



ज्ञानं परमं बलम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



*Circulation*

## शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

सतत् व्यापक मूल्यांकन (संशोधित)

04 सितम्बर 2015

बी. एस.सी. प्रथम, तृतीय एवं पंचम सेमेस्टर के सगस्त विद्यार्थी हेतु CCE दिनांक 14 एवं 15 सितम्बर 2015 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होगा-

विषय	दिनांक	कक्ष एवं समय
Physics, Computer Science, Economics, Information Technology, Hindi, English, Environmental Studies/Computer, Computer Application, Chemistry, Ph. Chemistry	14/09/2015	नियमित कालखण्ड में अध्यापन के दौरान
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Statistics, Microbiology, Bioinformatics, Biotechnology	15/09/2015	नियमित कालखण्ड में अध्यापन के दौरान

M.Sc. के CCE विभागाध्यक्ष सुविधानुसार सितम्बर माह में संपन्न कर लें।

सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से शीघ्र संपर्क करें।

विभागाध्यक्ष

- ✓ 1. Physics *A*
- ✓ 2. Computer Science *10/09/15*
- ✓ 3. Economics *10/09/15*
- ✓ 4. Mathematics, Information Technology *10/09/15*
- ✓ 5. Hindi *on leave*  
*Mam*



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



- ✓ 6. English *Mani*
- ✓ 7. Biotechnology *BT*
- ✓ 8. Computer Application *09.07.15*
- ✓ 9. Zoology *21*
- ✓ 10. Electronics *22*
- ✓ 11. Geography *23*
- ✓ 12. Botany *24*
- ✓ 13. Geology *25*
- ✓ 14. Pharmaceutical Chemistry *26*
- ✓ 15. Statistics *27*
- ✓ 16. Microbiology *28*
- ✓ 17. Bioinformatics *29*
- ✓ 18. Chemistry *30*

*Purday*  
डॉ. श्रीमती पिंकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

*Purday*  
डॉ. श्रीमती उषा श्रीवास्तव  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

सतत् व्यापक मूल्यांकन

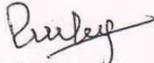
02/02/2016

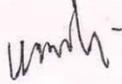
बी.एससी. द्वितीय, चतुर्थ एवं षष्ठम सेमेस्टर के समस्त विद्यार्थियों हेतु CCE दिनांक 15/02/2016 से 18/02/2016 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होंगे -

Subject	Date	Class
Physics, Computer science, Economics, IT, Comp. Application, Chemistry, Ph. Chemistry, Statistics	15/02/2016	B.Sc. II sem
Zoology, Maths, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	15/02/2016	B.Sc. IV & VI sem
Zoology, Maths, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	16/02/2016	B.Sc. II sem
Physics, Computer science, Economics, IT, Comp. Application, Chemistry, Ph. Chemistry, Statistics	16/02/2016	B.Sc. IV & VI sem
English, Hindi, Environment	17/02/2016	B.Sc. IV sem
English, Hindi, Computer	17/02/2016	B.Sc. VI sem
English, Hindi, Entrepreneurship	18/02/2016	B.Sc. II sem

M.Sc. के CCE विभागाध्यक्ष सुविधानुसार सितम्बर 2016 माह में सम्पन्न करले ।

सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें। स्ववित्तीय पाठ्यक्रमों के विद्यार्थी अपने विषय के समन्वयक से संपर्क करें।

  
डॉ. श्रीमती पिकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

  
डॉ. श्रीमती उषा श्रीवास्तव  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

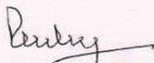
सतत् व्यापक मूल्यांकन

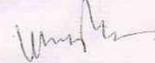
03/03/2017

बी. एससी. द्वितीय, चतुर्थ एवं षष्ठम सेमेस्टर के समस्त विद्यार्थियों हेतु CCE दिनांक 21/03/2017 से 24/03/2017 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होगा-

विषय	दिनांक	कक्षा
Hindi, English, Entrepreneurship	21/03/2017	B.Sc. II <sup>nd</sup> Sem.
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	21/03/2017	B.Sc. IV <sup>th</sup> & VI <sup>th</sup> Sem.
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	22/03/2017	B.Sc. IV <sup>th</sup> & VI <sup>th</sup> Sem.
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	23/03/2017	B.Sc. II <sup>nd</sup> Sem.
Hindi, English, Env. Science	23/03/2017	B.Sc. IV <sup>th</sup> Sem.
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	24/03/2017	B.Sc. II <sup>nd</sup> Sem.
Hindi, English, Computer	24/03/2017	B.Sc. VI <sup>th</sup> Sem.

M.Sc. के CCE विभागाध्यक्ष सुविधानुसार मार्च - 2017 माह में संपन्न कर लें।  
सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

  
डॉ. श्रीमती पिकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

  
डॉ. श्रीमती उषा श्रीवास्तव  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

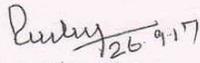
सतत् व्यापक मूल्यांकन

26/09/2017

बी.एससी. प्रथम वर्ष के समस्त विद्यार्थियों हेतु प्रथम प्रश्न पत्र का CCE दिनांक 04/10/2017 से 07/10/2017 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होगा-

विषय	दिनांक
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	04 / 10 / 2017
Zoology, Mathematics, Electronics; Geography, Botany, Geology, Microbiology, Bioinformatics; Biotechnology	06 / 10 / 2017
Hindi, English, Entrepreneurship	07 / 10 / 2017

सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

  
डॉ. श्रीमती पंकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

  
डॉ. श्रीमती उषा श्रीवास्तव  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

सतत् व्यापक मूल्यांकन

06/09/2017

बी.एससी. तृतीय एवं पंचम सेमेस्टर के समस्त विद्यार्थियों हेतु CCE दिनांक 18/09/2017 से 21/09/2017 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होगा-

विषय	दिनांक	कक्षा
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	18/09/2017	B.Sc. III <sup>rd</sup> Sem.
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	18/09/2017	B.Sc. V <sup>th</sup> Sem.
Hindi, English, Env. Science	19/09/2017	B.Sc. III <sup>rd</sup> Sem.
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	20/09/2017	B.Sc. V <sup>th</sup> Sem.
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	20/09/2017	B.Sc. III <sup>rd</sup> Sem.
Hindi, English, Computer	21/09/2017	B.Sc. V <sup>th</sup> Sem.

M.Sc. के CCE विभागाध्यक्ष सुविधानुसार सितम्बर - 2017 माह में संपन्न कर लें।  
सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

डॉ. श्रीमती पिकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

डॉ. श्रीमती उषा श्रीवास्तव  
प्रचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

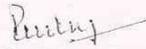
सतत् व्यापक मूल्यांकन

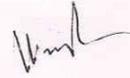
04/01/2018

बी.एससी. प्रथम वर्ष के समस्त विद्यार्थियों हेतु द्वितीय प्रश्न पत्र का CCE दिनांक 10/01/2018 से 12/01/2018 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होगा-

विषय	दिनांक
Hindi, English, Entrepreneurship	10/01/2018
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	11/01/2018
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	12/01/2018

सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

  
डॉ. श्रीमती पिंकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

  
डॉ. श्रीमती उषा श्रीवास्तव  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

सतत् व्यापक मूल्यांकन

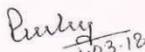
01/03/2018

बी.एससी. IV एवं VI Sem के समस्त विद्यार्थियों हेतु CCE दिनांक 12/03/2018 से 15/03/2018 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होंगे -

विषय	दिनांक	कक्षा
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	मार्च 12/03/2018	B.Sc. IV Sem
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	मार्च 12/03/2018	B.Sc. VI Sem
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	मार्च 13/03/2018	B.Sc. IV Sem
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	मार्च 13/03/2018	B.Sc. VI Sem
Hindi, English, Entrepreneurship	मार्च 14/03/2018	B.Sc. IV Sem
Hindi, English, Entrepreneurship	मार्च 15/03/2018	B.Sc. VI Sem

M.Sc. के CCE विभागाध्यक्ष सुविधानुसार मार्च-2018 माह में संपन्न कर लें।

सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

  
डॉ. श्रीमती पंकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

  
डॉ. श्रीमती उषा श्रीवास्तव  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

सतत् व्यापक मूल्यांकन

19/09/2018

बी.एससी. V के समस्त विद्यार्थियों हेतु CCE दिनांक 24/09/2018 से 26/09/2018 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होंगे -

विषय	दिनांक	कक्षा
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	24/09/2018	B.Sc. V Sem
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	25/09/2018	B.Sc. V Sem
Hindi, English, Computers (Foundation)	26/09/2018	B.Sc. V Sem

M.Sc. के CCE विभागाध्यक्ष सुविधानुसार सितम्बर-2018 माह में संपन्न कर लें।  
सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

डॉ. श्रीमती पंकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

डॉ. अर्पण भारद्वाज  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

सतत् व्यापक मूल्यांकन

04/10/2018

बी.एससी. प्रथम एवं द्वितीय वर्ष के समस्त विद्यार्थियों हेतु CCE I दिनांक 11/10/2018 से 13/10/2018 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होंगे -

विषय	दिनांक	कक्षा
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	11/10/2018	B.Sc. I Year ✓
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	12/10/2018	B.Sc. I Year
Hindi, English, Entrepreneurship	13/10/2018	B.Sc. I Year
Hindi, English, Environment	11/10/2018	B.Sc. II Year
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	12/10/2018	B.Sc. II Year
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	13/10/2018	B.Sc. II Year

सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

डॉ. श्रीमती पिकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

डॉ. अर्पण भारद्वाज  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

सतत् व्यापक मूल्यांकन

11/01/2019

सूचना

बी.एस.सी. प्रथम एवं द्वितीय वर्ष के समस्त विद्यार्थियों हेतु CCE II दिनांक 28/01/2019 से 02/02/2019 को निम्नलिखित समय सारणी के अनुसार संपन्न होंगे।

नोट:- इस CCE में प्रत्येक विषय का प्रश्न पत्र दो घण्टे का होगा। विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

Date	Subject 11:30-1:30PM B.Sc. I Year	Subject 2:30-4:30PM B.Sc. II Year
28.01.2019	Physics/ Botany/ Geology/ Electronics	Zoology/Mathematics/Geography
28.01.2019	Zoology/Mathematics/Geography	Chemistry/Ph.Chemistry
29.01.2019	Chemistry/Ph.Chemistry	English/Hindi
30.01.2019	English/Hindi	Environment
01.02.2019	Computer Science / Economics/ Information Technology/ Computer Application/ Statistics/ Biotechnology/ Microbiology/Bioinformatics	Physics/ Botany/ Geology/ Electronics
02.02.2019	Entrepreneurship	Computer Science / Economics/ Information Technology/ Computer Application/ Statistics/ Biotechnology/ Microbiology/Bioinformatics

मॉडल प्रश्न सम्बन्धित विभागों के सूचना पटल पर 16.01.2019 तक प्रदर्शित कर दिये जायेंगे।

डॉ. श्रीमती पिकी द्विवेदी  
संयोजक, सेमेस्टर प्रकोष्ठ

डॉ. अर्पण भारद्वाज  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं वलम



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

सतत व्यापक मूल्यांकन

03/04/2019

बी.एससी. VI के समस्त विद्यार्थियों हेतु CCE दिनांक 09/04/2019 से 11/04/2019 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होंगे -

विषय	दिनांक	कक्षा
Physics, Computer Science, Economics, Information Technology, Computer Application, Chemistry, Ph. Chemistry, Statistics	09/04/2019	B.Sc. VI Sem
Zoology, Mathematics, Electronics, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology	10/04/2019	B.Sc. VI Sem
Hindi, English, Computers (Foundation)	11/04/2019	B.Sc. VI Sem

M.Sc. के CCE विभागाध्यक्ष सुविधानुसार अप्रैल-2019 माह में संपन्न कर लें।

सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

डॉ. श्रीमती पिकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

डॉ. अर्पण भारद्वाज  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

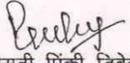
सतत् व्यापक मूल्यांकन

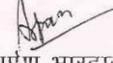
04/11/2019

बी.एससी. प्रथम, द्वितीय एवं तृतीय वर्ष के समस्त विद्यार्थियों हेतु CCE I दिनांक 13/11/2019 से 16/11/2019 को नियमित कालखण्ड में अध्यापन के दौरान निम्नलिखित कार्यक्रम अनुसार संपन्न होंगे -

Date	B.Sc. I Year	B.Sc. II Year	B.Sc. III Year
13.11.2019	Physics/ Botany/ Geology	Zoology/ Mathematics/ Geography/ English/Hindi/ Environment	Chemistry/ Economics/ Statistics
14.11.2019	Zoology/ Mathematics/ Geography	Chemistry/ Economics/ Statistics	Physics/ Botany/ Geology
15.11.2019	Chemistry/ Economics/ Statistics	Physics/ Botany/ Geology	Zoology/ Mathematics/ Geography/ English/Hindi/ Computer
16.11.2019	English/Hindi Entrepreneur ship	-	-

सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

  
डॉ. श्रीमती पिकी द्विवेदी  
संयोजक  
सेनेस्टर प्रकोष्ठ

  
डॉ. अर्पण भारद्वाज  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्

GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

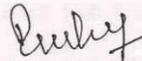
सतत व्यापक मूल्यांकन

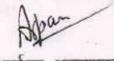
24/01/2020

बी.एससी. प्रथम एवं द्वितीय वर्ष के समस्त विद्यार्थियों हेतु **CCE II**  
दिनांक 01/02/2020 से 05/02/2020 को निम्नलिखित कार्यक्रम  
अनुसार संपन्न होंगे -

Date	B.Sc. I Year 11:00-1:00PM	B.Sc. II Year 2:00-4:00
01.02.2020	Physics/ Electronics, Botany/ Microbiology, Bioinformatics, Geology	English / Hindi
03.02.2020	English/Hindi Entrepreneurship	Chemistry/ Ph. Chemistry, Economics, Statistics
04.02.2020	Zoology/ Biotechnology Mathematics/ Computer Science, Information Technology, Computer Application, Geography	Physics/ Electronics, Botany/ Microbiology, Bioinformatics, Geology
05.02.2020	Chemistry/ Ph. Chemistry, Economics, Statistics	Zoology/ Biotechnology Mathematics/ Computer Science, Information Technology, Computer Application, Geography

सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

  
डॉ. श्रीमती पिकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

  
डॉ. अर्पण भारद्वाज  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं वलम



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



शासकीय माधव विज्ञान महाविद्यालय, उज्जैन

सतत व्यापक मूल्यांकन

24/01/2020

बी.एससी. तृतीय वर्ष के समस्त विद्यार्थियों हेतु **CCE II** दिनांक  
08/02/2020 से 12/02/2020 को निम्नलिखित कार्यक्रम अनुसार  
संपन्न होंगे -

Date	B.Sc. III Year 11:00-1:00PM
08.02.2020	Chemistry/ Ph. Chemistry, Economics, Statistics
10.02.2020	Physics/ Electronics, Botany/ Microbiology, Bioinformatics, Geology
11.02.2020	English/Hindi Computer Science
12.02.2020	Zoology/ Biotechnology Mathematics/ Computer Science, Information Technology, Computer Application, Geography

सम्बन्धित विद्यार्थी अधिक जानकारी के लिये विषय के विभागाध्यक्ष से संपर्क करें।

डॉ. श्रीमती पिंकी द्विवेदी  
संयोजक  
सेमेस्टर प्रकोष्ठ

डॉ. अर्पण भारद्वाज  
प्राचार्य



Signature Not Verified  
ARPAN BHARDWAJ  
E=ARPANBHARDW  
AJ11@GMAIL.COM,



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:02/09//2015

### **CCE ODD SEMESTER I III & V 2015-16 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in chemistry, zoology, Botany, Mathematics & Physics wings for detailed CCE timetable in Hindi, First CCE .....14<sup>th</sup> & 15<sup>th</sup> September (Modes as declared by respective departments)

Second CCE ..... 29<sup>th</sup> September (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons 3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....23<sup>rd</sup> & 24<sup>th</sup> September

Second CCE.....5<sup>th</sup> October 2015

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:02/09//2015

### **CCE ODD SEMESTER I III & V 2015-16 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in wings for detailed CCE timetable in Hindi,

First CCE .....14<sup>th</sup> & 15<sup>th</sup> September (Modes as declared by respective departments)

Second CCE ..... 20<sup>th</sup> September (For all students who missed the first due to  
1. They were representing college in some event 2. Medical Reasons 3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....22<sup>rd</sup> & 26<sup>th</sup> September

Second CCE.....29<sup>th</sup> September 2015

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science





ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:25/01//2016

### **CCE ODD SEMESTER I III & V 2015-16 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in chemistry, zoology, Botany, Mathematics & Physics wings for detailed CCE timetable in Hindi, First CCE .....15&18<sup>th</sup> February (Modes as declared by respective departments)  
Second CCE .....21<sup>th</sup> February (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....28<sup>th</sup> February

Second CCE.....03<sup>rd</sup> March 2016

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:25/01//2016

### **CCE ODD SEMESTER I III & V 2015-16 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in chemistry, zoology, Botany, Mathematics & Physics wings for detailed CCE timetable in Hindi,  
First CCE 15&18<sup>th</sup> February (Modes as declared by respective departments)  
Second CCE .....26<sup>th</sup> February (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons 3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....28<sup>th</sup> February

Second CCE.....03<sup>rd</sup> March 2016

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:25/01//2016

## CCE ODD SEMESTER I III & V 2015-16 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in English, Hindi, Entrepreneurship wings for detailed CCE timetable in Hindi,  
First CCE .....15&18<sup>th</sup> February February (Modes as declared by respective departments)  
Second CCE .....27<sup>th</sup> February (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....07<sup>th</sup> March

Second CCE.....12<sup>rd</sup> March 2016

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:28/02//2017

### **CCE ODD SEMESTER I III & V 2016-17 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in chemistry, Economics, Statistics, Pharma Chemistry, Mathematics & Physics Computer Science, IT wings for detailed CCE timetable in Hindi,

First CCE .....21&.24 March (Modes as declared by respective departments)

Second CCE .....28<sup>th</sup> March (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....27<sup>th</sup> March

Second CCE.....05<sup>rd</sup> April 2016

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:28/02//2017

### **CCE ODD SEMESTER I III & V 2016-17 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Zoology, Mathematics, Electronic, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology, wings for detailed CCE timetable in Hindi, First CCE 21&.24 March March (Modes as declared by respective departments)  
Second CCE .....29<sup>th</sup> March (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....25<sup>th</sup> March

Second CCE.....30<sup>th</sup> April 2016

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं वरम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:28/02//2017

### **CCE ODD SEMESTER I III & V 2016-17 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Zoology, Mathematics, Electronic, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology, IT, wings for detailed CCE timetable in Hindi,  
First CCE 21&.24 March (Modes as declared by respective departments)  
Second CCE .....30<sup>th</sup> March (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....26<sup>th</sup> March

Second CCE.....31<sup>th</sup> March 2016

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:28/02//2017

### **CCE ODD SEMESTER I III & V 2016-17 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Hindi, English, Env. Science wings for detailed CCE timetable in Hindi,  
First CCE .....21&.24 March (Modes as declared by respective departments)

Second CCE .....29<sup>th</sup> March (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....25<sup>th</sup> March

Second CCE.....30<sup>th</sup> March 2016

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:25/02/2016

## **CCE ODD SEMESTER I III & V 2016-17 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in English, Hindi, Computer wings for detailed CCE timetable in Hindi,

First CCE .....21&.24 March February (Modes as declared by respective departments)

Second CCE .....29<sup>th</sup> February (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....25<sup>th</sup> March

Second CCE.....30<sup>rd</sup> March 2016

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:20/09//2017

### **CCE ODD SEMESTER I III & V 2017-18 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Zoology, Mathematics, Electronic, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology, wings for detailed CCE timetable in Hindi,

First CCE .....04<sup>th</sup> &07 October (Modes as declared by respective departments)

Second CCE .....14<sup>th</sup> October (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....07<sup>th</sup> October

Second CCE.....15<sup>th</sup> October 2017

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:20/09//2017

## CCE ODD SEMESTER I III & V 2017-18 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Zoology, Mathematics, Electronic, Geography, Botany, Geology, Microbiology, Bioinformatics, Biotechnology wings for detailed CCE timetable in Hindi,

First CCE .....04<sup>th</sup> &07 October (Modes as declared by respective departments)

Second CCE .....15<sup>th</sup> October (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....12<sup>th</sup> October

Second CCE.....18<sup>th</sup> October 2017

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:20/09//2017

## CCE ODD SEMESTER I III & V 2017-18 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Hindi, English, Entrepreneurship wings for detailed CCE timetable in Hindi, First CCE .....04<sup>th</sup> &07 October (Modes as declared by respective departments)  
Second CCE .....17<sup>th</sup> October (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....07<sup>th</sup> October

Second CCE.....15<sup>th</sup> October 2017

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं वरम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:29/12//2017

## CCE ODD SEMESTER I III & V 2017-18 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Hindi, English,  
Entrepreneurship wings for detailed CCE timetable in Hindi,

First CCE .....10&12<sup>th</sup> January (Modes as declared by respective  
departments)

Second CCE .....20 January (For all students who missed the first due to 1.  
They were representing college in some event 2. Medical Reasons3. Any other  
unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....16 January

Second CCE.....24 January 2018

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the  
college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque  
(Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date: 29/12//2017

## CCE ODD SEMESTER I III & V 2017-18 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Zoology, Computer Science, Electronic, IT, CA, Chemistry, Pharma Chemistry wings for detailed CCE timetable in Hindi,

First CCE .....10&12 January (Modes as declared by respective departments)

Second CCE .....20 January (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons 3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....22 January

Second CCE.....28 January 2018

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं वरम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:29/12//2017

## **CCE ODD SEMESTER I III & V 2017-18 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Zoology , Mathematics, Botany, Bioinformatics, Microbiology, Biotechnology wings for detailed CCE timetable in Hindi,

First CCE .....10<sup>th</sup>& 12<sup>th</sup> January (Modes as declared by respective departments)

Second CCE .....18 January (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....15 January

Second CCE.....22 January 2018

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:25/02//2018

### **CCE ODD SEMESTER I III & V 2017-18 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Physics, Computer, IT, Economics, Chemistry, Pharma chemistry, Statistics wings for detailed CCE timetable in Hindi,

First CCE .....12&15 March (Modes as declared by respective departments)

Second CCE .....20 January (For all students who missed the first due to 1.

They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....16 January

Second CCE.....24 January 2018

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:25/02//2018

### **CCE ODD SEMESTER I III & V 2017-18 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Mathematics, Botany, Bioinformatics, Microbiology, Biotechnology wings for detailed CCE timetable in Hindi,

First CCE .....12&15 March (Modes as declared by respective departments)

Second CCE .....20 March (For all students who missed the first due to 1.

They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....16 March

Second CCE.....24 March 2018

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:25/02//2018

## **CCE ODD SEMESTER I III & V 2017-18 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Hindi, English, Entrepreneur Ship wings for detailed CCE timetable in Hindi,  
First CCE .....12 &15 March (Modes as declared by respective departments)  
Second CCE .....20 March (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....16 March

Second CCE.....24 March 2018

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Usha Shrivastava  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:15/09//2018

## CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Mathematics, Botany, Bioinformatics, Microbiology, Biotechnology wings for detailed CCE timetable in Hindi,

First CCE .....24&25 September (Modes as declared by respective departments)

Second CCE .....29 September (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons 3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....26 September

Second CCE.....30 September 2018

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वरम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:15/09//2018

### **CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in ,Zoology Mathematics, Botany, Bioinformatics, Microbiology, Biotechnology wings for detailed CCE timetable in Hindi,

First CCE .....24&25 September (Modes as declared by respective departments)

Second CCE .....28 September (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....26 September

Second CCE.....29September 2018

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee) For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:15/09//2018

### **CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards Hindi, English , Computer (Foundation) wings for detailed CCE timetable in Hindi,  
First CCE .....24&25 September (Modes as declared by respective departments)  
Second CCE .....29 September (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....26 September

Second CCE.....30 September 2018

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee) For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:05/01//2019

### **CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Physics , Botany, Geology, Electronic wings for detailed CCE timetable in Hindi,  
First CCE .....28 January & 02 February (Modes as declared by respective departments)  
Second CCE .....08 February (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons 3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....07 February

Second CCE.....15 February 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee) For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वरम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:05/01//2019

## **CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Zoology, Geography ,  
Mathematic wings for detailed CCE timetable in Hindi,

First CCE .....28 January & 02 February (Modes as declared by respective  
departments)

Second CCE .....08 February (For all students who missed the first due to 1.  
They were representing college in some event 2. Medical Reasons 3. Any other  
unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....06 February Second

CCE.....10 February 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the  
college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque  
(Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं बलम्  
GOVT. MADHAV SCIENCE COLLEGE, UJJAIN  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED  
AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:05/01//2019

### **CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in English, Hindi wings for detailed CCE timetable in Hindi,

First CCE .....28 January & 02 February (Modes as declared by respective departments)

Second CCE .....10 February (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons 3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....07 February Second

CCE.....16 February 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:05/01//2019

### **CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in CS , IT, Computer Application, Chemistry wings for detailed CCE timetable in Hindi,  
First CCE .....28 January & 02 February (Modes as declared by respective departments)  
Second CCE .....09 February (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons 3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....06 February Second

CCE.....18 February 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:05/01//2019

## CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Entrepreneurship wings for detailed CCE timetable in Hindi,

First CCE .....28 January & 02 February (Modes as declared by respective departments)

Second CCE .....06 February (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons 3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE.....09 February Second

CCE.....15 February 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

• Dr. Pinky Dwivedi (Coordinator CCE Core Committee)

• Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:01/04//2019

### **CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in CS , IT, Computer Application, Chemistry wings for detailed CCE timetable in Hindi,  
First CCE .....09 &11 April (Modes as declared by respective departments)  
Second CCE .....18April (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances) No third CCE will be conducted  
Students are advised to check their evaluated answer sheets on  
First CCE..... 15 April  
Second CCE.....20 April 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee) For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:01/04//2019

### **CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in CS , IT, Computer Application, Chemistry wings for detailed CCE timetable in Hindi,  
First CCE .....09 &11 April (Modes as declared by respective departments)  
Second CCE .....18April (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE..... 15 April

Second CCE.....20 April 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee) For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:01/04//2019

## CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Zoology , Mathematics , Computer, Biotechnology, Microbiology, Bioinformatics wings for detailed CCE timetable in Hindi,

First CCE .....09 &11 April (Modes as declared by respective departments)

Second CCE .....20 April (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE..... 18 April Second

CCE.....25 April 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee) For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:01/04//2019

## CCE ODD SEMESTER I III & V 2018-19 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Hindi, English, Entrepreneurship wings for detailed CCE timetable in Hindi,  
First CCE .....09 &11 April (Modes as declared by respective departments)  
Second CCE .....18 April (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE..... 16 April

Second CCE.....25 April 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee) For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:01/11/2019

## CCE ODD SEMESTER I III & V 2019-20 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Zoology , Mathematics , Computer, Biotechnology, Microbiology, Bioinformatics wings for detailed CCE timetable in Hindi,

First CCE .....13 &16 November Modes as declared by respective departments)

Second CCE .....22 November (For all students who missed the first due to 1.

They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE..... 18 November

Second CCE.....25 November 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee) For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:01/11//2019

### **CCE ODD SEMESTER I III & V 2019-20 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Zoology , Mathematics , Geography wings for detailed CCE timetable in Hindi,  
First CCE .....13 &16 November Modes as declared by respective departments)  
Second CCE .....25 November (For all students who missed the first due to 1. They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE..... 15 November

Second CCE.....28 November 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee)
- Dr. Shehla Ishaque (Member CCE Core Committee) For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:01/11//2019

## CCE ODD SEMESTER I III & V 2019-20 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Zoology , Mathematics , Computer, Biotechnology, Microbiology, Bioinformatics wings for detailed CCE timetable in Hindi,

First CCE .....13 &16 November Modes as declared by respective departments)

Second CCE .....22 November (For all students who missed the first due to 1.

They were representing college in some event 2. Medical Reasons3. Any other unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE..... 18 November

Second CCE.....25 November 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college. The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

• Dr. Pinky Dwivedi (Coordinator CCE Core Committee)

• Dr. Shehla Ishaque (Member CCE Core Committee) For

Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj

Principal

Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:01/11//2019

## **CCE ODD SEMESTER I III & V 2019-20 Detailed CCE SCHEDULE**

Students are advised to visit College notice boards in Hindi, English ,  
Entrepreneurship wings for detailed CCE timetable in Hindi,  
First CCE .....13 &16 November Modes as declared by respective departments)  
Second CCE .....25 November (For all students who missed the first due to 1.  
They were representing college in some event 2. Medical Reasons3. Any other  
unforeseen circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE..... 22 November

Second CCE.....28 November 2019

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college.  
The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### **INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD**

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science



ज्ञानं परमं वलाम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Date:20/01//2020

## CCE ODD SEMESTER I III & V 2019-20 Detailed CCE SCHEDULE

Students are advised to visit College notice boards in Hindi, English ,  
Entrepreneurship wings for detailed CCE timetable in Hindi,  
First CCE .....08 &12 February Modes as declared by respective departments)  
Second CCE .....20 February (For all students who missed the first due to 1. They  
were representing college in some event 2. Medical Reasons3. Any other unforeseen  
circumstances)

No third CCE will be conducted

Students are advised to check their evaluated answer sheets on

First CCE..... 22 February

Second CCE.....28 February 2020

Note\*\*\*\*\*

For students appearing in CCE 2 seek valid permission from the principal of the college.  
The application should be forwarded by the Head of the department.

For Grievance Redressal related to the Internal examination contact

### INTERNAL EXAMINATION GRIEVANCE REDRESSAL BOARD

- Dr. Pinky Dwivedi (Coordinator CCE Core Committee) • Dr. Shehla Ishaque (Member CCE Core Committee)

For Instructions in Hindi contact respective departments.

Dr. Arpan Bhardwaj  
Principal  
Govt. Madhav Science

OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.COLLEGE UJJAIN

A GRADE ACCREDITED THROUGH NAACDST-FIST

COLLEGE

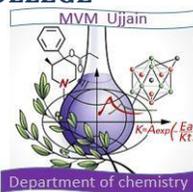


SAMPLE PROOF FOR CCE MODE



**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**

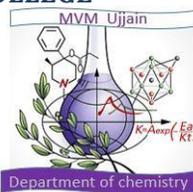


## Chemistry

S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Sem	2015-16	Chemistry	<b>Subjective long test</b>
2.	B.Sc. 2 <sup>nd</sup> Sem	2015-16	Chemistry	Written Test
3.	B.Sc. 3 <sup>rd</sup> Sem	2015-16	Chemistry	Assignments
4.	B.Sc. 4 <sup>th</sup> Sem	2015-16	Chemistry	Assignments
5.	B.Sc. 5 <sup>th</sup> Sem	2015-16	Chemistry	PPT Presentation
6.	B.Sc. 6 <sup>th</sup> Sem	2015-16	Chemistry	GROUP POSTER
7.	M.Sc. 1 <sup>st</sup> Sem	2015-16	Inorganic Chemistry 401	Poster Presentation
			Organic Chemistry 402	Multiple Choice Questions
			Group theory and Spectroscopy 404:	Spectroscopic case studies
			Physical Chemistry 403	Semi Surprise Analytical Test
			Mathematics for chemists 405 a :	Problem Solving
			Biology for Chemists 405 b:	Charts and Presentation
8.	M.Sc. 2 <sup>nd</sup> Sem	2015-16	Inorganic Chemistry 406	Poster Presentation/ Presentation
			Organic Chemistry 407	Single Topic Compendium formation
			Physical Chemistry Paper 408	Objective Questionnaire & Question bank formation
			Spectroscopy II Paper 409	Spectroscopic e-compendium
			Computer for chemistry 410:	Assignments
9.	M.Sc. 3 <sup>rd</sup> Sem	2015-16	Applications of Spectroscopy 501:	Research Paper Writing
			Photo chemistry 502 :	Long Answer tests
			Environmental Chemistry 503:	Assignments (Peer evaluated assignments)
			Organotransition Metal chemistry 504:	Open Book Test
			Polymers 505:	Charts Presentation e Charts

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**

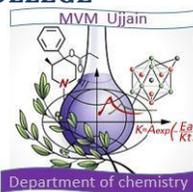


10	M.Sc. 4 <sup>th</sup> Sem	2015-16	Applications of Spectroscopy 511:	Bibliography
			Solid State Chemistry 512:	Crystal Presentation
			Biochemistry 513:	Mind Mapping Giving solution
			Analytical Chemistry 516:	Assignments (Problem Bank)
			Medicinal Chemistry 518:	Surprise Long answer Test

S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Sem	2016-17	Chemistry	Written Test
2.	B.Sc. 2 <sup>nd</sup> Sem	2016-17	Chemistry	Written Test
3.	B.Sc. 3 <sup>rd</sup> Sem	2016-17	Chemistry	Assignments
4.	B.Sc. 4 <sup>th</sup> Sem	2016-17	Chemistry	Assignments
5.	B.Sc. 5 <sup>th</sup> Sem	2016-17	Chemistry	PPT Presentation
6.	B.Sc. 6 <sup>th</sup> Sem	2016-17	Chemistry	GROUP POSTER
7.	M.Sc. 1 <sup>st</sup> Sem	2016-17	Inorganic Chemistry 401	Poster Presentation
8.			Organic Chemistry 402	Multiple Choice Questions
9.			Physical Chemistry 403	Semi Surprise Analytical Test
10.			Group theory and Spectroscopy 404:	Spectroscopic case studies
11.			Mathematics for chemists 405 a :	Problem Solving
12.			Biology for Chemists 405 b:	Charts and Presentation
13.			M.Sc. 2 <sup>nd</sup> Sem	2016-17
14.	Organic Chemistry 407	Single Topic Compendium formation		
15.	Physical Chemistry Paper 408	Open Book & Assignment		
16.	Spectroscopy II Paper 409	Research paper		

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**

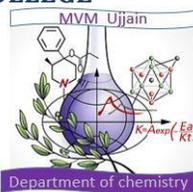


17.			Computer for chemistry 410:	Bibliography of Search Engines and content Search though assigned search engines
18.	M.Sc. 3 <sup>rd</sup> Sem	2016-17	Applications of Spectroscopy 501:	Research Paper Writing
19.			Photo chemistry 502:	Long Answer
20.			Environmental Chemistry 503:	Assignments (Peer evaluated assignments)
21.			Organtransition Metal chemistry 504:	Open Book Test
22.			Polymers 505:	Charts Presentation e Charts
23.			M.Sc. 4 <sup>th</sup> Sem	2016-17
24.	Solid State Chemistry 512:	Crystal Presentation		
25.	Biochemistry 513:	Mind Mapping Giving solution		
26.	Analytical Chemistry 516:	Assignments (Problem Bank)		
27.	Medicinal Chemistry 518:	Semi Surprise Test		

S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Year	2017-18	Chemistry	Written Test
2.	B.Sc. 3 <sup>rd</sup> Sem	2017-18	Chemistry	Assignments
3.	B.Sc. 4 <sup>th</sup> Sem	2017-18	Chemistry	Learner Centric Group Activity Question
4.	B.Sc. 5 <sup>th</sup> Sem	2017-18	Chemistry	PPT Presentation
5.	B.Sc. 6 <sup>th</sup> Sem	2017-18	Chemistry	GROUP POSTER
6.	M.Sc. 1 <sup>st</sup> Sem	2017-18	Inorganic Chemistry 401	Poster Presentation
			Organic Chemistry 402	Multiple Choice Questions
			Physical Chemistry 403	Semi Surprise Analytical Test
			Group theory and Spectroscopy 404:	Semi surprise test
			Mathematics for	Problem Solving

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

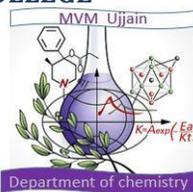
**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



			chemists 405 a:	
			Biology for Chemists 405 b:	Charts and Presentation
7.	M.Sc. 2 <sup>nd</sup> Sem	2017-18	Inorganic Chemistry 406:	Poster Presentation/ Presentation
			Organic Chemistry 407:	Single Topic Compendium formation
			Physical Chemistry Paper 408:	Knowledge based Closed Book long answer type test Learner centricity: 25% only
			Spectroscopy II Paper 409:	Research paper
			Computer for chemistry 410:	Bibliography of Search Engines and content Search through assigned search engines
8.	M.Sc. 3 <sup>rd</sup> Sem	2017-18	Applications of Spectroscopy 501:	GROUP POSTER SUBMISSION FOLLOWED BY POSTER PRESENTATION
			Photo chemistry 502 :	PPT
			Environmental Chemistry 503:	Assignments (Peer evaluated assignments)
			Organ transition Metal chemistry 504:	Open Book Test
			Polymers 505:	Charts Presentation e Charts
9.	M.Sc. 4 <sup>th</sup> Sem	2017-18	Applications of Spectroscopy 511:	Bibliography
			Solid State Chemistry 512:	Crystal Presentation
			Biochemistry 513:	Mind Mapping Giving solution
			Analytical Chemistry 516:	Assignments (Problem Bank)
			Medicinal Chemistry 518:	Semi Surprise Test

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

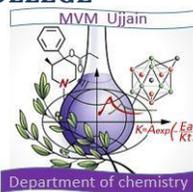
**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Year	2018-19	Chemistry	Written Test
2.	B.Sc. 2 <sup>nd</sup> Year	2018-19	Chemistry	Assignments
3.	B.Sc. 5 <sup>th</sup> Sem	2018-19	Chemistry	Assignments
4.	B.Sc. 6 <sup>th</sup> Sem	2018-19	Chemistry	Question Paper Setting Question Bank
5.	M.Sc. 1 <sup>st</sup> Sem	2018-19	Inorganic Chemistry 401	Poster Presentation
			Organic Chemistry 402	Multiple Choice Questions
			Physical Chemistry 403	Semi Surprise Analytical Test
			Group theory and Spectroscopy 404:	Spectroscopic case studies
			Mathematics for chemists 405 a :	Problem Solving
			Biology for Chemists 405 b:	Charts and Presentation
6.	M.Sc. 2 <sup>nd</sup> Sem	2018-19	Inorganic Chemistry 406	Poster Presentation/ Presentation
			Organic Chemistry 407	Single Topic Compendium formation
			Physical Chemistry Paper 408	Open Book & Assignment
			Spectroscopy II Paper 409	Compendium preparation & Subjective test
			Computer for chemistry 410:	Assignments
7.	M.Sc. 3 <sup>rd</sup> Sem	2018-19	Applications of Spectroscopy 501:	GROUP POSTER SUBMISSION FOLLOWED BY POSTER PRESENTATION
			Photo chemistry 502 :	PPT
			Environmental Chemistry 503:	Assignments (Peer evaluated assignments)
			Organtransition Metal chemistry 504:	Open Book Test
			Polymers 505:	Charts Presentation e Charts
8.	M.Sc. 4 <sup>th</sup> Sem	2018-19	Applications of Spectroscopy 511:	Bibliography
			Solid State Chemistry 512:	Crystal Presentation

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



			Biochemistry 513:	Mind Mapping Giving solution
			Analytical Chemistry 516:	Assignments (Problem Bank)
			Medicinal Chemistry 518:	Semi Surprise Test

S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Year	2019-20	Chemistry	Mock Test Long Test
2.	B.Sc. 2 <sup>nd</sup> Year	2019-20	Chemistry	Mock Test
3.	B.Sc. 3 <sup>rd</sup> Year	2019-20	Chemistry	Mock Test
4.	M.Sc. 1 <sup>st</sup> Sem	2019-20	Inorganic Chemistry 401	Poster Presentation
			Organic Chemistry 402	Multiple Choice Questions
			Physical Chemistry 403	Semi Surprise Analytical Test
			Group theory and Spectroscopy 404:	SPECTROSCOPIC CASE STUDY OF "ABC" MOLECULE & Open book test & POSTER PRESENTATION
			Mathematics for chemists 405 a :	Problem Solving
			Biology for Chemists 405 b:	Charts and Presentation
5.	M.Sc. 2 <sup>nd</sup> Sem	2019-20	Inorganic Chemistry 406	Poster Presentation/ Presentation
			Organic Chemistry 407	Single Topic Compendium formation
			Physical Chemistry Paper 408	Open Book & Assignment
			Spectroscopy II Paper 409	Compendium preparation & Subjective test
			Computer for chemistry 410:	Bibliography of Search Engines and content Search through assigned search engines
6.	M.Sc. 3 <sup>rd</sup> Sem	2019-20	Applications of Spectroscopy 501:	SPECTROSCOPIC CASE STUDY OF "ABC" MOLECULE & POSTER PRESENTATION

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**

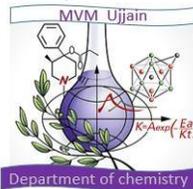


			Photo chemistry 502:	Long Answer
			Environmental Chemistry 503:	Assignments (Peer evaluated assignments)
			Organtransition Metal chemistry 504:	Open Book Test
			Polymers 505:	Charts Presentation e Charts
7.	M.Sc. 4 <sup>th</sup> Sem	2019-20	Applications of Spectroscopy 511:	Bibliography
			Solid State Chemistry 512:	Crystal Presentation
			Biochemistry 513:	Mind Mapping Giving solution
			Analytical Chemistry 516:	Assignments (Problem Bank)
			Medicinal Chemistry 518:	Semi Surprise Test

DEPARTMENT OF CHEMISTRY, GOVT. MADHAV SCIENCE P.G.COLLEGE UJJAIN

LIST OF STUDENTS FOR CCE

INSTRUCTOR : DR. KALPANA SINGH

Class: B.Sc. VI semester

CCE MODE..... GROUP POSTER

SESSION 2015-16

Size: 86 cm. X 53 cm.

Poster Background: Dark Red/Black/ Dark Blue

Sr. No.	Name of the Student	Batch	Title of the Poster
1.	Aarti Makwana Aashiya Nagori Anita Malviya Anjali Soni Anshu Joshi Archana Devda Balmukund Dangi Deepak Sharma Dharmendra Gopal Hari singh Dangi Kamlesh Panchal Kavita Makwana Kiran Kumavat Lokendra Singh Rajput Mahendra Singh Rajput	<b>B<sub>1</sub></b>	<b><i>Structure of Proteins Primary, Secondary and Quaternary Structures</i></b>
2	Monika Upadhyay Monika Vasnik Mukesh Chouhan Omprakash Parasia Pankaj Choudhary Pawan Singh Rajput Pooja Choudhary Pratiksha Rathod Pritam Sindal Rahul Malviya Rajesh Dangi Ramesh Mewada Ramkanya Rathi Ranjana Muwel Ravindra Malviya Ritu Sharma	<b>B<sub>1</sub></b>	<b><i>Functions of DNA and RNA</i></b>

3	Ruchi Rathod Sanjay Panwar Shubham Dodiya Shubham Verma Shweta Kushwaha Vidit Yadav Vijay Ganguli Vikas Rathod Vinod Choudhary Vishakha Mandloi Vishnu Prasad Prashansa Neema Deepak Sitpara Shuresh Bhagirath Rajendra Suryawanshi Bablu Dangi Anurag Vaid	<b>B<sub>1</sub></b>	<b><i>Constituents of Nucleic Acids</i></b>
4.	Archana Katara Abhishek Chodiya Ajay Sharma Akash Patidar Arjun Bagwan Avinash Baghel Bahadur Singh Bane Singh Bhavesh Chouhan Deepak Golwana Dharam Singh Karada Dharam Pal Dilip Tomar Divya Jog Govind Prasad Carpenter Harish Kumar	<b>B<sub>2</sub></b>	<b><i>Cleansing action of Soap</i></b>
5	Hemant Parmar Hemant Solanki Jagdish Alawa Jitendra Jat Jitendra Verma Jyoti Bisht Jyoti Verma Kailash Nandeda Kajal Neema Kapil Lakwal	<b>B<sub>2</sub></b>	<b><i>Applications of Grignard Reagents</i></b>

	Kshitiz Mishra Mamta Muvel Mamta Parmar Man singh Bamniya Mohd.Farman Mohd. Mohsin Ram Singh Chouhan		
6.	Mukesh Tahed Namita Malviya Narendra Banihar Pankaj Darji Pankaj Mandor Pankaj Patidar Pankaj Sharma Pooja Chouhan Pooja parihar Prasanna Nigam Pushpendra Singh Panwar Rahul Ajmera Mohmd. Rafiq Khan Rajesh Rathod Rakesh Mehar Sunil Kumar Malviya	<b><math>B_2</math></b>	<b><i>Chemical Shift and spin spin interactions</i></b>
7.	Sanjay Panwar Seemab Khan Shivani Niboriya Shivani Sharma Suruchi Modi Swapnil Nigam Vajeeha Fatema Vika Bamniya Pawan Chaukhatiya Sajanlal Parmar Kiran Meena Prashant Bhilala Prem Narayan Jyoti Kanel	<b><math>B_2</math></b>	<b>Modes of Vibrations in IR Spectrum</b>
8.	Adarsh Jadav Aishwary Bhatt Akhilesh Nagora Aman Soni Anand Prajapat Anil Malviya Anish Pal	<b><math>M_1</math></b>	<b><i>Orgel Diagram</i></b>

	Anmol Joshi ArchanaChiloriya Arjun Lavvanshi Arpit Patidar Arun Bablu Jatav Bal Chand Rathore Bharat Parihar		
9.	Bhavesht Upadhyay Bhumika Ramdasi Chetna Singh Deepak Sharma Deepak Soni Deepak Thorecha Deepak Varshi Dheeraj Patidar Dhruv Jain Ghanshyam Gehlot Govind Govind Malviya Govind Panchrangiya Heena Khan Hemraj Malviya	<b><math>M_1</math></b>	<b><i>Raman Spectrum and Polarizability Ellipsoid</i></b>
10	Jasmat Tomar Jaspal Singh Anjana Jitendra Soni Kalpana Parmar Kartik Verma Kavita Baghel Kishan Sagitra Krishna Kumar Soni Kuldeep Bhati Lalu Prasad Lokesh Rajoriya Madhav Rathore Madhavi Chouhan Mahendra Singh Mahesh Kumar Prajapati Mandakini Kaurav	<b><math>M_1</math></b>	<b><i><math>^1H</math> NMR</i></b>
11.	Manish Kumar Manoj Jangle Mansi Triparhee Mayank Raikwar Meghali Jambulkar Murlidhar Kavriya	<b><math>M_1</math></b>	<b><i>Adsorption Isothers</i></b>

	Naziya Pathan Nidhi Dubey Nishant Tiwari Nitesh Solanki Pankaj Rathore Parul Sharma Pawan Patidar Pawan Prakash Sagit		
12	Pravin Mehar Preeti Shukla Prince Malviya Priya Panwar Rahul Rahul Bhatodara Rahul Chouhan Rahul R. Solanki Rahul Solanki Rahul Vaghela Rajat Singh Sendhav Ram Gopal Meda Ramchander Panwar Ram Dayal Nagar Ram Lakhan Rathore Rashmi Malviya Ravi Vishvakarma Saad Saxena	<b><math>M_1</math></b>	<b><i>BET Model and various BET Isotherms</i></b>
13.	Sakshi Shukla Santosh Solanki Sanyukta Vyas Shahrukh Mansoori Sheikh Faizan Shivam Gehlot Shrey Pareekh Shruti Sugandhi Shubham Rathore Shubham Suryavanshi Som Raj Singh Tanwar Subhash Anjana Sunil Kapadia Sunil Pal	<b><math>M_1</math></b>	<b><i>Molecule as Rigid Rotar</i></b>
14.	Surbhi Goyal Suresh Dangi	<b><math>M_1</math></b>	<b><i>Anharmonicity in Infra red</i></b>

	Tarun Carpenter Umesh Rathore Vijay Ghungharwal Vijendra Gehlot Vikas Panchal Vinod Rathore Vishvjeet Singh Shekhawat Vivek Dewada Yashee Upadhyay Yashwant Patidar Avadhesh Patidar Aayush Gupta Rakesh Dangi Mukesh Kumar Dangi Rohit Maru.		<i><b>Spectrum</b></i>
--	---	--	------------------------

15. Periodic Table (Ex Students)

Shahbaj Ahmed

Doulat Ram

Vijay Kanesh

Kunwar Singh

Vaibhav Khamora

Kavita Mansuria

Madhuri Nagare

Sonali Rathore

Damini Malviya

Pre eti Soni

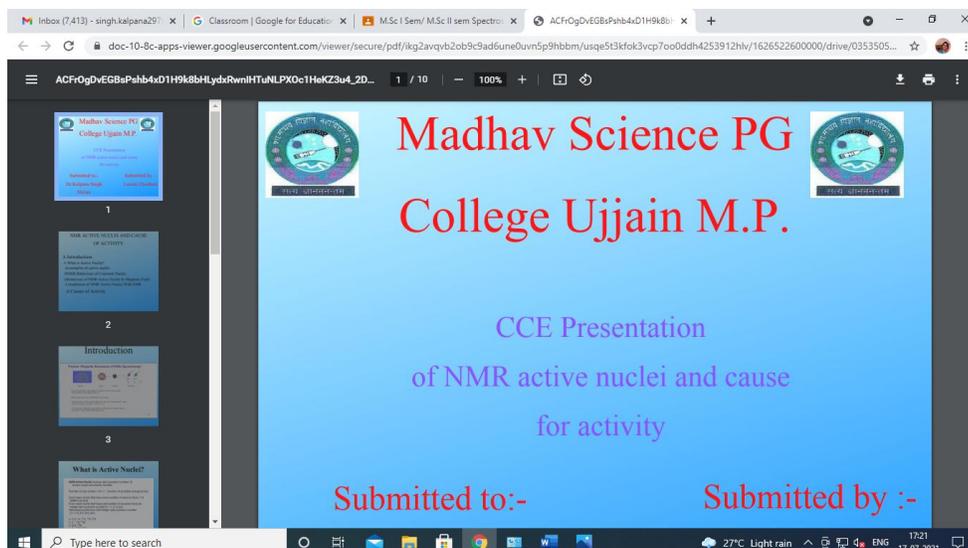
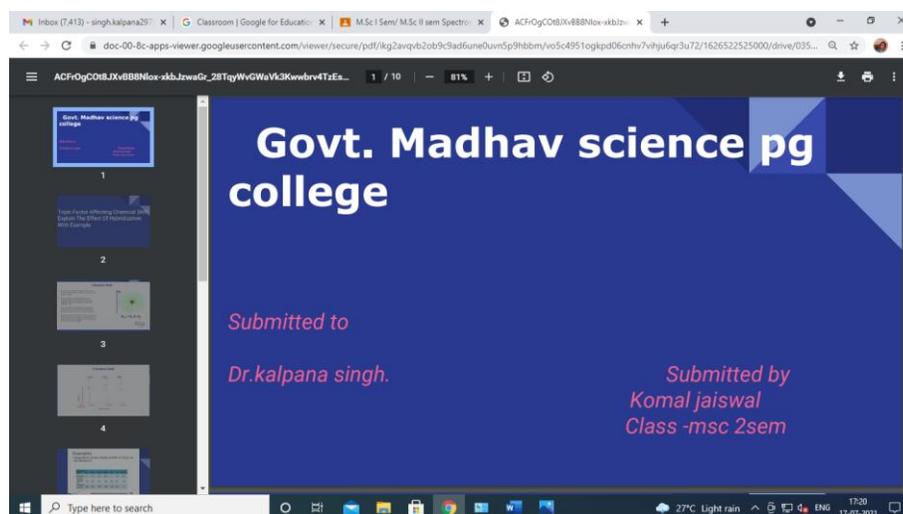
Poonam Nirmal

# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAACDST-FIST COLLEGE



## SAMPLE POWER POINT PRESENTATIONS AS CCE MODE



Inbox (7,413) - singh.kalpana297 | Classroom | Google for Education | M.Sc I Sem/ M.Sc II sem Spectro... | ACFrOgBxVAEWwBkTjwAYVzT...

doc-00-8c-apps-viewer.googleusercontent.com/viewer/secure/pdf/ikg2avqvb2ob9c9ad6une0uvn5p9hbbm/uo2s35s37jig2gepg0b6kk3gsl8ut1jv/1626522675000/drive/03535056...

ACFrOgBxVAEWwBkTjwAYVzT\_2aOIZ5W68n9oQgTH8MUPE4Z3rwe... 1 / 7 - 100% +

**GOVT MADHAV SCIENCE P.G COLLEGE UJJAIN**



CCEM.SC. 2nd sem  
TOPIC .Factors affecting chemical shift explain the effect of electronegativity with examples  
SUBMITTED BY: NIHARIKA SHARMA SUBMITTED TO: DR. KALPANA SINGH MAM

Type here to search 27°C Light rain 17:22 17-07-2021

Inbox (7,413) - singh.kalpana297 | Classroom | Google for Education | M.Sc I Sem/ M.Sc II sem Spectro... | ACFrOgDWJ4CkaCvN2BmmUjzT...

doc-00-8c-apps-viewer.googleusercontent.com/viewer/secure/pdf/ikg2avqvb2ob9c9ad6une0uvn5p9hbbm/pko3gq1c8969m4stphki36rvd8c46a3/1626522825000/drive/0353505...

ACFrOgDWJ4CkaCvN2BmmUjzT\_zarp3P\_eUj8ZJkX\_206\_WYt2pYJ8... 1 / 7 - 100% +

**MC CONNELL RELATIONSHIP**

{ESR OR EPR SPECTROSCOPY}

Type here to search 27°C Light rain 17:24 17-07-2021

Inbox (7,413) - singh.kalpana297 | Classroom | Google for Education | M.Sc I Sem/ M.Sc II sem Spectro... | ACFrOgCmkmyPV5U7C\_itr9wS...

doc-00-8c-apps-viewer.googleusercontent.com/viewer/secure/pdf/ikg2avqvb2ob9c9ad6une0uvn5p9hbbm/tngm8p74og5f7a8avgdaiqiaa82rgj/1626522750000/drive/0353505...

ACFrOgCmkmyPV5U7C\_itr9wSepXP4wLMoDzNFFN819ByDVHEaUdr... 1 / 9 - 100% +

**{ TOPIC }  
FACTORS AFFECTING ] COUPLING**

Guided by- Dr. kalpana ma'am  
Presentation by- priyanka sahni  
Class - Msc 2nd sem

Type here to search 27°C Light rain 17:33 17-07-2021

ACFrOgDHo-YLu5ijj5JhywF8HGpx7iOEPA7vPQXFIS\_R3cRd5NiubwYC... 1 / 7 - 81% +

**GOVT. MADHAV SCIENCE COLLEGE UJJAIN**

TOPIC - COSSY NMR TECHNIQUE EXPLANATION WITH EXAMPLE OF MOLECULE.

SUBMITTED BY- YOGITA DUBEY, NAHID

SEM - M.SC IV\_SEM

classroom.google.com/u/0/w/MTUzMDcwODU2Njcy/t/all

M.Sc III Semester & iv semester  
Spectroscopy, Medicinal & Biochemistry

Stream **Classwork** People Marks

+ Create Google Calendar Class Drive folder

All topics

CCE Project submis...

Applications of IR s...

NMR

experiment( Virtual mode) Posted 12 Jan

change the variables and see the effect on absorbance

Beer's Law Lab 1.4.19  
<https://phet.colorado.edu/si...>

View material

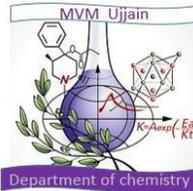
Mossbauer applied to Iron Posted 7 Jan

mossbauer Due 26 Nov 2020, 21:00

Drago, Physical Spectroscopy Posted 22 Nov 2020

Nakamoto A Posted 15 Oct 2020

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.**  
**A GRADE ACCREDITED THROUGH NAAC**  
**DST-FIST COLLEGE**



Sample CCE

Mode : Poster Presentation

**Govt. Madhav Science P.G. College, Ujjain**  
 DST-FIST COLLEGE  
 A GRADE ACCREDITED THROUGH NAAC

**CHEMICAL SHIFT AND SPIN-SPIN INTERACTION**

**NMR SPECTROSCOPY:**  
 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY IS A RESEARCH TECHNIQUE THAT STUDIES THE MAGNETIC PROPERTIES OF CERTAIN ATOMIC NUCLEI.

**CHEMICAL SHIFT:**  
 IN NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY THE CHEMICAL SHIFT IS THE RESONANT FREQUENCY OF A NUCLEUS RELATIVE TO A STANDARD IN A MAGNETIC FIELD OFTEN THE POSITION AND NUMBER OF CHEMICAL GROUPS ARE DIAGNOSTIC OF THE STRUCTURE OF A MOLECULE.

**SPIN-SPIN INTERACTION:**  
 THE INTERACTION BETWEEN THE SPINS OF THE ADJACENT NUCLEI IN A MOLECULE, WHICH CAUSES THE SPLITTING OF LINES, IS KNOWN AS SPIN-SPIN INTERACTION.

Designed & Submitted By :  
 B.Sc. VI Sem.  
 Batch B2 (Group No.8) 2016-17

**Govt. Madhav Science P.G. College Ujjain**  
 DST-FIST COLLEGE  
 A GRADE ACCREDITED THROUGH NAAC

**Raman Spectroscopy**

When a beam of light is passed through a transparent substance, the scattering of radiation of the same frequency as that of incident frequency is known as Rayleigh Tyndall Scattering, while the scattering radiations of higher and lower frequencies than the frequency of incident radiation is known as Raman scattering. The origin of Raman spectra is due to the change in the polarizability of the molecule.

**Stokes and Anti-Stokes lines:**

The lines of lower frequencies than that of the lines of incident light frequency are called Stokes lines and those of higher frequencies are called as anti-Stokes lines.

Designed & Presented By :  
 B.Sc. VI Sem.  
 Batch 2016-17

**Govt. Madhav Science P.G. College Ujjain**  
 DST-FIST COLLEGE  
 A GRADE ACCREDITED THROUGH NAAC

**MOLECULES AS RIGID ROTOR**

A rotating diatomic molecule whose nucleus are separated by a definite mean distance may be treated as a rigid rotor with fixed size of constant bond length remains fixed during rotation.

**Condition Followed:-**  
 Permanently Polar Molecule - Polar molecules have dipole or rather separation of charges in a molecule which gives it a distinct behavior of a pair with point charges of opposite sign separated from each other.

**Rotational Properties:**  
 The rotational properties of any molecule can be expressed in terms of the moment of inertia about three perpendicular axes to the molecule. For linear molecules the moment of inertia around the inter-nuclear axis is zero.

**Microwave Radiation with Energy:**  
 $4.9 \times 10^7$  e volt and wavelength of the order of  $3 \times 10^6$  cm, when interact with the electromagnetic field of the Rigid Rotor produce microwave spectrum.

Designed & Presented By :  
 B.Sc. VI Sem.  
 Batch 2016-17

**Govt. Madhav Science P.G. College, Ujjain**  
 DST-FIST COLLEGE  
 A GRADE ACCREDITED THROUGH NAAC

**STRUCTURAL LEVELS OF PROTEIN**

Protein is a large molecule or macromolecule consisting of one or more chains of amino acids. The amino acid is linked together by covalent bonds to form a long chain. Each amino acid is linked to the next amino acid by a covalent bond. The amino acid is linked to the next amino acid by a covalent bond.

**PRIMARY STRUCTURE:** It is the linear sequence of amino acid present in the polypeptide chain. The primary structure is held together by covalent bonds such as peptide bonds, which are made during the process of protein synthesis.

**SECONDARY STRUCTURE:** It is the local folding of the polypeptide chain into regular structures like alpha-helix, beta-sheet, and beta-turn. The secondary structure is held together by hydrogen bonds.

**TERTIARY STRUCTURE:** It is the overall three-dimensional shape of the protein molecule. The tertiary structure is held together by hydrogen bonds, hydrophobic interactions, and disulfide bonds.

**QUATERNARY STRUCTURE:** It is the overall three-dimensional shape of the protein molecule. The quaternary structure is held together by hydrogen bonds, hydrophobic interactions, and disulfide bonds.

Designed & Submitted By :  
 B.Sc. VI Sem.  
 Batch B1 (Group No.1) 2016-17

**Govt. Madhav Science P.G. College Ujjain**  
 DST-FIST COLLEGE  
 A GRADE ACCREDITED THROUGH NAAC

**FUNCTIONS OF DNA & RNA**

**Functions of DNA:**  
 1. Genetic Material  
 2. Hereditary Material  
 DNA stores an organism's genetic information and directs the production of proteins.

**Functions of RNA:**  
 A. Catalytic function: RNA acts as a catalyst in protein synthesis.  
 B. Messenger function: RNA carries instructions from DNA.

**Ribosomal RNA (rRNA):**  
 Factory of protein synthesis. Acts as a catalyst.

**Transfer RNA (tRNA):**  
 It takes the messenger from mRNA and decodes them for the ribosomes.

**Messenger RNA (mRNA):**  
 Serves as messenger from DNA to the rest of the cell.

Designed & Presented By :  
 B.Sc. VI Sem.  
 Batch 2016-17

**Govt. Madhav Science P.G. College Ujjain**  
 DST-FIST COLLEGE  
 A GRADE ACCREDITED THROUGH NAAC

**CLEANSING EFFECT OF SOAPS**

**CLEANSING ACTION OF SOAPS:**  
 1. A long hydrocarbon chain which is hydrophobic (i.e. it dissolves in hydrocarbons).  
 2. A short polar part containing oxygen atoms is hydrophilic (i.e. it dissolves in water).

**WATERLESS SOAP MOLECULES:**  
 A soap molecule has two ends with different properties.

**Micelle:**  
 The dirt present on clothes is organic in nature and insoluble in water. Therefore, it cannot be removed by only washing with water. When soap is dissolved in water, its hydrophilic ends attach themselves to the dirt and remove it from the cloth. Then the molecules of soap arrange themselves in the centre of the cluster. These micelles remain suspended in the water. Hence, the dirt particles are easily rinsed away by water.

Designed & Presented By :  
 B.Sc. VI Sem.  
 Batch 2016-17

**GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN**  
 DST-FIST COLLEGE  
 A GRADE ACCREDITED THROUGH NAAC

**BET**

**BRUNAUER-EMMETT-TELLER**

An adsorption isotherm is a plot of the amount of gas adsorbed on the surface of a solid versus the pressure of the gas at a constant temperature. The BET equation is named after S. Brunauer, P. Emmett and E. Teller. It is given by:

$$\frac{P}{V(P_0 - P)} = \frac{c}{V_m(P_0 - P)} + \frac{c - 1}{V_m}$$

The adsorption isotherm is of the form:

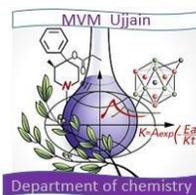
The irreversibly BET region in the isotherm corresponds to irreversible sorption and is characteristic of:

- Type I Adsorption Isotherm
- Type II Adsorption Isotherm
- Type III Adsorption Isotherm
- Type IV Adsorption Isotherm
- Type V Adsorption Isotherm

Designed & Presented By :  
 B.Sc. VI Sem.  
 Batch 2016-17

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



*Mode : Subjective long test*

*Session: 2019-20*

**INORGANIC CHEMISTRY**

1. what is valence band theory (VBT) write its rules, utility & limitations?
2. what are semiconductors? describe P-type & n- type semi-conductors?
3. what is lattice energy? how can it be determined by Born –Haber's process?
4. explain physical and chemical properties of group15 elements?

**ORGANIC CHEMISTRY**

1. what are conjugated dienes write methods & preparation?
2. Write two method of preparation of alkynes?
3. Explain mechanism of elimination reaction of alkyl halides?
4. what do you mean by isomerism? discuss its various type? And describe in detail.

**Physical Chemistry**

1. what is radioactivity? explain natural and artificial radioactivity.
2. explain the various application of radioactivity?
3. what do you understand by first order reaction? Derive mathematical expression for rate constant for first order reaction what is specific reaction rate?
4. Explain the Le chatelier's principle and explain its applications.
5. state and explain chemical equilibrium explain factors affecting chemical equilibrium?



# SCANNED ANSWER SHEET

Physical Chemistry

Ques → what is radioactivity? Explain Natural and artificial radioactivity.

Ans → Francis physicist Henry Becquerel observed that Uranium and its compound spontaneously emitted contain invisible rays which affected photographic plate, in the dark and are able to penetrate solid matter cause gases and produces luminosity in substance like zinc sulphide and sodium platino cyanide. He called it as radioactive rays. The substance which possess the property of emitting these radioactive rays was said to be radioactive and the phenomenon was called radioactivity.

⇒ Natural Radioactivity & Radio active Radiations.

The nature of the Radiation emitted by radioactive elements was investigated by further.

→ found in 1904. By passing a steely electric field they separated them in different kinds as shown.

Emission and of separation of radioactive radiations

The rays which are deflected towards the negative plate are positively charged and are known as  $\alpha$  rays, or alpha particles as they, in fact, consist merely helium nuclei.

Inorganic Chemistry...

Ques → what is valence bond theory (VBT) write its ends, utility & limitations?

Ans → This theory was developed by Heitler and London in 1927 and later extended by Pauling and Slater in 1931. According to them a covalent bond must contain two orbitals containing one  $e^-$  on opposite spin overlaps and lead to pairing of the electrons.

Let's consider bond formation in  $H_2$  molecule. It has two H atoms, contains one unpaired electron with opposite spin when two atoms are apart. There is no interaction between them, when they come closer to each other there is interaction between them. Hence energy decreases the attractive forces between them for nucleus of one atom &

electrons of other atoms are not mixed.

where:

$\Delta E = 434.3 \text{ kJ/mol}$

H-H energy same as atom pairing opposite spin ( $\uparrow\downarrow$ )

$d_0 \rightarrow$  Bond length.

$\Delta E \rightarrow$  Bond energy.

Important postulates of VBT

- 1) The covalent bond is formed by overlapping of atomic orbitals.
- 2) Atomic orbitals contain not available  $e^-$  opposite spin  $e^-$ .

ORGANIC Chemistry...

Q1 → what are conjugated diene write methods of preparation?

Ans → Diene which contains alternate single & double bonds. eg: Beta 1-3 diene and isoprene.

→ Methods of formation

- 1) By dehydration of acids when suitable diol is heated in presence of acid, catalyzed then diene are formed.

$CH_3CH_2CH_2CH_2OH \xrightarrow{H^+} CH_2=CH-CH=CH_2$   
Beta 1,3-diene

- 2) By catalytic hydrogenation in physical chemical industry Beta-diene are obtained by catalytic hydrogenation of n-pentan-2-one

or Beta-2-one

$CH_3CH_2CH_2CH_3 \xrightarrow{O_2} H_2C=CH-CH=CH_2$

$CH_3CH=CHCH_3 \xrightarrow{O_2} H_2C=CH-CH=CH_2$   
OR  
 $CH_3CH_2CH=CH_2$

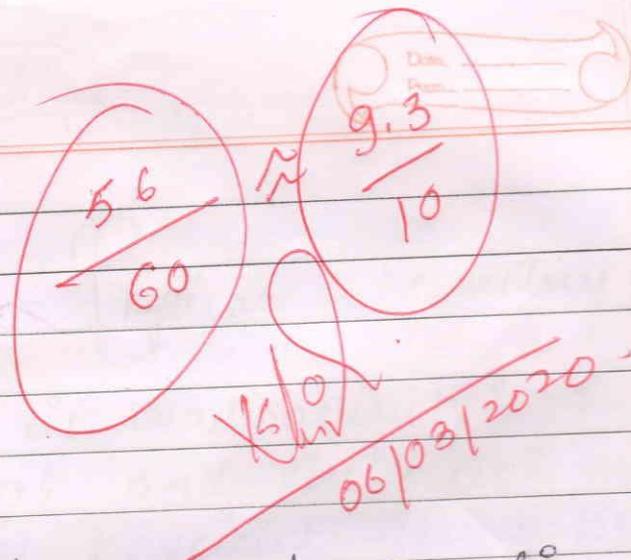
Q2 → Write two methods of preparation of alkynes?

Ans → By the action of alcoholic KOH and mono-halogen substitution product of diene molecule halogen acids are eliminated and alkynes are obtained.

$CH_3-CH_2CH_2-CH_2-Br + 2KOH \rightarrow CH_3-C \equiv CH + 2KBr + 2H_2O$   
Propyne

$CH_2=CH-CH_2-Br + KOH(aq) \rightarrow CH \equiv C + H_2O$   
2 ethynyl prop-1-ene

$CH_3-CH_2-CH_2-Br + 2NaNH_2 \rightarrow CH_3-C \equiv CH + 2NaNH + 2NH_3$



Name - Apuwa Tiwari  
 Subj. - Chemistry  
 Year - 1<sup>st</sup> year  
 Father's Name - Arvind Tiwari  
 Subj Date - 04/08/20

marking done out of 60  
 Equated to 10.

1

Date \_\_\_\_\_  
Page \_\_\_\_\_

# Physical Chemistry

Ques → what is radioactivity? Explain Natural and artificial radioactivity.

Ans → Francis Physicist Henry Becquerel observed that Uranium and its compound spontaneously emitted invisible rays which affected photographic plate, in the dark and are able to penetrate solid matter cause gases and produces luminosity in substance like zinc sulphide and barium platino cyanide. He called it as radioactive rays.

The substance which possessed the property of emitting these radioactive rays was said to be radioactive and the phenomenon was called radioactivity.

⇒ Natural Radioactivity & Radio active Radiations.

Date \_\_\_\_\_  
Page \_\_\_\_\_

The nature of the radiations emitted by radioactive elements was investigated by Rutherford in 1904. By passing a strong electric field they separated them in different kinds as shown.

→ Emission and separation of radioactive radiations

The rays which are deflected towards the negative plate are positively charged and are known as  $\alpha$  rays, or alpha particles as these, in fact, consist merely of helium nuclei.

# Inorganic Chemistry...

Ques → what is valence bond theory (VBT) write its rules, utility & limitations?

Ans → This theory was developed by Heitler and London in 1927 and later extended by Pauling and Slater in 1931. According to them a covalent bond results when two orbitals containing one  $e^-$  of opposite spin overlaps and lead to pairing of the electrons.

Let's consider bond formation in  $H_2$  molecule. It has two H atoms, contains one unpaired electron with opposite spin when two atoms are apart. There is no interaction between them. When they come closer to each other there is "interaction" between them. Hence energy decreases the attractive forces between them for nucleus of one atom &

electrons of other atoms  
are vice versa.

→ where.

$$\Delta E = 434.8 \text{ KJ/mol.}$$

H-H energy same for atoms  
having opposite spin ( $\uparrow\downarrow$ )

do → Bond length.

$\Delta E$  → Bond energy.

→ Important postulates of V.B.

(1) The covalent bond is  
formed by overlapping of  
atomic orbitals.

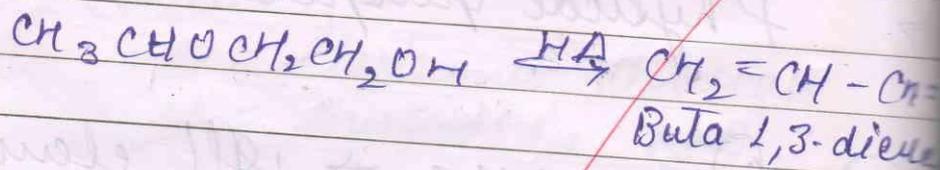
(2) Atomic orbitals contain  
parallel & opposite spins.

# ORGANIC Chemistry

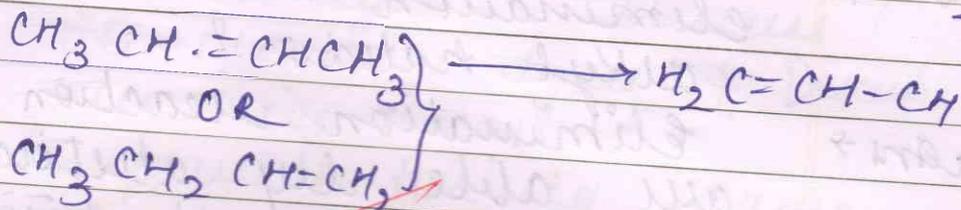
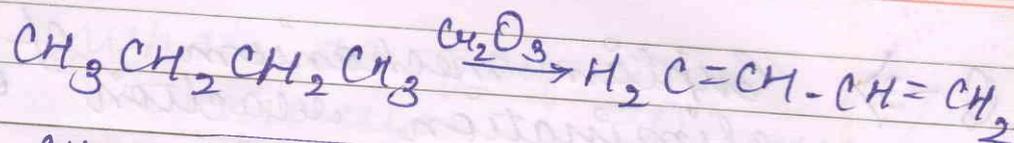
Q-1} what are conjugated dienes  
write methods of preparation  
Dienes which contain  
alternate single & double  
bonds. eg. Buta 1-3  
diene and isoprene.

→ Methods of formation

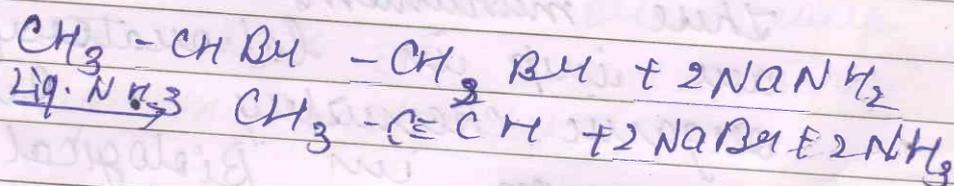
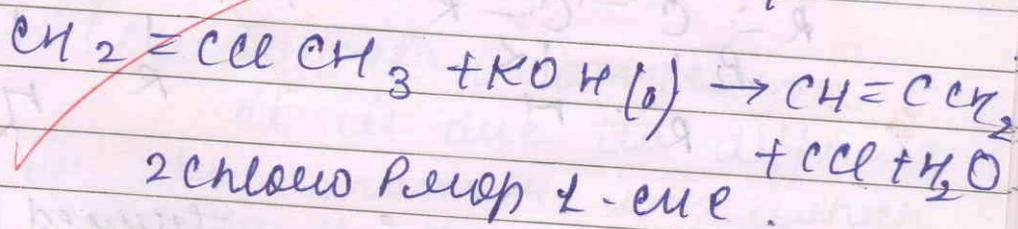
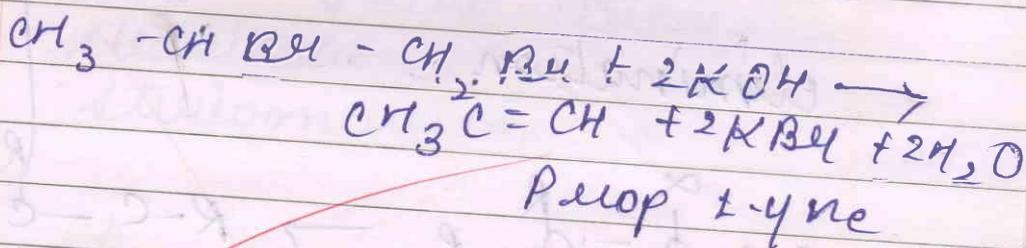
(1) By dehydration of acids  
when suitable diol  
is heated in presence of  
acid, catalyst then dienes  
are formed.

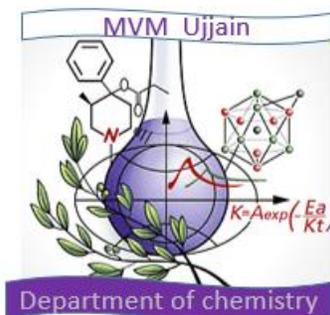


(2) By catalytic dehydrogenation  
In petrochemical industry  
Buta-dienes are obtained  
by catalytic dehydrogenation  
of n-butane; not 1-ene  
or But-2-ene.



Q-2) Write two methods of preparation of alkyne?  
 Ans → By the action of alcoholic KOH and mono-halogen substitution product of olefins molecules halogen acids are eliminated and alkynes are obtained.





**DEPARTMENT OF CHEMISTRY  
GOVT. MADHAV SCIENCE PG COLLEGE UJJAIN**

**COURSE INSTRUCTOR: DR. KALPANA VIRENDRA SINGH  
PROFESSOR CHEMISTRY**

**CCE DISTRIBUTION M.Sc.II SEMESTER SESSION 2018-19**

**Mode: Compendium preparation**

**Evaluation and Submission of e content : 15/05/2019**

**Final publication of e content:20/05/2019**

**Examination : 24/05/2019**

**UNIT I Contributors: Vaidehi Vyas, Mamta Deshmukh, Pooja Nandi, Manisha katariya,  
Vijay Parasiya**

Nuclear Magnetic Resonance Spectroscopy, Nuclear Spin, Nuclear Resonance, Saturation,  
Shielding of Magnetic Nuclei. .... Vaidehi Vyas

Chemical Shift and it's measurements, factors influencing chemical shift ..... Mamta  
Deshmukh

De shielding , Spin Spin interactions, J Coupling , factors influencing J Coupling.....Pooja  
Nandi

Classification (AXB, AMX, ABC, A2B2 etc.) spin decoupling, basic ideas about  
instrument....Manisha Katariya

NMR studies of nuclei other than proton <sup>13</sup>C, <sup>19</sup>F and <sup>31</sup>P, FTNMR and its  
advantages.....Vijay Parasiya

**UNIT II**

General concept of Nuclear Quadrupole Resonance spectroscopy.....Omprakash Parasiya

Quadrupole Nuclei and quadrupole moment.....Rohit Kumavat

Electric field gradient in NQR.....Priya Patidar

Coupling constant in NQR, Splitting in NQR.....Mahendra Vishwkarma

Applications in NQR.....Rajat Dube

### **UNIT III**

Basic Principles of Electron spin resonance Spectroscopy

Zero field splitting and Kramer's degeneracy

g value and factors inflecting g values, Gyromagnetic ratio

Isotropic and Anisotropic hyperfine coupling constant

Spin Hamiltonian, spin densities and MC Connell relationships, measurement techniques, Applications of ESR.

### **UNIT IV**

Braggs condition in X-ray diffraction , Miller indices.

X-ray structural analysis of crystals through Laue method, Bragg method, Debye Scherer method

Index reflections, identification of unit cells from systematic absences in diffraction pattern

Structure of simple lattices and X-ray intensities

Structure factor and it's relation to intensity and electron density, phase problem

Description of the procedure for an X-ray structure analysis, absolute configuration of molecules

### **UNIT V**

Electron Diffraction, Scattering Intensity vs Scattering angle

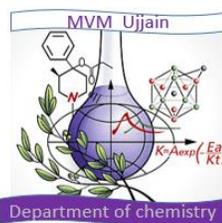
Wierl equation, measurement technique

Elucidation of structure of simple gas phase molecules

Low energy electron diffraction and structure of surfaces

Neutron Diffraction, scattering of neutrons by solids measurement techniques

Elucidation of structure of magnetically ordered unit cells



FIRST  
ATTEMPT  
2017-18

**DEPARTMENT OF CHEMISTRY GOVT. MADHAV SCIENCE PG COLLEGE UJJAIN M.P.  
SESSION 2017-18**

**Note:** Relevant Chapters Microwave spectroscopy (slight input from Electronic spectroscopy).

Please note that  $B = \frac{h}{8\pi^2 I c}$  when units are in  $\text{cm}^{-1}$ ; and  $B = \frac{h}{8\pi^2 I}$  when units are expressed in Hz.

Q1. For a diatomic molecule in a  $\Sigma^1$  electronic state, we observe a microwave transition from  $J = 1$  to  $J = 2$  in the presence of an electric field. How many lines will appear in the spectrum?

Q2. Calculate the bond length of  $\text{C}^{12}\text{O}^{16}$  using  $B = 1.9302 \text{ cm}^{-1}$  and the reduced mass is  $\mu = 1.14 \times 10^{-26}$

Q3. Identify the molecules that will exhibit a pure rotational absorption microwave spectrum:  
 $\text{N}_2\text{O}, \text{NO}_2, \text{CClF}_3, \text{NF}_3, \text{SF}_6, \text{CH}_4, \text{CO}_2$

Q4. Calculate the frequency of the  $J = 3$  to  $J = 4$  transition in the pure rotational absorption spectrum of  $\text{N}^{14}\text{O}^{16}$ . The equilibrium bond length is 115 pm. Assume no centrifugal distortion. The mass of a nitrogen atom is 14.003 amu; the mass of an oxygen atom is 15.995 amu; and the conversion factor is  $1.6605 \times 10^{-27} \text{ kg/amu}$ .

Q5. What information about the molecular geometry for  $\text{N}_2\text{O}$  can be determined from knowing that a pure rotational absorption spectrum is observed for this molecule?

Q6. The moment of inertia about an axis perpendicular to the principal axis for  $\text{NH}_3$  is  $2.82 \times 10^{-47} \text{ kg m}^2$ . There are different types of rigid rotors: linear, spherical top, prolate symmetric top, oblate symmetric top, asymmetric top. Which type of rotor is  $\text{NH}_3$ ? Calculate the separation (expressed in  $\text{cm}^{-1}$ ) of the pure rotational spectrum lines for  $\text{NH}_3$ ?

Hint: The moment of inertia about the principal axis is given by  $I_{II} = 2m_H R^2(1 - \cos\theta)$ , where the mass of a hydrogen atom  $= m_H = 1.6735 \times 10^{-27} \text{ kg}$ ; the N-H bond length  $R = 1.014 \times 10^{-10} \text{ m}$ ; and the bond angle is  $106.78^\circ$ . Explain different types of rigid rotors

**Note:** Relevant Chapter **Vibrating Diatomic Molecules and Infra red spectroscopy**

Q7. Which of the following vibrational transitions will be observed for a diatomic molecule (treated as a harmonic oscillator):  $v = 1$  to  $v = 3$ ;  $v = 2$  to  $v = 3$ ;  $v = 5$  to  $v = 4$ . Secondly treat the same molecule as anharmonic oscillator. Give complete diagrammatic representation

Q8. What is rotational vibrational spectroscopy, give their integration and formation of spectral lines.

Q9. Draw Morse Potential energy diagram and give its significance.

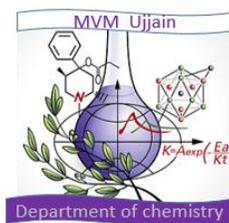
**Note:** Relevant Chapter **Raman Spectroscopy**

Q10. Sulphur hexafluoride ( $\text{SF}_6$ ) is Centro symmetric. Discuss the advantages of Raman Spectrum taking its example

Teacher Incharge: Dr. Kalpana Virendra Singh  
Professor Chemistry.

Difficulty Level: Moderate

Expected average Score as per difficulty level 6/10



DEPARTMENT OF CHEMISTRY GOVT. MADHAV SCIENCE PG COLLEGE UJJAIN M.P.  
SESSION 2017-18

CCE Class M.Sc I Semester  
Paper Code 404

COURSE INSTRUCTOR : DR. KALPANA SINGH

**Each Question carries the marks written in front of it. Final marks will be calculated out of 10 after moderation**

Q1. Infrared radiations are largely thermal energy and produces molecular vibrations. Discuss the formation of IR Spectrum taking into account active bonds, how does the intensity of spectral lines decided, give factors responsible for it. How does harmonicity and anharmonicity appears giving rise to fundamental lines as well as overtones. ....12

Q2. Symmetry and shape of the molecules play decisive role in the spectral behavior of molecules, discuss in detail in which class do  $BCl_3$  and  $CH_3I$  fall . validate your answer with the justification and drawings.....08

Q3. Bond length in  $^{12}_C^{14}_N$  is 117pm and force constant is  $1630Nm^{-1}$ . Predict the rotational vibrational spectrum of  $^{12}_C^{14}_N$ .....10

## CCE : MCH 501 APPLICATIONS OF SPECTROSCOPY

### CLASS M.SC III SEMESTER

#### MODE: GROUP POSTER SUBMISSION FOLLOWED BY POSTER PRESENTATION

Submit Soft copy followed by presentation Final submission in the form of Poster

SOFT COPY SUBMISSION: 23/11/2019

**GROUP 1. Presentation** 25/11/2019 Time: 2.40 p.m. Room no 18

1.Arvind D. Rathore, 2.Arvind. H. Rathore 3.Damodar Bansiya 4.Alkar Singh 5.Gopal Sharma 6. Mahendra Vishwakarma

#### Mossbauer spectroscopic case study of $\text{Fe}^{+2}$ and $\text{Fe}^{+3}$ compounds

**GROUP 2. Presentation** 25/11/2019 Time: 3.00 p.m. Room no 18

1.Rajat Kumar Dubey 2.Preeti Jat 3.Rohit Kumavat 4.Shanu Tiwari 5. .Manisha Katariya

#### Mossbauer spectroscopic case study of $\text{Sn}^{+2}$ and $\text{Sn}^{+4}$ compounds

**GROUP 3. Presentation** 25/11/2019 Time: 3.20 p.m. Room no 18

1.Shree Vallabh Bansiya 2.Sunil Kapadiya 3. Varsha Bairagi 4. Supriya Jain 5.Anita Gamad

#### Spectroscopic case study of Diketonato Complexes special emphasis on vibrational Spectra

**GROUP 4. Presentation** 25/11/2019 Time: 3.40 p.m. Room no 18

1.Vaidehi Vyas 2. Mamta Deshmukh 3. Pooja Chandel 4. Vijay Parasiya 5. Omprakash Parasiya 6.Pooja Nandi

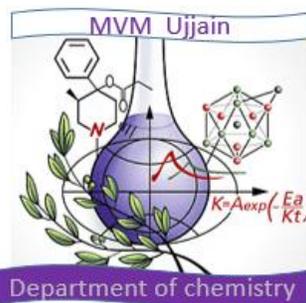
#### Spectroscopic case study of EDTA special emphasis on vibrational Spectra

**Final submission : 26/11/2019 2.40 p.m.**

**Poster size 6x3 Feet**



**Dr. Kalpana Singh**



**DEPARTMENT OF CHEMISTRY**  
**GOVT. MADHAV SCIENCE PG COLLEGE UJJAIN M.P.**

**CCE QUESTION PAPER MCH 409 SPECTROSCOPY**

**MODE : SUBJECTIVE TEST**

**COURSE INSTRUCTOR: DR. KALPANA SINGH**

**CLASS: M.SC.II SEMESTER      SESSION 2018-19      TIME ALLOTTED: 90 MINUTES**

Q1. Number of signals in proton NMR Spectrum depends upon the set of equivalent protons in a molecule. Discuss “are magnetically equivalent protons chemically equivalent also” validate your point giving an insight into the individual equivalence.

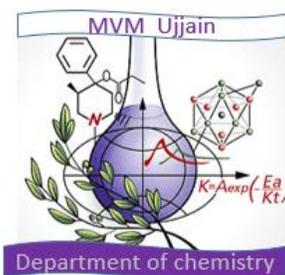
Q2. What is Chemical Shift, give reasons for it. TMS is used as reference why? Give formula for calculation of Chemical shift, what are the units used to express Chemical Shift ( $\delta$ )

Q3. What are Nuclear Quadrupole transitions, discuss with reference to Axially Symmetric and Axially non symmetric molecules

(Hint: discuss taking into account the energy equation depending upon electric field gradient)

Q4. Interpretation of ESR Spectra is made in terms of Spin Hamiltonian, what is it? Calculate the spin Hamiltonian for Hydrogen atom.

Q5. Concomitant splitting of electron spin energy levels is called as Hyperfine splitting giving rise to hyperfine structures in ESR Spectra, give factors on which magnitude of hyperfine coupling constant depends, can you have a comparison with Zeeman splitting here.



## P.G. DEPARTMENT OF CHEMISTRY GOVT. MADHAV SCIENCE P.G.COLLEGE UJJAIN

### M.Sc I semester session 2019-20

CCE I                      Mode: Open book test                      MM: 50      Qualifying marks: 17

Moderation on the scale of 10 will be done after CCE IV

UNITS COVERED: UNIT 1 (One question)

UNIT II (Two questions)

Difficulty level: Moderate

Objective: The objective of the CCE is

- To give students a tour from semester examination to CSIR NET JRF Examination
- Every question has two part first part is theoretical dealing with the semester examination , where as the second part is analytical and directly refers to the related questions asked in previous years CSIR / GATE /TFR exams .

Books to be consulted :

- Fundamentals of Molecular Spectroscopy by Colin N. Banwell and Elaine M. McCash
- Physical Methods for Chemists by Russel S. Drago
- Introduction to molecular Spectroscopy by G.M.Barrow
- Chemical applications of group theory by F Albert Cotton

### QUESTIONS

1. Discuss in detail Gross and specific selection Rules for Microwave (Rotational Spectroscopy).How are the rotational levels spaced in Rigid Rotators (6)

For a diatomic molecule AB, the energy for the transition from  $J=0$  to  $J=1$  state is  $3.9\text{cm}^{-1}$ . The energy for the rotational transition from  $J=3$  to  $J=4$  state would be

- a)  $3.9\text{cm}^{-1}$    b)  $7.8\text{cm}^{-1}$    c)  $11.7\text{cm}^{-1}$    d)  $15.6\text{cm}^{-1}$  { CSIR NET June 2012}

Support your answer with full solution. (10)

2. Discuss the intensity of spectral lines with respect to the population of different rotational levels. Discuss in the light of Maxwell Boltzman distribution law (6)

A homonuclear diatomic molecule is rotating with a frequency  $\nu$ . The temperature at which the population of excited state will be half of that ground state is given by {8}

a)  $\frac{h\nu \ln 2}{2k_B}$     b)  $\frac{h\nu}{\ln 2 k_B}$     c)  $\frac{\ln 2}{h\nu k_B}$     d)  $\frac{h\nu \log 2}{k_B}$     { CSIR NET Dec 2015}

Support your answer with full solution

A molecule absorb in green wavelength at 500 nm. At some temperature it is measured that for every 10 molecules in excited state 27 molecules are present in ground state, what is the approximate temperature of the molecule (8)

a) 270 K    b) 1000K    c) 500K    d) 30,000K    { TIFR}

Support your answer with full solution

3. What are Schonflies and Mulliken Symbols in group Theory. (4)

Write the Mulliken symbols and missing Characters for the Character Table {CSIR NET 2017}

Support your answer with full explanation (8)

	E	$2C_3$	$3\sigma_v$
A	1	1	1
-	-	-	-
E	2	-1	0

Missing Characters

a)  $A_1'$  1    -1    1

b)  $B_1$  1    -1    -1

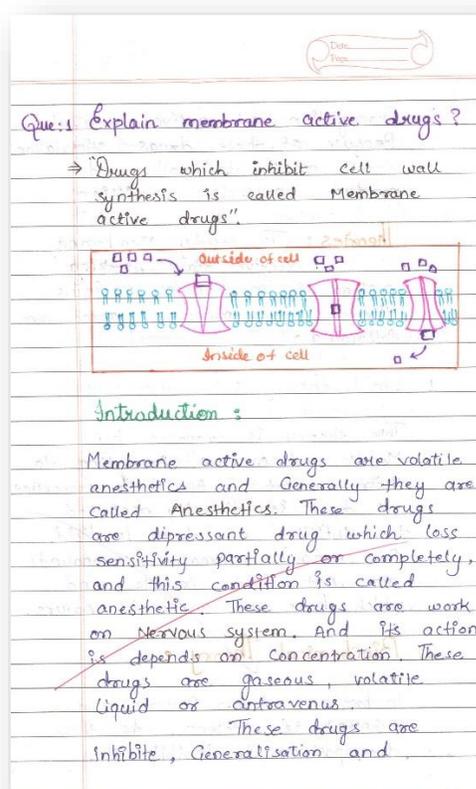
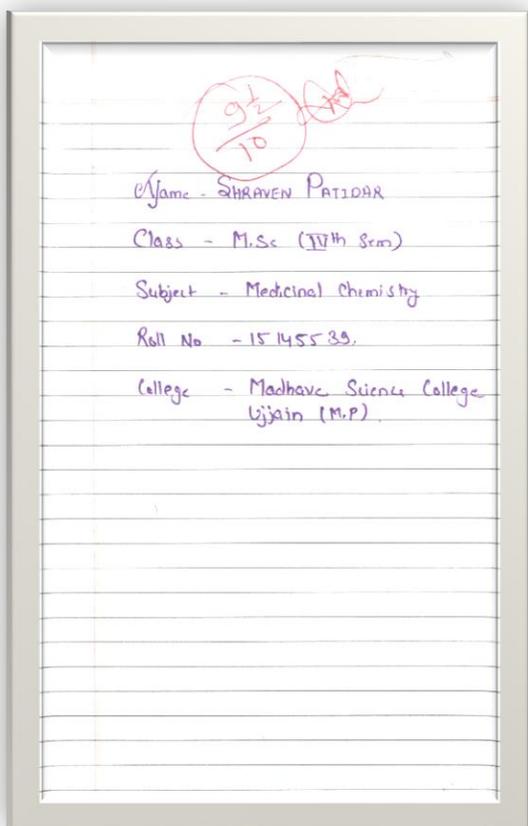
c)  $A_2$  1    1    -1

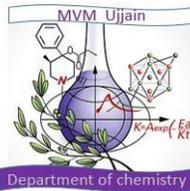
d)  $B_2$  1    -1    1

COLLEGE



Sample Copies





Propagation of active potential.  
Because of these drugs stimulations don't reach to brain and produce anesthetic condition.

**Theories:** To study Membrane active drug working action & mechanism various theories are proposed some are following:

1] **Lipid Theory:**  
This theory is proposed by Meigs and Overton. According to their concept - "Anesthetic properties of drug is directly related to solubility of drug in lipid. But various aromatic compounds are not lipid soluble and which have not anesthetic nature."

2] **Biochemical Theory:**  
In brain  $\gamma$ -Amino Buteric acid [GABA] is present. If their decomposition is inhibit then

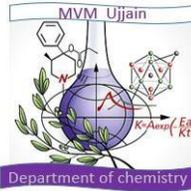
they increased GABA's concentration in brain and generate Synaptic Inhibition.

Anesthetic drugs are inhibit GABA's metabolic break-down. Because of this the conc of GABA is increased & produced anesthetic conditions.

3] **Membrane perturbation theory:**  
Anesthetic drugs are act on Membrane proteins. Because of this changes conformation & cause expansion of membrane, which produce an anesthetic condition.

**Membrane active drug:**  
Membrane active drugs are following types:

i] **Non halogenated Hydrocarbon:**  
Non halogenated Hydrocarbons as alkane, alkene etc have anesthetic properties. And this activity



increase with increasement of active chain length. Generally these compounds are explosive in nature, hence they are not used preferably.

2] Halogenated Hydrocarbon :

If Halogen is added in membrane active drug then they increased anesthetic properties of drug. And Generally they are flameable in nature.

3] Keto-amide Hydrochlorine :

This is a rapid & short duration membrane active drug. They are used in short surgical process. (10-25 min).

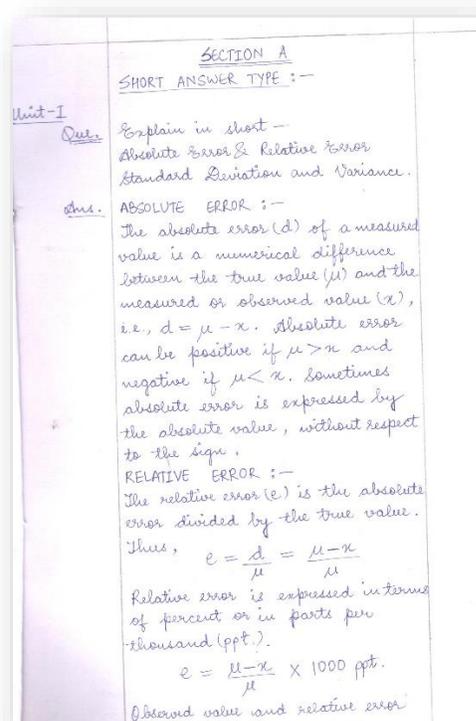
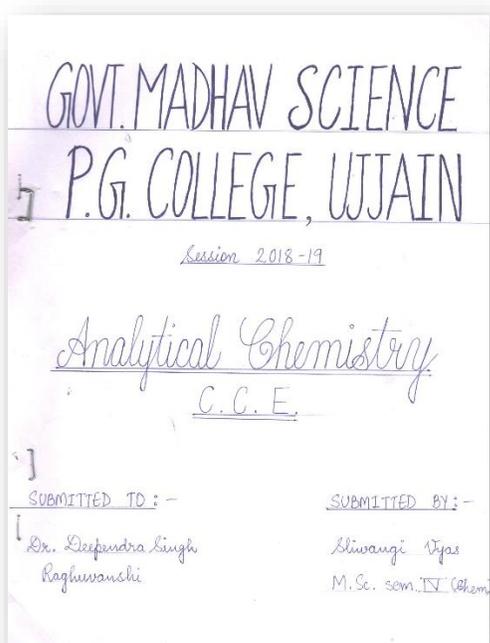
4] Ultra short acting barbiturates :

This is a very short type of membrane active drug. And it is also used with  $N_2O$  combination.

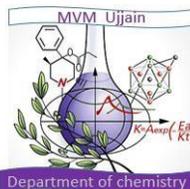
Contd.....



Sample



COLLEGE



give true or correct value,  

$$\mu = \frac{x}{1-e} \quad (\text{for } e \neq 1)$$

**STANDARD DEVIATION :-**  
 Standard deviation (also called root mean square deviation)  $\sigma$  measures how closely the data are clustered about the mean. The smaller the standard deviation, the more closely the data are present about the mean. S.D. of a single measurement can be obtained by extracting the square root of the quotient obtained by dividing the sum of the square of the individual deviations of the number of measurements made.

$$\sigma = \left[ \frac{1}{n} \sum (M_n - m)^2 \right]^{1/2} = \sqrt{\left[ \frac{\sum (X_i)^2}{n} \right]}$$

When the number of values is small the denominator is  $(n-1)$  rather than  $n$ . The above equation may also be written as

$$s = \left[ \frac{\sum (M_n - m)^2}{(n-1)} \right]^{1/2} = \sqrt{\left[ \frac{\sum (X_i)^2}{n-1} \right]}$$

This gives an indication of the reliability of the mean.  
 If we consider arithmetic mean equation, then the standard deviation may be defined by:

$$s = \sqrt{\frac{(x_1 - \bar{x})^2 + (x_2 - \bar{x})^2 + \dots + (x_n - \bar{x})^2}{n-1}}$$

For this equation the denominator is  $n-1$  rather than  $n$  when the number of measurement is small. The above equation can be written as

$$s = \sqrt{\frac{\sum (x - \bar{x})^2}{n-1}}$$

The square of the standard deviation is called the VARIANCE. Another measure of precision, known as Relative standard deviation (RSD) is given by:

$$RSD = s/\bar{x}$$

This measure is often expressed as a percentage, known as the coefficient of variance (CV). It is given as  $CV = s \times 100/\bar{x}$ .

Unit-II  
Que. Explain Munson Walker method for analysis of Reducing Sugars  
Ans. Carbohydrates are oxidised on heating with an excess of cupric sulphate and alkaline tartrate in basic medium to keep copper as copper (Cu<sup>2+</sup>) hydroxide.  
 • Upon heating, water is driven off and copper oxide is converted to cuprous oxide.

Contd.....

COLLEGE



Sample

**CHEMISTRY**  
CCE-410  
Class – M. Sc. 2<sup>nd</sup> sem.  
Session:- 2018-19  
Roll no. – 18180236  
Date:- 24/05/2019

Submitted to: Dr. Deependra Singh Raghuwanshi

Submitted by:- Shree Vallabh Bansiya

UNIT-1

Memory of the Computer :-  
The memory of the Computer is divided into two Categories :-

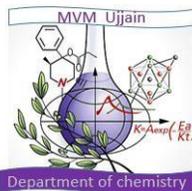
- 1) Primary Memory
- 2) Secondary Memory

1) Primary Memory :- This is the main memory of the Computer. CPU can directly read or write this memory. It is fixed on the motherboard of the Computer.

Primary memory is further divided into two types:

- A) RAM (Random Access Memory)
- B) ROM (Read only Memory)

A) RAM :- RAM is a temporary memory. The information stored in this memory is lost as the power supply to the Computer is turned off. That's why it is also called Volatile Memory. It stores the data and instruction given by the user and also the results produced by the Computer temporarily.



B) ROM :- Information stored in ROM is permanent in nature i.e. it holds the data even if the system is switched off. It holds the starting instructions for the computer. ROM cannot be overwritten by the computer. It is also called non-volatile memory.

2) Secondary Memory :- This memory is permanent in nature. It is used to store the different programs and the information permanently. It holds the information till we erase it.

Different types of Secondary storage devices are :-

Hard Disc, Compact Disc, DVD, pen drive, etc.

Hard Disc :- This is the main storage device of the computer which is fixed inside the CPU box. Its storage capacity is very high that varies 200GB to 3TB. A hard disc contains a number of metallic discs which are called platters. Information is recorded on the surface of the platters in a series of concentric circles. These circles are called tracks.

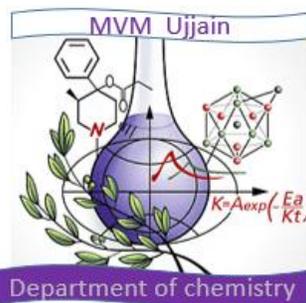
Input and Output Devices :- The devices which are used to input the data and the programs in the computer are known as "Input Devices". Input devices can read data and convert them to a form that a computer can use. Output device can produce the final product of machine processing into a form usable by humans. It provides man to machine communication.

i) keyboard :- keyboard is used in the input phase of a computer based information system. keyboard is most common input device is used today. The data and instruction are input by typing on the keyboard reaches the memory unit of a computer. It's connected to a computer via a cable.

ii) Mouse :- It's a pointing device. The mouse is rolled over the mouse pad, which in turn controls the movement of the cursor in the screen. We can click, double click or drag the mouse. Most of the mouse's have a ball beneath them, which rotates when the mouse is moved.

iii) Scanner :- Scanners are used to enter information directly in to the computers memory.

Contd.....



## FORMAT FOR CCE (Spectroscopy) M.Sc III & M.Sc.I SEMESTER

### SPECTROSCOPIC CASE STUDY OF "ABC" MOLECULE

SESSION 2019-20

- **SPECTROSCOPY**
  - Include EMR spectrum
  - Types of Interaction of EMR with matter
  - Types of spectroscopic interactions
- **MOLECULE**
  - Discuss structure
  - Symmetry and point group
- **IMPORTANCE OF SPECTROSCOPY FOR STRUCTURE ELUCIDATION IN GENERAL**
- **IMPORTANCE OF SPECTROSCOPY FOR STRUCTURE ELUCIDATION OF SPECIFIC MOLECULE**
- **DISCUSS SPECTROSCOPY OF MOLECULE IN DETAIL**
  - Microwave
  - IR
  - Raman
  - NMR
  - UV
- **DISCUSSION OF PEAKS and explanation Real time Spectra**
- **REFERENCES AND ACKNOWLEDGEMENTS**

## HPLC PRE TRAINING QUALIFYING TEST

**Total marks 50.**

**Start Time: 1.30 p.m. 03/11/2019**

**Submission Time: 3.00 p.m.03/11/2019**

**Responses closed by 3.05 p.m.03/11/2019**

Q1. Quantitative analysis may contain calculation and practical errors. How will you apply precision to the analytical tests. What is coefficient of variation give formula to calculate, what is the acceptable value of KV

Q2. Chromatography can be treated as a qualitative or quantitative analytical technique. Discuss

Q3. What is Eluotropic series. Is it adsorbent based. In a series constructed for Silica gel Toluene is placed higher to Acetone, how will you explain it.

Q4. Does particle size of adsorbent have anything to do with efficacy in Ion exchange Chromatography

Q5. How will you calculate Dwell volume and Dead Volume in Liquid Injection Chromatography.

**PARTICIPATIVE LEARNING MODE FOR CCE**  
**PG III SEMESTER**  
**NOTICE FOR PREPARATION OF QUESTION PAPER**

M.Sc III Semester & iv semester  
Spectroscopy, Medicinal & Biochemistry  
Class code v66ume6

Upcoming  
No work due in soon

Announce something to your class

Kalpana Singh  
1 Dec 2020

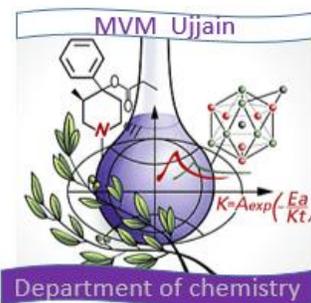
Class MSc III semester  
Mode of Teaching Active learning  
CCE mode 1 paper spectroscopy  
Unit II  
Applications of IR spectroscopy to Inorganic molecules.

Dear students  
The exercise is you have to set a question paper for this unit, assuming you are the paper setter.  
Your question paper should have 5 questions of 3 marks each  
And 5 questions of 5 marks each  
You can not copy from previous year papers.No mark will be given for copying  
Paper should be set individually, no group exercise.students working in groups and copying will be debarred from further CCE modes.  
Spectroscopy will have 6 modes from my side, I will submit the normalized score to official CCE instructor appointed by the department, in case I am not the one.  
I will set this assignment in your google class, so that you can submit there.

Your time starts now  
Ends on 02/12/2020 sharp 4.00pm

1 class comment

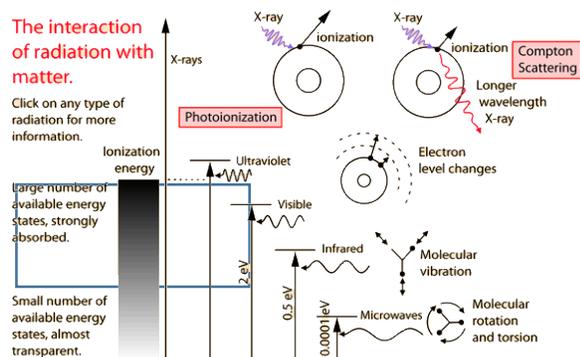
Afreen Ali 1 Dec 2020  
Mam.. What is the mode of writing the question bank... We have to write it on paper ND click a picture.. Or



**DEPARTMENT OF CHEMISTRY**  
**GOVT. MADHAV SCIENCE PG COLLEGE UJJAIN**  
CCE MODE POSTER PRESENTATION  
CLASS M.Sc.III Semester  
M.Sc.I Semester  
Session 2019-20

**SPECTROSCOPY : A POWERFUL TOOL FOR STRUCTURE ELUCIDATION OF MOLECULES.....**

Spectroscopy is the measurement of the absorption, emission, or scattering of electromagnetic radiation by matter to qualitatively or quantitatively study the matter or physical processes. The interaction of radiation with matter can cause redirection of the radiation and absorption via transitions between the energy levels of the atoms or molecules. Spectroscopy is widely used to study structural and dynamical aspect of molecular systems; it is a reliable tool for the characterization of crystalline materials. Modern spectroscopic techniques such as FTIR, FT-Raman, UV-visible, fluorescence and nuclear magnetic resonance (NMR) have proven to be an exceptionally powerful technique for solving many drug molecules, pesticide molecules and the natural products because of the availability of sophisticated instrumentation methods



We present here Spectroscopic case study of very simple molecules, just to have a glimpse of this spectroscopic tool.....

Graded poster Presentations

**Course Instructor: Dr. Kalpana Virendra Singh**  
**Professor Chemistry**



**VIKRAM UNIVERSITY**  
Ujjain



## INTERNAL MARKS ENTRY

(SESSION:DEC-2019)

**Note :- Please Click Submit button at the bottom to save marks after filling data in each screen.**  
**Note :- Please Click Approve button at the bottom to approve marks after submitting data.**

College Name	Madhav Science College,Kothi Road,Ujjain(605) ▼		
Select Course Name	MSC ▼	Branch Name	Chemistry ▼
Branch Mode	REGULAR ▼	Semester	1SEM ▼
Subject	1MSCC3 - GROUP THEORY & SPECTROSCOPY-I - IV ▼		
Entry Type	Internal Theory Marks ▼		

S.No	Check(All) <input type="checkbox"/>	Enroll. No.	Rollno	Name (Father's Name)	Obtain Marks		Submit/Approve Status	
					Enter Marks	Check, If absent	Submit Status	Approval Status
41	<input type="checkbox"/>	V16R166250268	19195193	Reena (Amarsingh)	5	<input type="checkbox"/>	Submitted	Approved
42	<input type="checkbox"/>	V16r166050322	19195194	Rohit Yogi(Tarun Yogi)	9	<input type="checkbox"/>	Submitted	Approved
43	<input type="checkbox"/>	v16r166010153	19195195	Saroj Patidar(Manish)	7	<input type="checkbox"/>	Submitted	Approved
44	<input type="checkbox"/>	V16R166010002	19195196	Sayyed Aafreen Ali(Sayyed Maqsood Ali)	9	<input type="checkbox"/>	Submitted	Approved
45	<input type="checkbox"/>	v16r166010025	19195197	Shobhita Kundlewati(Sohanlal Kundlewati)	5	<input type="checkbox"/>	Submitted	Approved
46	<input type="checkbox"/>	V16611231262	19195198	SOWAN LAL SISODIYA(MADAN LAL SISODIYA)	5	<input type="checkbox"/>	Submitted	Approved
47	<input type="checkbox"/>	B09013741	19195199	SUBHADRA CHOUHAN(TEJKUMAR CHOUHAN)	4	<input type="checkbox"/>	Submitted	Approved
48	<input type="checkbox"/>	v16r166250270	19195200	Sujan Singh(Devi Singh)	5	<input type="checkbox"/>	Submitted	Approved
49	<input type="checkbox"/>	V13R166250302	19195201	SUMER LAL CHOUHAN(RATAN LAL CHOUHAN)	5	<input type="checkbox"/>	Submitted	Approved
50	<input type="checkbox"/>	v12r166010101	19195202	SUSHMITA KHARE(PRADEEP KHARE)	7	<input type="checkbox"/>	Submitted	Approved
51	<input type="checkbox"/>	V16R162090089	19195203	TWINKLE WADHWA(RAJENDRA WADHWA)	5	<input type="checkbox"/>	Submitted	Approved
52	<input type="checkbox"/>	V13R166010087	19195204	VEENA RAJORIYA(NARAYAN)	8	<input type="checkbox"/>	Submitted	Approved
53	<input type="checkbox"/>	V16R166250228	19195205	Vikas Prajapat(Mayaram Prajapat)	8	<input type="checkbox"/>	Submitted	Approved
54	<input type="checkbox"/>	v15r166050416	19195206	Yogita Dubey(Mahesh Dubey)	7	<input type="checkbox"/>	Submitted	Approved

1 2 3

MAX INTERNAL THEORY MARKS: :: **10**





**VIKRAM UNIVERSITY**  
Ujjain



## INTERNAL MARKS ENTRY

(SESSION:DEC-2019)

**Note :- Please Click Submit button at the bottom to save marks after filling data in each screen.**  
**Note :- Please Click Approve button at the bottom to approve marks after submitting data.**

College Name	Madhav Science College,Kothi Road,Ujjain(605) <span style="float: right;">▼</span>		
Select Course Name	MSC <span style="float: right;">▼</span>	Branch Name	Chemistry <span style="float: right;">▼</span>
Branch Mode	REGULAR <span style="float: right;">▼</span>	Semester	1SEM <span style="float: right;">▼</span>
Subject	1MSCC3 - GROUP THEORY & SPECTROSCOPY-I - IV <span style="float: right;">▼</span>		
Entry Type	Internal Theory Marks <span style="float: right;">▼</span>		

S.No	Check(All) <input type="checkbox"/>	Enroll. No.	Rollno	Name (Father's Name)	Obtain Marks		Submit/Approve Status	
					Enter Marks	Check, If absent	Submit Status	Approval Status
1	<input type="checkbox"/>	V15R166250172	19195153	Abhishek Upadhyay(Kamalkishor Upadhyay)	4	<input type="checkbox"/>	Submitted	Approved
2	<input type="checkbox"/>	v16r166050151	19195154	Akshay Vyas(Roop Kishor Vyas)	7	<input type="checkbox"/>	Submitted	Approved
3	<input type="checkbox"/>	v16r166010124	19195155	Arpita Patidar(Nandkishore)	7	<input type="checkbox"/>	Submitted	Approved
4	<input type="checkbox"/>	V16R166250440	19195156	Asha Astay(Tulsi Ram Astay)	5	<input type="checkbox"/>	Submitted	Approved
5	<input type="checkbox"/>	V16R166070072	19195157	Ashvinee Dodiya(Rajesh Dodiya)	5	<input type="checkbox"/>	Submitted	Approved
6	<input type="checkbox"/>	V16R166200122	19195158	Ayushi (Dilip Kumar)	8	<input type="checkbox"/>	Submitted	Approved
7	<input type="checkbox"/>	V16R166050203	19195159	Bahadur (Rajaram)	8	<input type="checkbox"/>	Submitted	Approved
8	<input type="checkbox"/>	V16R166050040	19195160	Bansilal (Omprakash)	6	<input type="checkbox"/>	Submitted	Approved
9	<input type="checkbox"/>	V16R166050024	19195161	Bharat (Vikram Lal)	7	<input type="checkbox"/>	Submitted	Approved
10	<input type="checkbox"/>	V16R166100076	19195162	Dharmendra Singh Panvar(Narayan Singh)	6	<input type="checkbox"/>	Submitted	Approved
11	<input type="checkbox"/>	V14R166200110	19195163	DIMPLE SAHANI(JHULAN PRASAD SAHANI)	5	<input type="checkbox"/>	Submitted	Approved
12	<input type="checkbox"/>	V16R166050741	19195164	Durga Jaiswal(Prakash Chandra)	8	<input type="checkbox"/>	Submitted	Approved
13	<input type="checkbox"/>	V16R166100053	19195165	Durgesh Kumawat(Kantilal Kumawat)	7	<input type="checkbox"/>	Submitted	Approved
14	<input type="checkbox"/>	V16R166050208	19195166	Haripriya Rathore(Raghvendra Singh Rathore)	7	<input type="checkbox"/>	Submitted	Approved
15	<input type="checkbox"/>	V16R166050363	19195167	Ishvar Lal(Nagu Lal)	8	<input type="checkbox"/>	Submitted	Approved
16	<input type="checkbox"/>	V14R166110037	19195168	Jayant Singh Rathode(Narendra Singh Rathode)	8	<input type="checkbox"/>	Submitted	Approved
17	<input type="checkbox"/>	V16R166180225	19195169	KAJAL MUKHERJEE(SAMAR MUKHERJEE)	8	<input type="checkbox"/>	Submitted	Approved
18	<input type="checkbox"/>	V16R166070027	19195170	Kavita (Mukesh)	5	<input type="checkbox"/>	Submitted	Approved
19	<input type="checkbox"/>	V16R166200025	19195171	Khushabu Jatwa(Rajesh Jatwa)	5	<input type="checkbox"/>	Submitted	Approved

SATPURA

20	<input type="checkbox"/>	V16R166050346	19195172	Kratika Upadhyay(Kamlesh Upadhyay)	8	<input type="checkbox"/>	Submitted	Approved
----	--------------------------	---------------	----------	------------------------------------	---	--------------------------	-----------	----------

1 2 3

Save in Draft

Send To Univ.

MAX INTERNAL THEORY MARKS: :: **10**

Powered by  **online Limited**



**VIKRAM UNIVERSITY**  
Ujjain

ISO/IEC 27001:2013 Certified  
**MPonline Limited**  
Joint venture between Govt of Madhya Pradesh and ICS  
मध्यप्रदेश सरकार का पोर्टल

## INTERNAL MARKS ENTRY

(SESSION:DEC-2019)

**Note :- Please Click Submit button at the bottom to save marks after filling data in each screen.**  
**Note :- Please Click Approve button at the bottom to approve marks after submitting data.**

College Name	Madhav Science College,Kothi Road,Ujjain(605) <span style="float: right;">▼</span>		
Select Course Name	MSC <span style="float: right;">▼</span>	Branch Name	Chemistry <span style="float: right;">▼</span>
Branch Mode	REGULAR <span style="float: right;">▼</span>	Semester	1SEM <span style="float: right;">▼</span>
Subject	1MSCC3 - GROUP THEORY & SPECTROSCOPY-I - IV <span style="float: right;">▼</span>		
Entry Type	Internal Theory Marks <span style="float: right;">▼</span>		

S.No	Check(All) <input type="checkbox"/>	Enroll. No.	Rollno	Name (Father's Name)	Obtain Marks		Submit/Approve Status	
					Enter Marks	Check, If absent	Submit Status	Approval Status
21	<input type="checkbox"/>	V16R166110057	19195173	Kusum Gavari(Kamal Kishor)	4	<input type="checkbox"/>	Submitted	Approved
22	<input type="checkbox"/>	V16R166050360	19195174	Laakhan Kasumriya(Babulal Kasumriya)	4	<input type="checkbox"/>	Submitted	Approved
23	<input type="checkbox"/>	V16R166070081	19195175	Mahima Upadhyay(Radheshyam)	7	<input type="checkbox"/>	Submitted	Approved
24	<input type="checkbox"/>	V15R166250147	19195176	Manisha (Balram Singh)	8	<input type="checkbox"/>	Submitted	Approved
25	<input type="checkbox"/>	V16R166110049	19195177	Maya Rathor(Mangilal Rathor)	4	<input type="checkbox"/>	Submitted	Approved
26	<input type="checkbox"/>	V15R166050015	19195178	Mayaram (Rajaram)	4	<input type="checkbox"/>	Submitted	Approved
27	<input type="checkbox"/>	v16r166200009	19195179	Megha Chouhan(Somershwar Chouhan)	5	<input type="checkbox"/>	Submitted	Approved
28	<input type="checkbox"/>	V19R396050016	19195180	METAN MEDA(KALIYA MEDA)	7	<input type="checkbox"/>	Submitted	Approved
29	<input type="checkbox"/>	V16R166250229	19195181	Nageshvar (Kalu Singh)	7	<input type="checkbox"/>	Submitted	Approved
30	<input type="checkbox"/>	V15R166050373	19195182	Nahid (Ishak)	8	<input type="checkbox"/>	Submitted	Approved
31	<input type="checkbox"/>	V16R166180024	19195183	NEHA CHOUHAN(VIRENDRA SINGH CHOUHAN)	8	<input type="checkbox"/>	Submitted	Approved
32	<input type="checkbox"/>	V12R166200104	19195184	POOJA DUBEY(YOGENDRA DUBEY)	5	<input type="checkbox"/>	Submitted	Approved
33	<input type="checkbox"/>	V19R396050018	19195185	POOJA PANCHAL(GOVIND PANCHAL)	5	<input type="checkbox"/>	Submitted	Approved
34	<input type="checkbox"/>	V19R396050017	19195186	POOJA PATEL(PYARELAL PATEL)	5	<input type="checkbox"/>	Submitted	Approved
35	<input type="checkbox"/>	V16611235491	19195187	POONAM KANWAR SHEKHAWAT(MANG SINGH SHEKHAWAT)	8	<input type="checkbox"/>	Submitted	Approved
36	<input type="checkbox"/>	V16R166050620	19195188	Priyanka Damor(Ram Singh)	5	<input type="checkbox"/>	Submitted	Approved
37	<input type="checkbox"/>	v16r166010010	19195189	RADHA (GOPAL SINGH)	6	<input type="checkbox"/>	Submitted	Approved
38	<input type="checkbox"/>	V16R165010020	19195190	Rahul Parmar(Siddhanath Singh Parmar)	7	<input type="checkbox"/>	Submitted	Approved
39	<input type="checkbox"/>	V16R166250273	19195191	Rajendra Kumar Gurjar(Shivnarayan)	7	<input type="checkbox"/>	Submitted	Approved
40	<input type="checkbox"/>	V16R166050373	19195192	Rajesh Babor(Nathu Babor)	8	<input type="checkbox"/>	Submitted	Approved

SATPURA

1 2 3

Save in Draft

Send To Univ.

MAX INTERNAL THEORY MARKS: :: **10**

Powered by **MPonline Limited**



**VIKRAM UNIVERSITY**  
Ujjain



## INTERNAL MARKS ENTRY

(SESSION:DEC-2019)

**Note :- Please Click Submit button at the bottom to save marks after filling data in each screen.**  
**Note :- Please Click Approve button at the bottom to approve marks after submitting data.**

College Name	Madhav Science College,Kothi Road,Ujjain(605) ▼		
Select Course Name	MSC ▼	Branch Name	Chemistry ▼
Branch Mode	ATKT ▼	Semester	1SEM ▼
Subject	1MSCC3 - GROUP THEORY & SPECTROSCOPY-I - IV ▼		
Entry Type	Internal Theory Marks ▼		

Show Cancel

S.No	Check(All) <input type="checkbox"/>	Enroll. No.	Rollno	Name (Father's Name)	Obtain Marks		Submit/Approve Status	
					Enter Marks	Check, If absent	Submit Status	Approval Status
1	<input type="checkbox"/>	V17R396050003	17109512	ANITA GAMAD(PAPPU LAL GAMAD)	4	<input type="checkbox"/>	Submitted	Approved
2	<input type="checkbox"/>	B052820	18180234	ROHIT KUMAWAT(GORDHAN LAL KUMAWAT)	6	<input type="checkbox"/>	Submitted	Approved

1

Save in Draft

Send To Univ.

MAX INTERNAL THEORY MARKS: :: 10



**VIKRAM UNIVERSITY**  
Ujjain

ISO/IEC 27001:2013 Certified  
**MPonline Limited**  
Joint venture between Govt of Madhya Pradesh and ICS  
मध्यप्रदेश सरकार का पोर्टल

## INTERNAL MARKS ENTRY

(SESSION:DEC-2019)

**Note :- Please Click Submit button at the bottom to save marks after filling data in each screen.**  
**Note :- Please Click Approve button at the bottom to approve marks after submitting data.**

College Name	Madhav Science College,Kothi Road,Ujjain(605) ▼		
Select Course Name	MSC ▼	Branch Name	Chemistry ▼
Branch Mode	EX(Sem. Svs.) ▼	Semester	3SEM ▼
Subject	3MSCC0 - APPLICATION OF SPECTROSCOPY - I ▼		
Entry Type	Internal Theory Marks ▼		

Show Cancel

S.No	Check(All) <input type="checkbox"/>	Enroll. No.	Rollno	Name (Father's Name)	Obtain Marks		Submit/Approve Status	
					Enter Marks	Check, If absent <input type="checkbox"/>	Submit Status	Approval Status
1	<input type="checkbox"/>	v13r166350100	17109641	MANISHA NISHAD(HARENDRA PRASAD NISHAD)	8	<input type="checkbox"/>	Submitted	Approved
2	<input type="checkbox"/>	V13R166100013	17109643	PRIYA PARMAR(RAJENDRA)	8	<input type="checkbox"/>	Submitted	Approved

1

Save in Draft

Send To Univ.

MAX INTERNAL THEORY MARKS: :: 10

# Pharma Chemistry

S.No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Sem	2015-16	Pharma Chemistry	Assignment
2.	B.Sc. 2 <sup>nd</sup> Sem	2015-16	Pharma Chemistry	Assignment
3.	B.Sc. 3 <sup>rd</sup> Sem	2015-16	Pharma Chemistry	Assignment
4.	B.Sc. 4 <sup>th</sup> Sem	2015-16	Pharma Chemistry	Assignment
5.	B.Sc. 5 <sup>th</sup> Sem	2015-16	Pharma Chemistry	Assignment
6.	B.Sc. 6 <sup>th</sup> Sem	2015-16	Pharma Chemistry	Assignment
7.	M.Sc. 1 <sup>st</sup> Sem	2015-16	Introduction pharmacy Drug Regulatory Act, Intellectual Property Rights 101	Assignment
			Pharmaceutical Chemistry Biochemistry 102	Written Test
			Principles of Organic Pharmaceutical Chemistry 103	Assignment
			Principles of Physical Pharmacy I 104	MCQ
			Mathematics and Statistics for chemistry 105 a	Assignment
			Biology for chemists 105 b	Assignment
8.	M.Sc. 2 <sup>nd</sup> Sem	2015-16	Principal of Inorganic Pharmaceutical Chemistry 201	Assignment
			Pharmaceutical analysis –I 202	Assignment
			Pharmaceutical Analysis II 203	
			Principal of Physical Pharmacy 204	Assignment
			Computers for chemists 205	
9.	M.Sc. 3 <sup>rd</sup> Sem	2015-16	Principal of Physical Pharmacy 301	Written Test
			Principle of Pharmacognosy 302	Assignment
			Pharmaceutical Medicinal Chemistry – I 303	MCQ
			Principle of Inorganic Pharmaceutical Chemistry – II 304	Assignment
			Instrumental Methods of Analysis 305	Assignment
10.	M.Sc. 4 <sup>th</sup> Sem	2015-16	Pharmaceutical Medicinal Chemistry- II 401	Assignment
			Drug Design and Medicinal Chemistry	Chalk Board Presentation
			Advance Chemistry	Assignment
			Supplements, Additives and Toxicology	Assignment
			Pharmacokinetics and drug development 405	Quiz

S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Sem	2016-17	Pharma Chemistry	Assignments
2.	B.Sc. 2 <sup>nd</sup> Sem	2016-17	Pharma Chemistry	Assignments
3.	B.Sc. 3 <sup>rd</sup> Sem	2016-17	Pharma Chemistry	Chalk Board Presentation
4.	B.Sc. 4 <sup>th</sup> Sem	2016-17	Pharma Chemistry	Assignments
5.	B.Sc. 5 <sup>th</sup> Sem	2016-17	Pharma Chemistry	Assignments
6.	B.Sc. 6 <sup>th</sup> Sem	2016-17	Pharma Chemistry	Assignments
7.	M.Sc. 1 <sup>st</sup> Sem	2016-17	Introduction pharmacy Drug Regulatory Act, Intellectual Property Rights 101	Assignments
8.			Pharmaceutical Chemistry Biochemistry 102	Assignments
9.			Principles of Organic Pharmaceutical Chemistry 103	Written Test
10.			Principles of Physical Pharmacy I 104	MCQ
11.			Mathematics and Statistics for chemistry 105 a	Assignments
12.			Biology for chemists 105 b	Assignments
13.	M.Sc. 2 <sup>nd</sup> Sem	2016-17	Principal of Inorganic Pharmaceutical Chemistry 201	Assignments
14.			Pharmaceutical analysis –I 202	Written Test
15.			Pharmaceutical Analysis II 203	Assignments
16.			Principal of Physical Pharmacy 204	Assignments
17.			Computers for chemists 205	Assignments
18.	M.Sc. 3 <sup>rd</sup> Sem	2016-17	Principal of Physical Pharmacy 301	Assignments
19.			Principle of Pharmacognosy 302	Assignments
20.			Pharmaceutical Medicinal Chemistry – I 303	MCQ
21.			Principle of Inorganic Pharmaceutical Chemistry – II 304	Written Test
22.			Instrumental Methods of Analysis 305	Assignments
23.	M.Sc. 4 <sup>th</sup> Sem	2016-17	Pharmaceutical Medicinal Chemistry- II 401	Assignments
24.			Drug Design and Medicinal Chemistry 402	Written Test
25.			Advance Chemistry 403	Assignments
26.			Supplements, Additives and Toxicology 404	Assignments
27.			Pharmacokinetics and drug development 405	Assignments

<b>S.No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Year	2017-18	Pharma Chemistry	Written Test
2.	B.Sc. 3 <sup>rd</sup> Sem	2017-18	Pharma Chemistry	Assignments
3.	B.Sc. 4 <sup>th</sup> Sem	2017-18	Pharma Chemistry	Assignments
4.	B.Sc. 5 <sup>th</sup> Sem	2017-18	Pharma Chemistry	Assignments
5.	B.Sc. 6 <sup>th</sup> Sem	2017-18	Pharma Chemistry	Assignments
6.	M.Sc. 1 <sup>st</sup> Sem	2017-18	Introduction pharmacy Drug Regulatory Act, Intellectual Property Rights 101	Assignments
			Pharmaceutical Chemistry Biochemistry 102	Assignments
			Principles of Organic Pharmaceutical Chemistry 103	Written Test
			Principles of Physical Pharmacy I 104	MCQ
			Mathematics and Statistics for chemistry 105 a	Assignments
			Biology for chemists 105 b	Assignments
7.	M.Sc. 2 <sup>nd</sup> Sem	2017-18	Principal of Inorganic Pharmaceutical Chemistry 201	Assignments
			Pharmaceutical analysis –I 202	Written Test
			Pharmaceutical Analysis II 203	Assignments
			Principal of Physical Pharmacy 204	Assignments
			Computers for chemists 205	Assignments
8.	M.Sc. 3 <sup>rd</sup> Sem	2017-18	Principal of Physical Pharmacy 301	Assignments
			Principle of Pharmacognosy 302	Assignments
			Pharmaceutical Medicinal Chemistry – I 303	MCQ
			Principle of Inorganic Pharmaceutical Chemistry – II 304	Written Test
			Instrumental Methods of Analysis 305	Assignments
9.	M.Sc. 4 <sup>th</sup> Sem	2017-18	Pharmaceutical Medicinal Chemistry- II 401	Assignments
			Drug Design and Medicinal Chemistry 402	Written Test
			Advance Chemistry 403	Assignments
			Supplements, Additives and Toxicology 404	Assignments
			Pharmacokinetics and drug development 405	Assignments

S.No.	Class	Session	Paper name	Mode
10.	B.Sc. 1 <sup>st</sup> Year	2018-19	Pharma Chemistry	Written Test
11.	B.Sc. 2 <sup>nd</sup> Year	2018-19	Pharma Chemistry	Assignment
12.	B.Sc. 5 <sup>th</sup> Sem	2018-19	Pharma Chemistry	Assignment
13.	B.Sc. 6 <sup>th</sup> Sem	2018-19	Pharma Chemistry	Assignment
14.	M.Sc. 1 <sup>st</sup> Sem	2018-19	Introduction pharmacy Drug Regulatory Act, Intellectual Property Rights 101	Assignment
			Pharmaceutical Chemistry Biochemistry 102	Assignment
			Principles of Organic Pharmaceutical Chemistry 103	Written Test
			Principles of Physical Pharmacy I 104	MCQ
			Mathematics and Statistics for chemistry 105 a	Assignment
			Biology for chemists 105 b	Assignment
15.	M.Sc. 2 <sup>nd</sup> Sem	2018-19	Principal of Inorganic Pharmaceutical Chemistry 201	Assignment
			Pharmaceutical analysis –I 202	Written Test
			Pharmaceutical Analysis II 203	Assignment
			Principal of Physical Pharmacy 204	Assignment
			Computers for chemists 205	Assignment
16.	M.Sc. 3 <sup>rd</sup> Sem	2018-19	Principal of Physical Pharmacy 301	Assignment
			Principle of Pharmacognosy 302	Assignment
			Pharmaceutical Medicinal Chemistry – I 303	MCQ
			Principle of Inorganic Pharmaceutical Chemistry – II 304	Written Test
			Instrumental Methods of Analysis 305	Assignment
17.	M.Sc. 4 <sup>th</sup> Sem	2018-19	Pharmaceutical Medicinal Chemistry- II 401	Assignment
			Drug Design and Medicinal Chemistry 402	Written Test
			Advance Chemistry 403	Assignment
			Supplements, Additives and Toxicology 404	Assignment
			Pharmacokinetics and drug development 405	Assignment

S.No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Year	2019-20	Pharma Chemistry	Written Test
2.	B.Sc. 2 <sup>nd</sup> Year	2019-20	Pharma Chemistry	Assignment
3.	B.Sc. 3 <sup>rd</sup> Year	2019-20	Pharma Chemistry	Assignment
4.	M.Sc. 1 <sup>st</sup> Sem	2019-20	Introduction pharmacy Drug Regulatory Act, Intellectual Property Rights 101	Assignment
			Pharmaceutical Chemistry Biochemistry 102	Assignment
			Principles of Organic Pharmaceutical Chemistry 103	Written Test
			Principles of Physical Pharmacy I 104	MCQ
			Mathematics and Statistics for chemistry 105 a	Assignment
			Biology for chemists 105 b	Assignment
5.	M.Sc. 2 <sup>nd</sup> Sem	2019-20	Principal of Inorganic Pharmaceutical Chemistry 201	Assignment
			Pharmaceutical analysis –I 202	Written Test
			Pharmaceutical Analysis II 203	Assignment
			Principal of Physical Pharmacy 204	Assignment
			Computers for chemists 205	Assignment
6.	M.Sc. 3 <sup>rd</sup> Sem	2019-20	Principal of Physical Pharmacy 301	Assignment
			Principle of Pharmacognosy 302	Assignment
			Pharmaceutical Medicinal Chemistry – I 303	MCQ
			Principle of Inorganic Pharmaceutical Chemistry – II 304	Written Test
			Instrumental Methods of Analysis 305	Assignment
7.	M.Sc. 4 <sup>th</sup> Sem	2019-20	Pharmaceutical Medicinal Chemistry- II 401	Assignment
			Drug Design and Medicinal Chemistry	Written Test
			Advance Chemistry	Assignment
			Supplements, Additives and Toxicology	Assignment
			Pharmacokinetics and drug development 405	Assignment

Name - Mayank Kinsluk

Class - B.Sc. I Sem

Session - 2015-16

Paper - Organic

Subject - Pharmaceutical Chemistry

Ques 1 Enzyme neutralizer :- It is completely effective against all fat stains and odors. Wine, feces, vomit & drool. MULTI-Surface formula - carpet, hardwood & granite, leather rugs, pet beds, walls, car upholstery, children's & pet safe. Natural enzyme formula is the safest way to clean up fat, mud, stain & odor.

Ques 2 Routes of drug administration :- A route of administration in Pharmacology & toxicology is the path by which a drug, fluid, poison, or other substance is taken into the body. Routes of administration are generally classified by the location at which the substance is applied. Common examples include oral and intravenous administration. Routes can also be classified based on where the target of action is. Action is may be topical (local), internal (systemic).

Name - Anayush Sharma

Class - B.Sc. I Sem

Subject - Organic (Pharma. Chemistry)

Session - 2015 - 2016

local - They are not delivered by the circ path.

The routes of drug administration is asked of drug delivery.

Ans-10

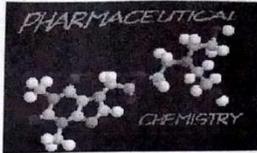
classification of drugs on the basis of biological sources:-

Natural drugs are obtained from plants and animals so that they are called biological sources of origin.

That type drugs are collected by the living cells of plant and animals.

They includes plant sources and animal sources :-

(1) Plant sources :- They are the oldest sources of plant drugs. The plants are the



Department of Pharmaceutical Chemistry, Govt. Madhav Science P.G. College Ujjain (M.P.)  
 B.Sc II Sem Session:-2015-2016  
 Principle of inorganic and physical pharmaceutical chemistry  
 Mode :- Assignment

Q.1 Write the structure and uses of alum.  
 Q.2 Write synthesis, properties and uses of Aromatic spirit.  
 Q.3 Explain Sources of impurities.  
 Q.4 Write about sources of Error.  
 Q.5 Discuss methods of expressing concentration.

Teacher In charge :- Miss Priyanka Khare  
 Faculty of Pharma Department  
 Difficulty Level : Moderate  
 Expected Average Score as per difficulty level =6/10

Date: / / Page no: \_\_\_\_\_

Yashwant Singh  
 B.Sc - II Sem  
 2015-16

प्रश्न क्रमांक - 03

खोदना व्यक्त करने की विधि।  
 करने की विधि निम्नलिखित है :-

1) मोलरता :- किसी विलयन के 1000gm विलयन में उपस्थित विलय के मोलों की संख्या को विलयन की मोलरता कहते हैं। इसे 'm' से दर्शाते हैं। इसका मात्रक मोल / लीटर है।  

$$m = \frac{\text{विलयन के मोलों की संख्या}}{\text{विलयन के वॉल्यूम में क्षमता}}$$

2) पत्रिभातता :- किसी विलयन के 100 भागों में उपस्थित विलय के भागों को पत्रिभात करने हैं। इसे % से दर्शाते हैं।

3) मोललता :- किसी विलयन के एक लीटर विलयन में घुले विलय के ग्राम अथवा द्रवमान को मोललता कहते हैं इसे 'm' से दर्शाते हैं।  

$$\text{मोललता} = \frac{\text{विलय का द्रव.} \times 1000}{\text{विलयन का द्रव.} \times \text{विलय का अणु द्रव.}}$$

Date: / / Page no: \_\_\_\_\_

2) Molality :- it is defined as the no. of moles of solute dissolve in 1kg of solution. it is denoted by 'M'

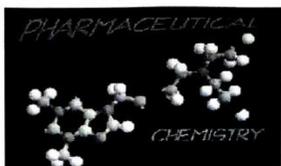
Molality :- no. of moles of solute mass of soln in 1kg

3) Molarity :- It is defined as the no. of moles of solute is dissolved in 1 litre of solution. it is denoted by 'm'.

molarity :- no. of moles of solute / litre of soln  
 volume of soln in litre

4) Formality :- This formula mass of solute is molar of solution. it is denoted by 'F'

formality :- mass of solute / molar of solvent



Department of Pharmaceutical Chemistry  
 B.Sc. III Semester  
 Session -2015-2016  
 Paper:- Medicinal Chemistry  
 Mode:- Assignment Questions

Marks :-15

- Question -1 Write structure , synthesis and uses of Procaine.
- Question -2 Write structure , synthesis and uses of Chloroform.
- Question -3 Write structure , synthesis and uses of Barbiturate .
- Question-4 Define the term Local Anesthetic drugs with example.
- Question -5 Write structure , synthesis and uses of Allobarbitol .

Teacher In charge :- Priyanka Khare

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =8/15

DATE PAGE

Chemical Name :- diethyl amino ethyl p-amino benzoate

① from p- amino benzoic acid

Syn :-

$$\begin{array}{c} \text{COOH} \\ | \\ \text{C}_6\text{H}_4 \\ | \\ \text{NH}_2 \end{array} + \text{HOCH}_2\text{CH}_2\text{N}(\text{C}_2\text{H}_5)_2 \xrightarrow[\text{-H}_2\text{O}]{\text{H}_2\text{SO}_4} \begin{array}{c} \text{COOCH}_2\text{CH}_2\text{N}(\text{C}_2\text{H}_5)_2 \\ | \\ \text{C}_6\text{H}_4 \\ | \\ \text{NH}_2 \end{array}$$

p- amino benzoic acid + 2-diethyl amino ethanol

$$\begin{array}{c} \text{O} \\ || \\ \text{H}_2\text{N}-\text{C}_6\text{H}_4-\text{C}-\text{OCH}_2\text{N}(\text{C}_2\text{H}_5)_2 \end{array} \xrightarrow{+\text{HCl}} \begin{array}{c} \text{O} \\ || \\ \text{H}_2\text{N}-\text{C}_6\text{H}_4-\text{C}-\text{OCH}_2\text{N}(\text{C}_2\text{H}_5)_2 \end{array} \cdot \text{HCl}$$

Procaine Base → Procaine Hydrochloride

② lignocaine Hydrochloride

Str :-

$$\begin{array}{c} \text{CH}_3 \\ | \\ \text{N} \\ | \\ \text{NHCOCH}_2\text{N}(\text{C}_2\text{H}_5)_2 \end{array} \cdot \text{HCl}$$

Chemical Name :- 2(diethyl amino 2,6 Acetoxytidine) Hydrochloride

→ 2-diethyl amino N,2,6 dimethyl

DATE PAGE

Name :- Tamy Jain

Class :- Bsc III<sup>rd</sup> sem

Subject :- Medicinal chemistry

Session :- 2015-16

Mode :- Assignment

DATE PAGE

12/15

Drug name	R	R <sup>1</sup>
1) Cocaine	H	$\begin{array}{c} \text{H}_3\text{C}-\text{N} \\   \\ \text{H}_3\text{COOC} \end{array}$
2) Hexylaine	H	$\text{H}_3\text{C}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{NH}-\text{C}_6\text{H}_4$

③ Para - amino benzoic acid derivatation

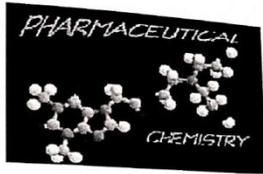
$$\begin{array}{c} \text{H} \\ | \\ \text{N} \\ | \\ \text{R} \end{array} - \text{C}_6\text{H}_4 - \begin{array}{c} \text{O} \\ || \\ \text{C} \end{array} - \text{O}-\text{R}_3-\text{R}_4$$

Drug name	R	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>
Benzocaine	H	H	H	CH <sub>2</sub> CH <sub>3</sub>	-
Procaine	H	H	H	-CH <sub>2</sub> -CH <sub>2</sub>	-N(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub>

③ Anilides :-

$$\begin{array}{c} \text{CH}_3 \\ | \\ \text{N} \\ | \\ \text{NH} \end{array} - \text{C}_6\text{H}_4 - \begin{array}{c} \text{O} \\ || \\ \text{C} \end{array} - \text{R}_1$$

Drug name	R	R <sub>1</sub>
lignocaine	CH <sub>3</sub>	-CH <sub>2</sub> N(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub>
mepivacaine	CH <sub>3</sub>	$\begin{array}{c} \text{H}_3\text{C} \\   \\ \text{N} \end{array}$



Department of Pharmaceutical Chemistry  
 B.Sc. IV Semester  
 Session -2015-16  
 Paper:- Chemistry of Natural Products  
 Mode:- Assignment

Marks :-15

- Question -1. Describe Classification of terpenes.
- Question -2. Write a detail note on Alkaloids.
- Question -3. Describe physicochemical properties of lipids.
- Question -4. Discuss isolation of steroids.
- Question -5. Write a short note on Expectorant and anti-tussive.

Name - Harshita Sharma

Class - B.Sc. IV Sem.

Session - 2015-16

Assignment - Paper - II

14/15 ~~100~~

Teacher In charge :- Komal Chelaramani

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =6/10

Date: / / Page No: 1

Q.1 Give the Classification of Terpenes:-

मूलतः terpenes का अर्थ यह है कि यह एक एकमात्रकी संश्लेषण द्वारा ही प्राप्त होता है। इनका आणविक सूत्र होता है जिसे मूलतः terpenes तथा कई आवरण से प्राप्त किया जाता है।

Classification - Terpenoid hydrocarbon को इस आधार पर वर्गीकृत किया गया है -  
 कि terpenoid की संख्या में Isopren इकाई की संख्या में।

Classes of terpenoid Hydrocarbons

S.No	class	No. of Isopren units	molecular formula
1.	Monoterpene Isopren	1	C <sub>10</sub> H <sub>16</sub>
2.	Monoterpene Terpenes	2	C <sub>10</sub> H <sub>16</sub>
3.	Sesquiterpenes	3	C <sub>15</sub> H <sub>24</sub>
4.	Diterpenes	4	C <sub>20</sub> H <sub>32</sub>
5.	Triterpenes	6	C <sub>30</sub> H <sub>48</sub>
6.	Tetraterpene (Carotenoids)	8	C <sub>40</sub> H <sub>64</sub>
7.	Polyterpene Rubber.	n	(C <sub>5</sub> H <sub>8</sub> ) <sub>n</sub>

Date: / / Page No: 1

Question 2 Camphor :-

Camphor is a waxy, inflammable, transparent solid with a strong aroma. It is a terpenoid with the chemical formula C<sub>15</sub>H<sub>16</sub>O. It is found in the wood of the camphor laurel (Cinnamomum camphora), a large evergreen tree found in East Asia, also of the unrelated kapur tree (Dryobalanops), a tall woody tree from South East Asia. It also occurs in some other related trees in the laurel family, notably Ocotea usambarensis. Rosemary leaves (Rosmarinus officinalis) contain 0.05 to 0.5% camphor. While camphor (Heterotheca) contains some 5% (7) a major source of camphor in Asia is Camphor basil (the parent of African blue basil). Camphor can also be synthetically produced from oil of turpentine.

Formula: C<sub>15</sub>H<sub>16</sub>O.

Camphor uses :-

- Camphor (topical) suggested uses include treating pain, warts, cold sores, hemorrhoids, osteoarthritis, anti-itch to increase local blood flow, and as a counterirritant.
- Camphor is an FDA-approved topical antitussive (anti-cough). Camphor is an FDA-approved topical analgesic and anesthetic used to relieve pain.

① Explain the heterocyclic compound of Indole ?

Indole को संश्लेषण बेरार ने 1866 में थावनी-इन्डोल के zinc संश्लेषण से प्राप्त किया गया था। इसका संश्लेषण बेरार ने 1866 में थावनी-इन्डोल के zinc संश्लेषण से प्राप्त किया गया था। इसका संश्लेषण बेरार ने 1866 में थावनी-इन्डोल के zinc संश्लेषण से प्राप्त किया गया था।

Indole एक heterocyclic compound है जिसका संरचना C8H7N है। यह एक five-membered ring है जिसमें एक nitrogen atom है। Indole essential oil में पाया जाता है जो C8H7N है।

Indole का IUPAC नाम 1H benzopyrrole है। Indole का toponymism term इंडोलीन कहलाता है। यह इंडोलीन है जो Indole का होता है।

ii) 3-H Indole

C1=CC=C2C(=C1)C=CN2 + C1=CC=C2C(=C1)C=CN2 → C1=CC=C2C(=C1)C=CN2

2/1-H benzo py (Indole)

Structure of Carbohydrates.

Carbohydrates consist of carbon, hydrogen, and oxygen. The general empirical structure for carbohydrates is  $(CH_2O)_n$ . They are organic compounds organized in the form of aldehydes or ketones with multiple hydroxyl groups coming off the carbon chain. The building blocks of all carbohydrates are simple sugars called monosaccharides. A monosaccharide can be a polyhydroxy aldehyde or a polyhydroxy ketone.

Open chain structure - It is the long straight chain form of carbohydrate.

Haworth structure - It is the presence of the pyranose ring structure.

Date: \_\_\_\_\_  
Page No. 1

Salbutamol

Salbutamol is a highly selective  $\beta_2$ -adrenergic receptor stimulating drug that has a bronchodilator effect. It is used to relieve bronchospasm in bronchial asthma, chronic bronchitis, emphysema and other airway resistance diseases.

General Pharmacology :-

→ The chemical name of Salbutamol is 4-(2-hydroxy-3-hydroxy-5-methylphenyl)-2-(t-butylamino) ethanone sulphate. Molecular formula  $(C_{12}H_{17}NO)_2 \cdot H_2SO_4$  and molecular weight is 576.7.

→ After oral administration, approximately 50% of Salbutamol is absorbed from the intestinal tract with a slow onset of action, reaching a peak at about 2 hours after intake. After inhalation, Salbutamol reaches the lung directly and act within 3-5 minutes with a peak at 15-20 minutes. Overall duration of action of Salbutamol is 4-6 hours. It is

Date: \_\_\_\_\_  
Page No. 2

Page 2

1) Bronchospasm with reversible obstructive airway diseases

Salbutamol is indicated for the prevention or treatment of bronchospasm with reversible obstructive airway diseases such as -

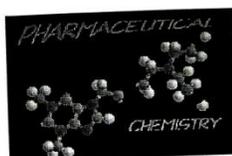
- Bronchial asthma
- Chronic obstructive pulmonary diseases (COPD) which includes chronic bronchitis and emphysema.

2) Exercise-induced bronchospasm :-

→ Salbutamol is used for the prevention of exercise-induced bronchospasm.

3) Use in pregnancy :-

Salbutamol is a pregnancy category C drug. It should be used during pregnancy only if -



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2015-2016

Paper – 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

- The study of the flow of heat or any other form of energy into is called  
A) Thermo chemistry B) Thermo kinetics C) Thermodynamics D) Thermo chemical
- Thermodynamic is applicable to  
A) Microscopic system only B) Macroscopic system only C) Homogenous system only D) Heterogeneous System
- A system that can transfer neither matter nor energy to and from its surroundings is called  
A) A closed system B) An isolated system C) An open system D) A homogenous system
- Entropy is a measure ..... of the molecule of the system.  
A) Concentration B) Velocity D) Zig-Zag motion D) Randomness or disorder
- The entropy of the system increases in the order.  
A) gas<liquid< solid B) gas<Solid <Liquid C) solid <gas<liquid D) None of these
- Normality of a solution is the number of ..... of solute per litre o the solution .  
A) Moles B) Equivalent C) Formula weight D) Mole fraction
- When a non-volatile is dissolved in a pure solvent , the vapor pressure of the pure solvent

Divya Gujjar



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2015-2016

Paper – 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

- The study of the flow of heat or any other form of energy into is called  
A) Thermo chemistry B) Thermo kinetics C) Thermodynamics D) Thermo chemical
- Thermodynamic is applicable to  
A) Microscopic system only B) Macroscopic system only C) Homogenous system only D) Heterogeneous System
- A system that can transfer neither matter nor energy to and from its surroundings is called  
A) A closed system B) An isolated system C) An open system D) A homogenous system
- Entropy is a measure ..... of the molecule of the system.  
A) Concentration B) Velocity D) Zig-Zag motion D) Randomness or disorder
- The entropy of the system increases in the order.  
A) gas<liquid< solid B) gas<Solid <Liquid C) solid <gas<liquid D) None of these
- Normality of a solution is the number of ..... of solute per litre o the solution .  
A) Moles B) Equivalent C) Formula weight D) Mole fraction
- When a non-volatile is dissolved in a pure solvent , the vapor pressure of the pure solvent

10/10



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2015-2016

Paper – 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

- The study of the flow of heat or any other form of energy into is called  
A) Thermo chemistry B) Thermo kinetics C) Thermodynamics D) Thermo chemical
- Thermodynamic is applicable to  
A) Microscopic system only B) Macroscopic system only C) Homogenous system only D) Heterogeneous System
- A system that can transfer neither matter nor energy to and from its surroundings is called  
A) A closed system B) An isolated system C) An open system D) A homogenous system
- Entropy is a measure ..... of the molecule of the system.  
A) Concentration B) Velocity D) Zig-Zag motion D) Randomness or disorder
- The entropy of the system increases in the order.  
A) gas<liquid< solid B) gas<Solid <Liquid C) solid <gas<liquid D) None of these
- Normality of a solution is the number of ..... of solute per litre o the solution .  
A) Moles B) Equivalent C) Formula weight D) Mole fraction
- When a non-volatile is dissolved in a pure solvent , the vapor pressure of the pure solvent

10/10

Anjal Tiwari



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2015-2016

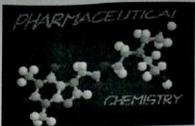
Paper – 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

- The study of the flow of heat or any other form of energy into is called  
A) Thermo chemistry B) Thermo kinetics C) Thermodynamics D) Thermo chemical
- Thermodynamic is applicable to  
A) Microscopic system only B) Macroscopic system only C) Homogenous system only D) Heterogeneous System
- A system that can transfer neither matter nor energy to and from its surroundings is called  
A) A closed system B) An isolated system C) An open system D) A homogenous system
- Entropy is a measure ..... of the molecule of the system.  
A) Concentration B) Velocity D) Zig-Zag motion D) Randomness or disorder
- The entropy of the system increases in the order.  
A) gas<liquid< solid B) gas<Solid <Liquid C) solid <gas<liquid D) None of these
- Normality of a solution is the number of ..... of solute per litre o the solution .  
A) Moles B) Equivalent C) Formula weight D) Mole fraction
- When a non-volatile is dissolved in a pure solvent , the vapor pressure of the pure solvent

08/10



Department of Pharmaceutical Chemistry, Govt. Madhav Science P.G. College Ujjain (M.P.)  
 M.Sc II Sem Session-2015-2016  
 CCE-Paper II  
 PC-202  
 Pharmaceutical analysis-I  
 Mode :- Assignment

1. ESR Spectroscopy,  
 2. NMR Spectroscopy  
 3. IR Spectroscopy  
 4. UV Spectroscopy  
 5. Mass Spectroscopy

Teacher In charge :- Miss Priyanka Khare  
 Faculty of Pharma Department  
 Difficulty Level : Moderate  
 Expected Average Score as per difficulty level =6/10

Electron Spin Resonance Spectroscopy :-

Electron spin resonance is a branch of absorption spectroscopy in which radiation having frequency in the microwave region is absorbed by paramagnetic substance to induce transitions between magnetic energy levels of electrons with unpaired spins. The magnetic energy splitting is done by applying a static magnetic field. The electron spin resonance phenomenon is shown by atoms having an odd number of electrons, ions having partly filled inner electron shells and other molecules that carry angular momentum of electron origin.

The electron spin resonance (ESR) is also called by other names such as "electron paramagnetic resonance (EPR)" and "electron magnetic resonance" (EMR). All these names convey the same meaning and simply describe the different aspects of the same phenomenon.

The electron spin resonance (ESR) is another type of magnetic resonance. It is concerned with the magnetic behaviour of spinning electrons. The ESR spectrum like NMR, results from transition from one spin state to the other state of an electron.

**Govt. Madhav Science P.G. College Ujjain**



CCE- Chalk Board Presentation  
 Session -2015-16  
 Topic- Sources of Impurities in pharmaceutical Substance

Submitted to :-  
 Vaibhav Sharma

Submitted By:-  
 Vasudev Soni  
 M.Sc. II Sem  
 Drug and Pharmaceutical Chemistry

10  
 10

classmate  
 Date \_\_\_\_\_  
 Page \_\_\_\_\_

of getting substances without impurities at reasonable cost. It is possible to prepare subs. [through a series of steps of purification] without any impurity but this may be achieved at any cost considering this as fact the limit of various impurities have been prescribed.

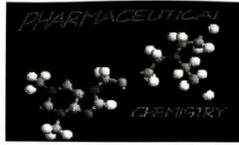
4) Deliberate adulteration employs material that are having similar qualities, also accounts for their presence of impurities in the substances.  
Example - Adulteration of Na salt with K salt, Ca salt with Mg salt etc.

pharmaceutical.  
Impurities - A compound is said to be impure if it is having foreign matter i.e. impurities. A state of absolute purity is virtually unobtainable but may be approached as closely as desired provided sufficient care is taken during the manufacturing process.

a) Sources of impurities in Pharmaceutical chemicals.

1) Raw materials employed in manufacture Impurities known to be associated with these chemicals, may be carried through the manufacturing process and contaminate the final compound.

Surbhi Shukla

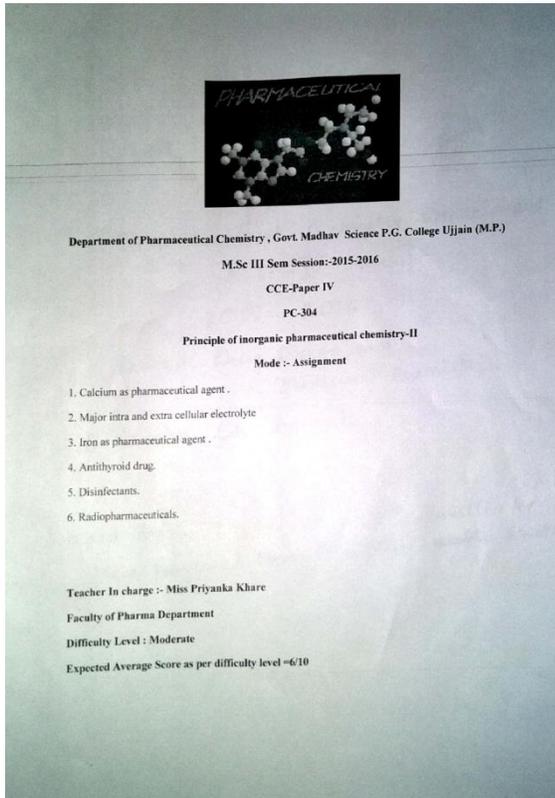


Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2015-2016  
Paper - 303 Medicinal Chemistry - I  
Mode: MCQ

Multiple Choice Questions :- Marks :-10

1. The major route of elimination of the volatile general anesthetics is via  
A) Kidneys B) Skin C) Lungs D) Liver
2. Anesthesia of mucous membrane is called  
A) Infiltration Anesthesia B) Field Block Anesthesia C) Nerve Block Anesthesia D) Topical Anesthesia
3. Which are of the following belongs to long acting -barbiturate?  
A) Pentobarbital B) Phenobarbital C) Thiopental D) Hexobarbital
4. One of the following belongs to imidazole-2,4-dione class  
A) Phenytoin B) Trimethadione C) Phenacemide D) Paramethadione
5. The B<sub>1</sub> receptors are located in .....  
A) Heart B) Lungs C) Kidney D) Adrenal Gland
6. 3,4-dihydroxyl-1-[isopropylamine] methyl benzyl alcohol is  
A) Adrenaline B) Propranolol C) Phenylephrine D) Isoprenaline
7. Acetyl Choline is biosynthesized from

10/10



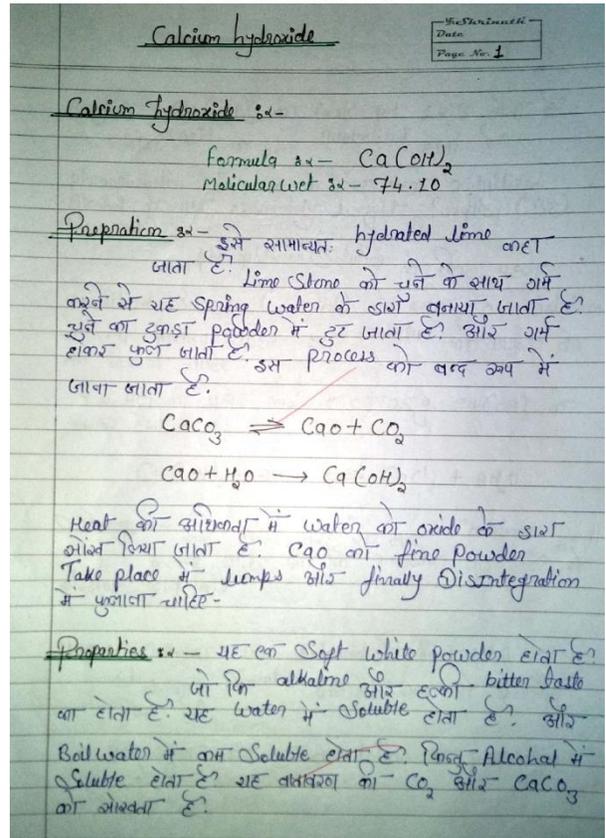
- A) L-Cysteine B) L-Codeine C) L-Serine D) L-Cholic acid
8. Acetaminophen is used for  
A) Fever B) Inflammation C) Anti-Platelets D) Cancer
9. Side- Effects of [NSAID<sub>s</sub>] include expects  
A) Peptic Ulcer B) Reduced Kidney Function c) GIT Bleeding D) Seizures
10. .... is the drug of choice for grandma epilepsy  
A) Diazepam B) Barbiturates C) Phenytoin D) Lamotrigine

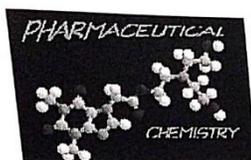
Teacher In charge :- Priyanka Khare

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =6/10





Department of Pharmaceutical Chemistry,  
Govt. Madhav Science P.G. College Ujjain (M.P.)

Session:-2015-16

CCE- M.Sc. – IV sem

PC-405 Pharmacokinetics and drug development

Mode :-Quiz

- The study of the time course of drug absorption, distribution, metabolism, and excretion is called:-
  - pharmacodynamics.
  - drug concentration.
  - pharmacokinetics.
  - kinetic homogeneity.
- The application of pharmacokinetic principles to the safe and effective therapeutic management of drugs in an individual patient is known as:
  - pharmacodynamics.
  - clinical pharmacokinetics
- Since we cannot practically measure drug concentration in specific tissues, we measure it in the plasma and assume that this concentration is the same as that in tissue:-
  - True
  - False
- Pharmacodynamics refers to the relationship of drug:
  - dose to drug concentration in plasma.
  - dose to drug concentration at the receptor site.
  - concentrations to drug effect.
  - dose to drug effect.

5. Drug pharmacodynamics are affected by the drug concentration at the site of the receptor, density of receptors on the target cell surface, mechanism by which a signal is transmitted into the cell by second messengers, and regulatory factors that control gene translation and protein production:-

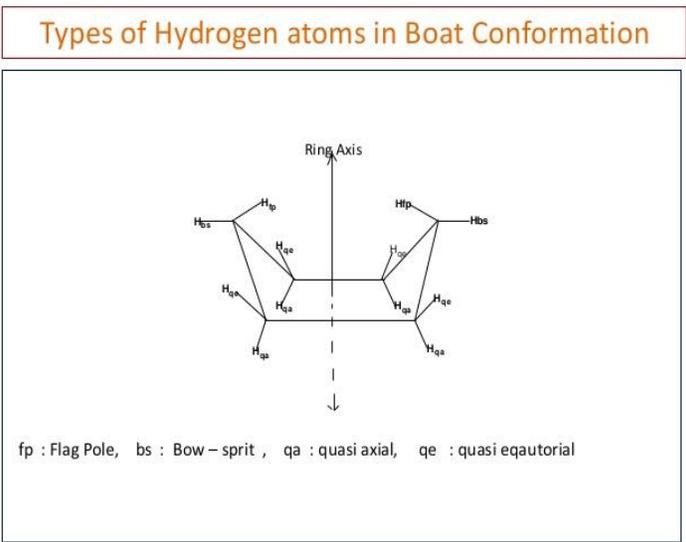
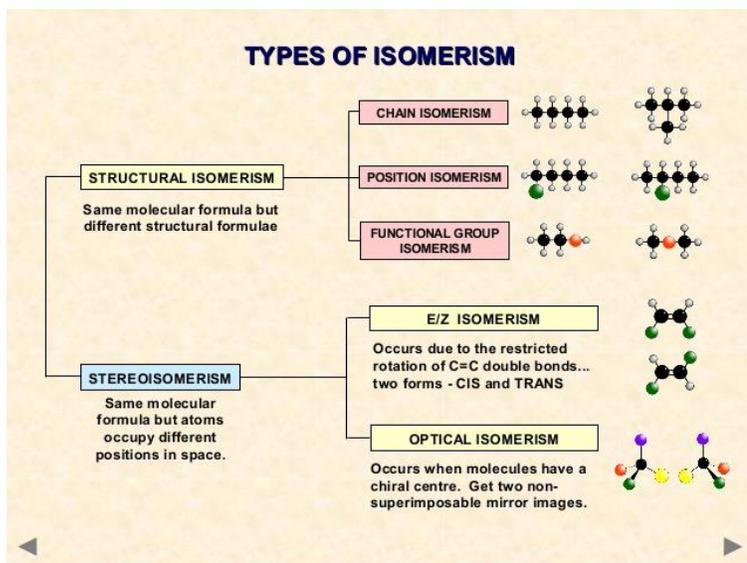
- True
  - False
6. The EC50 refers to the drug concentration at which:
- one-half the maximum response is achieved.
  - the maximal effect is achieved.
  - tolerance is likely to be observed
7. The therapeutic range is the range of plasma drug concentrations that clearly defines optimal drug therapy and where toxic effects cannot occur.
- True
  - False
8. Therapeutic drug concentration monitoring with plasma drug concentration data assumes that pharmacologic response is related to the drug concentration in plasma.
- True
  - False
9. Factors that cause variability in plasma drug concentrations after the same drug dose is given to different patients include variations in the:
- drug absorption.
  - EC50 of the drug.
10. An example of a situation that would not support therapeutic drug concentration monitoring with plasma drug concentrations would be one in which:
- a wide variation in plasma drug concentrations is achieved in different patients given a standard drug dose.
  - the toxic plasma concentration is many times the therapeutic concentration range.
  - correlation between a drug's plasma concentration and therapeutic response is good.

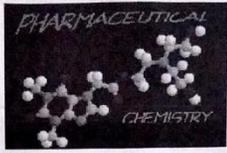
Teacher In charge :- Smt. Komal Gurudasani

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =6/10





Department of Pharmaceutical Chemistry, Govt. Madhav Science P.G. College Ujjain (M.P.)  
B.Sc II Sem Session:-2016-2017  
Principle of inorganic and physical pharmaceutical chemistry  
Mode :- Assignment

Q.1 Define gravimetric analysis.  
Q.2 Define acid base titration.  
Q.3 Write about types of impurities.  
Q.4 Write synthesis, properties, and uses of milk of magnesia.  
Q.5 Discuss in detail mohrs method.

Teacher In charge :- Miss Priyanka Khare  
Faculty of Pharma Department  
Difficulty Level : Moderate  
Expected Average Score as per difficulty level =6/10

calculations:-

$$N_1 V_1 = N_2 V_2$$

$$N_1 \times 10 = 9.5 \times 10$$

$$N_1 = \frac{9.5 \times 0.1}{10}$$

$$N_1 = 0.095$$

Ques:- Discuss in detailed about Mohr's and Volhard's method.

Ans:-

### Mohr's Method

Mohr's method:- Those reaction in which chemical reaction between two solution they will be precipitated.

$$AgNO_3 + NaCl \rightarrow AgCl + NaNO_3$$

Date: \_\_\_\_\_  
Page: \_\_\_\_\_

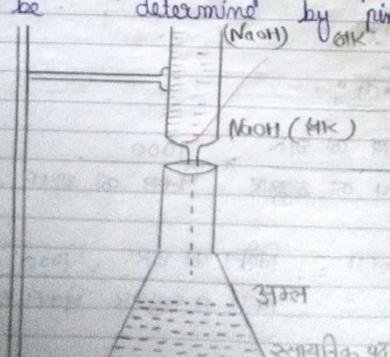
Shivani Parmar  
B.Sc.-II  
2016-17

→ अम्ल क्षार अनुमान को परिभाषित कीजिए।

Ans → अम्ल - क्षार अनुमान, कठोर क्षार एवं अम्ल के बीच होती है।

The help of indication to determine the Neutrality of the substance.

In this titration of and point will be determine by pink color.



Labels in diagram: (NaOH) alk, NaOH (alk), अम्ल, स्थायिक क्षार



Department of Pharmaceutical Chemistry  
 B.Sc. III Semester  
 Session -2016-2017  
 Paper:- Medicinal Chemistry  
 Mode:- Chalk Board Presentation

Marks :-15

Topics :-

1. Anesthetic Drugs.
2. Hypnotic and Sedative Drugs [Barbiturates].
3. Morphine.

Teacher In charge :- Priyanka Khare

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =8/15

(12/15) (13)

DATE PAGE

Synthesis :-

$$\begin{array}{c}
 \text{O} \\
 \parallel \\
 \text{NH} - \text{C} \\
 \diagup \quad \diagdown \\
 \text{O}=\text{C} \quad \text{C} - \text{C}_2\text{H}_5 \\
 \diagdown \quad \diagup \\
 \text{NH} - \text{C} \\
 \parallel \\
 \text{O}
 \end{array}
 \rightleftharpoons
 \begin{array}{c}
 \text{O} \\
 \parallel \\
 \text{N} = \text{C} \\
 \diagup \quad \diagdown \\
 \text{HO}-\text{C} \quad \text{C} - \text{C}_2\text{H}_5 \\
 \diagdown \quad \diagup \\
 \text{NH} - \text{C} \\
 \parallel \\
 \text{O}
 \end{array}$$

5,5 diethyl barbituric acid (lactum)

In stoichiometric proportion (NaOH)

$$\begin{array}{c}
 \text{O} \\
 \parallel \\
 \text{N} = \text{C} \\
 \diagup \quad \diagdown \\
 \text{NaO}-\text{C} \quad \text{C} - \text{C}_2\text{H}_5 \\
 \diagdown \quad \diagup \\
 \text{NH} - \text{C} \\
 \parallel \\
 \text{O}
 \end{array}$$

Barbital sodium

Dose :- 0.04 to 0.6 g

Properties :- Barbitalone is water soluble electrovalent and polar compound

Side effect :- Excretion is kidney is not easily metabolism in liver

Date: \_\_\_\_\_  
 Page No: \_\_\_\_\_

Name :- Mayank Kinkub.

Class :- B.Sc III Sem.

Subject :- Medicinal chemistry

Session :- 2016-17

Mode :- chalk board presentation

Date: \_\_\_\_\_  
 Page No: \_\_\_\_\_

Question SAR of ~~Morph~~ Morphine

- Ans. (1) HAMMETT AND HANSCH PLOT IN DRUGS Formulation - presented by Nazima majid Nabilah and jorastan avemia date 10<sup>th</sup> November 2014
- (2) Table of content. Introduction. Modification of lead compound. drug design -
- (a) lipophilicity (b) electronic effects (c) steric effects
- (4) Hansch analysis. Morphine as example. Conclusion. reference.
- (3) Hammett Louis plack Hammett (April 1894 - Feb 1987) was an American physical chemist. He is know for The hammett equilibrium constant for some classes of organic reactions including substituted aromatic compounds
- (4) Introduction -
- (5) -1- SAR is an advance designed to find The relationships between chemical

(12/15)

# Govt. Madhav Science P.G. College Ujjain



CCE-PPT  
Session -2016-17  
Topic- Antineoplastic

Submitted to  
Miss. Shruti Sharma

Submitted By  
Harshita Sharma  
Pharmaceutical Chemistry

**A=ANTICANCER DRUGS CAUSE**  
**N=NAUSEA AND VOMITING**  
**T=TREATMENT REGIMEN MUST BE FOLLOWED**  
**I=INDIVIDUALIZED DOSAGE**  
**N=NEW DRUGS APPEAR ON THE MARKET**  
**E=EXPOSURE TIME KEPT TO A MINIMUM**  
**O=ONLY A PHYSICIAN CAN ADMINISTER**  
**P=PROTECT YOURSELF**  
**L=LOOK, LISTEN, AND LEARN**  
**A=ASSESSMENT OF LABORATORY TESTS**  
**S=SAFE DOSAGE BASED ON WEIGHT**  
**T=TOXICITIES**  
**I=INFORM PATIENTS**  
**C=CLASSIFICATION OF AGENTS**

## Neoplasm

It is an abnormal mass of tissue as a result of **Neoplasia**  
(Neoplasia (*new growth* in Greek) is the abnormal proliferation of cells)

Classification of Neoplasm

- ❖ Benign
- ❖ Potentially malignant
- ❖ Malignant

**Benign**  
Skin surface  
Encapsulated growth

**Malignant**  
Skin surface  
Blood vessel  
Hemorrhage  
Lymph node

## WARNING SIGNS OF NEOPLASM

- Changes in bowel or bladder habits
- A sore that will not heal
- Unusual bleeding, discharge
- Thickening or lump in breast or elsewhere
- Indigestion, difficulty swallowing
- Obvious change in wart or mole
- Nagging cough, hoarseness

Upma Tiwari



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2016-2017

Paper - 104 Physical Pharmacy - I

Multiple Choice Questions :-

Marks :-10

- 1. A real solution is that which
  - A) Obey Raoult's Law
  - B) Does not Obey Raoult's Law
  - C) Obey Henry's Law
  - D) Does not Obey Henry's Law
- 2. Which of the following is true for a closed system?
  - A) Mass does not enter or leave the system
  - B) Mass entering = mass leaving
  - C) Both a and b
  - D) none of the mentioned
- 3. What is the H<sup>+</sup> ion concentration in pure water?
  - A) 10<sup>-7</sup> M
  - B) 1\*10<sup>-6</sup> M
  - C) 1\*10<sup>-8</sup> M
  - D) 1\*10<sup>-14</sup> M
- 4. As the pKa of an acid increases, the acid will be :-
  - A) More weaker
  - B) More stronger
  - C) Converted to neutral solution
  - D) Converted to basic solution
- 5. Buffers are mixtures of :-
  - A) Strong acid and strong base
  - B) Strong acid and weak base
  - C) Weak base and their conjugate acid
  - D) Weak acid and their conjugate base
- 6. The water level in the human body is regulated by the hormone
  - A) ACTH
  - B) Oxytocin
  - C) FSH
  - D) Epinephrine
- 7. Thermal power plant work on
  - A) Carnot - Cycle
  - B) Joule Cycle
  - C) Rankine Cycle
  - D) Otto Cycle
- 8. Who is father of physics and chemistry?
  - A) Isaac Newton
  - B) Antoine Lavoisier
  - C) Stewart Adams
  - D) William T.G. Morton
- 9. Father of thermodynamics is -

40/40

Reshma Mansharaman

- A) Nicolas Leonard Sadi Carnot
  - B) Rudolf Clausius
10. Who gave first law of thermodynamic
- A) Rudolf Clausius 1850
  - B) Adolf Von Bayer.

Teacher In charge :- Priyanka Khare

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =6/10



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2016-2017

Paper - 104 Physical Pharmacy - I

Multiple Choice Questions :-

Marks :-10

- 1. A real solution is that which
  - A) Obey Raoult's Law
  - B) Does not Obey Raoult's Law
  - C) Obey Henry's Law
  - D) Does not Obey Henry's Law
- 2. Which of the following is true for a closed system?
  - A) Mass does not enter or leave the system
  - B) Mass entering = mass leaving
  - C) Both a and b
  - D) none of the mentioned
- 3. What is the H<sup>+</sup> ion concentration in pure water?
  - A) 10<sup>-7</sup> M
  - B) 1\*10<sup>-6</sup> M
  - C) 1\*10<sup>-8</sup> M
  - D) 1\*10<sup>-14</sup> M
- 4. As the pKa of an acid increases, the acid will be :-
  - A) More weaker
  - B) More stronger
  - C) Converted to neutral solution
  - D) Converted to basic solution
- 5. Buffers are mixtures of :-
  - A) Strong acid and strong base
  - B) Strong acid and weak base
  - C) Weak base and their conjugate acid
  - D) Weak acid and their conjugate base
- 6. The water level in the human body is regulated by the hormone
  - A) ACTH
  - B) Oxytocin
  - C) FSH
  - D) Epinephrine
- 7. Thermal power plant work on
  - A) Carnot - Cycle
  - B) Joule Cycle
  - C) Rankine Cycle
  - D) Otto Cycle
- 8. Who is father of physics and chemistry?
  - A) Isaac Newton
  - B) Antoine Lavoisier
  - C) Stewart Adams
  - D) William T.G. Morton
- 9. Father of thermodynamics is -

10/10

- A) Nicolas Leonard Sadi Carnot
  - B) Rudolf Clausius
10. Who gave first law of thermodynamic
- A) Rudolf Clausius 1850
  - B) Adolf Von Bayer.

Teacher In charge :- Priyanka Khare

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =6/10

# Govt. Madhav Science P.G. College Ujjain

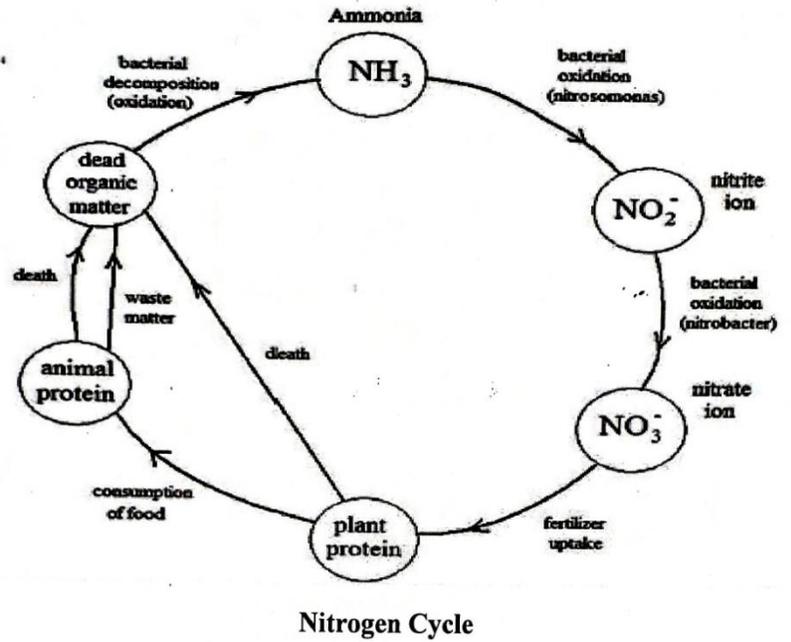


CCE- Chalk Board Presentation  
Session -2016-17  
Topic- Nitrogen Cycle

Submitted to :-  
Priyanka Khare

Submitted By:-  
Mahendra Gehlot  
M.Sc. II Sem  
Drug and Pharmaceutical Chemistry

10  
10



# Govt. Madhav Science P.G. College Ujjain

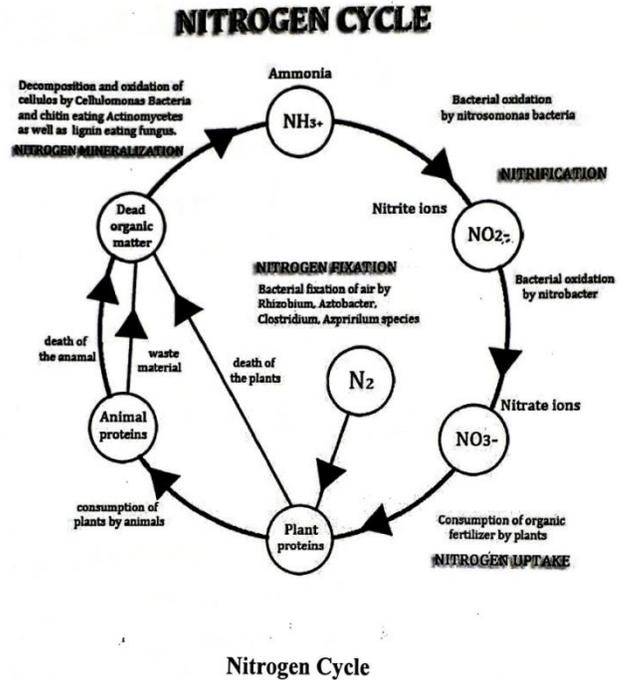


CCE- Chalk Board Presentation  
Session -2016-17  
Topic- Nitrogen Cycle

Submitted to :-  
Priyanka Khare

Submitted By:-  
Upama Tiwari  
M.Sc. II Sem  
Drug and Pharmaceutical Chemistry

09  
10



Anjali Tiwari

Vasudev Soni

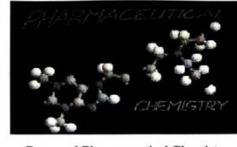


Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2016-2017  
Paper – 303 Medicinal Chemistry –I  
Mode:- MCQ

**Multiple Choice Questions :-** **Marks :-10**

1. What mixtures of gases are used in anesthesia?  
A) O<sub>2</sub> & N<sub>2</sub>O B) O<sub>2</sub> & CO<sub>2</sub> C) CO<sub>2</sub> & N<sub>2</sub>O D) O<sub>2</sub>, CO<sub>2</sub> & N<sub>2</sub>O
2. Which of the Following is known as laughing gas?  
A) N<sub>2</sub>O B) CO<sub>2</sub> C) B<sub>2</sub>O D) O<sub>2</sub>
3. Which Of the Following Local anesthetic Agent would be preferred in prolong- surgical procedure?  
A) Bupivacaine B) Cocaine C) Lignocaine D) Prilocaine
4. It is Difficult to obtain local infiltration anesthesia in the presence of inflammation because of:  
A) A decreased pH B) Increased Vascularity C) Oedema D) Pain
5. Which of the following is derived from the hemp plant "Cannabis Sativa"  
A) Opium B) Marijuana C) MDMA D) Crak
6. A Synthetic form of opium was developed by Germany during WWII . This is known as ?  
A) Prednisalone B) Cortisone C) Methadone D) Polyheroin
7. In biological treatment of substance abuse an example of a uses being weaned onto a weaker substance would be which of the following?

09  
10

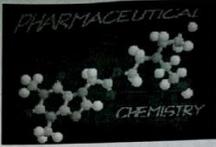


Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2016-2017  
Paper – 303 Medicinal Chemistry –I  
Mode:- MCQ

**Multiple Choice Questions :-** **Marks :-10**

1. What mixtures of gases are used in anesthesia?  
A) O<sub>2</sub> & N<sub>2</sub>O B) O<sub>2</sub> & CO<sub>2</sub> C) CO<sub>2</sub> & N<sub>2</sub>O D) O<sub>2</sub>, CO<sub>2</sub> & N<sub>2</sub>O
2. Which of the Following is known as laughing gas?  
A) N<sub>2</sub>O B) CO<sub>2</sub> C) B<sub>2</sub>O D) O<sub>2</sub>
3. Which Of the Following Local anesthetic Agent would be preferred in prolong- surgical procedure?  
A) Bupivacaine B) Cocaine C) Lignocaine D) Prilocaine
4. It is Difficult to obtain local infiltration anesthesia in the presence of inflammation because of:  
A) A decreased pH B) Increased Vascularity C) Oedema D) Pain
5. Which of the following is derived from the hemp plant "Cannabis Sativa"  
A) Opium B) Marijuana C) MDMA D) Crak
6. A Synthetic form of opium was developed by Germany during WWII . This is known as ?  
A) Prednisalone B) Cortisone C) Methadone D) Polyheroin
7. In biological treatment of substance abuse an example of a uses being weaned onto a weaker substance would be which of the following?

10  
10



Department of Pharmaceutical Chemistry , Govt. Madhav Science P.G. College Ujjain (M.P.)  
M.Sc III Sem Session:-2016-2017  
CCE-Paper IV  
PC-304  
Principle of inorganic pharmaceutical chemistry-II  
Mode :- Written test

Q.1 Explain the properties and uses of ferric ammonium citrate.  
Q.2 Write about physiological acid base balance.  
Q.3 Explain factors affecting stability of complex.  
Q.4 Write short note on crown ethers.  
Q.5 Define Radioactivity. Write its applications.

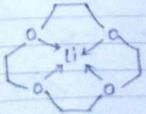
Teacher In charge :- Miss Priyanka Khare  
Faculty of Pharma Department  
Difficulty Level : Moderate  
Expected Average Score as per difficulty level =6/10

DATE \_\_\_\_\_  
PAGE \_\_\_\_\_

Q.1 Write a short note Crown ethers.

Ans Crown ethers are cyclic chemical compounds that consist of ring containing several ether groups. Most common ethers are oligomers of ethylene oxide. Important members of this series are tetramers (n=4), pentamers (n=5), hexamers (n=6). The term crown ether bound to a cation and crown sitting on a person's head whenever this ether used as solvent cation i.e. (+ve) part of a molecule trap by the ether and its (-ve) part anion is used for reaction.

Ex- 12 - Crown ether  
15 - Crown ether  
18 - Crown ether



12 - crown ether

Nomenclature.  
The first no. designates the ring size and second no. designates the no. of oxygen atom in the ring.

# Govt. Madhav Science P.G. College Ujjain



CCE- Chalk Board Presentation  
Session -2016-17  
Topic- Anti tubercular Drug

*Priyanka Khare*  
Submitted to :-  
Priyanka Khare

Submitted By:-  
Divya Gujar  
M.Sc. IV Sem  
Drug and Pharmaceutical Chemistry

09  
10

## Introduction

- Tuberculosis - most important communicable disease in the world.
- Mycobacteria are intrinsically resistant to most antibiotics
  - Grows more slowly than other bacteria – antibiotics active against **rapidly growing cells**
  - **lipid-rich mycobacterial cell wall** is impermeable to many agents
  - It grows inside macrophage – poorly penetrated by drugs
  - Excellent ability to develop resistance – Multiple Drug Resistant (MDR)

# Govt. Madhav Science P.G. College Ujjain



CCE- Chalk Board Presentation  
Session -2016-17  
Topic- Diuretics

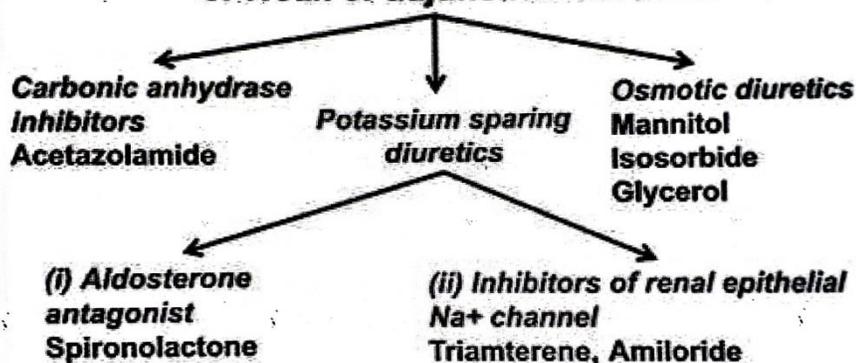
*Priyanka Khare*  
Submitted to :-  
Priyanka Khare

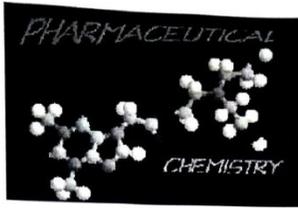
Submitted By:-  
Anjali Tiwari  
M.Sc. IV Sem  
Drug and Pharmaceutical Chemistry

10  
10

## Classification of Diuretics

### 3. Weak or adjunctive diuretics





Department of pharmaceutical Chemistry

B.Sc. 1 Year 2017-18

Paper- Organic

Mode: Written Test

Que1. Write short note on Syrup.

Que2.- Define Tincture.

Que3. Explain Imperial and metric system.

Que4. Write note on Biological Defence and Chemical defence.

Que5. Explain drugs on the basis of natural sources.

- Teacher In charge :- Shruti Sharma
- Faculty of Pharma Department
- Difficulty Level : Moderate
- Expected Average Score as per difficulty level =6/10

Q1) Infusions → Infusions are the liquid preparation, which are either prepared by infusion process or by diluting one part concentrated infusion with nine parts of water. Infusion should be freshly prepared and must be used in 12 hours of their preparation.  
Example - concentrated compounds of infusion.

[Am. of que. No. 7.]

Ans) There are many types of medicinal system

i) Ayurvedic system.

ii) Unani system of medicine.

iii) Homeopathic system.

iv) Allopathy system.

2/10

10/10

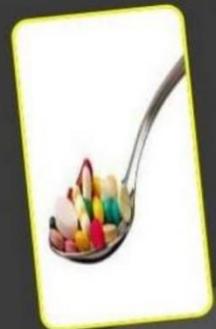
## Key Points

- ▶ What is antibiotic
- ▶ Classification
- ▶ Use
- ▶ Misuse
- ▶ Resistance & Cross-resistance
- ▶ Possible side effects
- ▶ Characteristics of ideal antibiotic



## On the basis of mode of action:

- **Bacteriostatic antibiotics**
  - Tetracycline
  - Chloramphenicol
  - Erythromycin
  - Lincomycin
- **Bacteriocidal antibiotics**
  - Cephalosporin
  - Penicillin
  - Erythromycin
  - Aminoglycosides
  - Cotrimoxazole





Department of Pharmaceutical Chemistry

B.Sc. III Semester  
 Session -2017-2018  
 Paper:- Medicinal Chemistry  
 Mode:- Assignment

Marks :-15

- Question -1 Give the classification of Local Anesthetics drugs.
- Question -2 Write structure , synthesis and uses of Lignocaine..
- Question -3 Give the classification of Anticovalant Drugs .
- Question-4 Write structure , synthesis and uses of Thiopental Sodium .
- Question -5 Explain the SAR of Barbiturates Drug .

Teacher In charge :- Surabhi Shukla.

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =8/15

Date: / / Page no: \_\_\_\_\_

Name :- Hemant Rathore

Class :- B.S.C III<sup>rd</sup> Sem.

Subject :- Medicinal Chemistry.

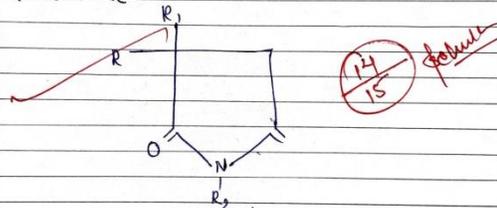
Session :- 2017-18

Mode :- Assignment

Date: / / Page no: \_\_\_\_\_

Drug Name	R <sub>1</sub>	R <sub>2</sub>
Phenytoin	C <sub>6</sub> H <sub>5</sub>	C <sub>6</sub> H <sub>5</sub>
Ethoin	C <sub>6</sub> H <sub>5</sub>	H
Me Phenytoin	C <sub>6</sub> H <sub>5</sub>	C <sub>2</sub> H <sub>5</sub>

C) Succinimides :-



Drug Name	R <sub>1</sub>	R <sub>2</sub>
Phenosuccinimides	C <sub>6</sub> H <sub>5</sub>	H
Meth Succinimides	C <sub>6</sub> H <sub>5</sub>	CH <sub>3</sub>
Etho Succinimides	C <sub>2</sub> H <sub>5</sub>	CH <sub>3</sub>

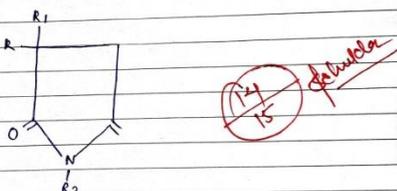
d) Benzodiazepines

Example :- diazepam, lorazepam

Date: / / Page no: 7

Drug Name	R <sub>1</sub>	R <sub>2</sub>
Phenytoin	C <sub>6</sub> H <sub>5</sub>	C <sub>6</sub> H <sub>5</sub>
Ethoin	C <sub>6</sub> H <sub>5</sub>	H
Me Phenytoin	C <sub>6</sub> H <sub>5</sub>	C <sub>2</sub> H <sub>5</sub>

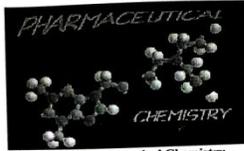
c) Succinimides :-



Drug name	R <sub>1</sub>	R <sub>2</sub>
Phenosuccinimides	C <sub>6</sub> H <sub>5</sub>	H
Meth succinimides	C <sub>6</sub> H <sub>5</sub>	CH <sub>3</sub>
Etho succinimides	C <sub>2</sub> H <sub>5</sub>	CH <sub>3</sub>

d) Benzodiazepines

Example :- diazepam, lorazepam



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2017-2018

Paper – 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

1. Addition of heat at constant pressure to a gas results in

- A.  Raising its temperature B.  Raising its pressure  
C.  Raising its volume D.  Raising its temperature and doing external work

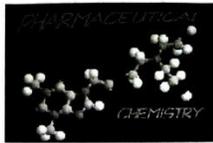
2. Which of the following items is not a path function?

- A.  Heat B.  Work  
C.  Kinetic energy D.  Thermal conductivity

3. Mixture of ice and water form a

- A.  Closed system B.  Open system  
C.  Isolated system D.  Heterogeneous system

*Manish Kalotiya*



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2017-2018

Paper – 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

1. Addition of heat at constant pressure to a gas results in

- A.  Raising its temperature B.  Raising its pressure  
C.  Raising its volume D.  Raising its temperature and doing external work

2. Which of the following items is not a path function?

- A.  Heat B.  Work  
C.  Kinetic energy D.  Thermal conductivity

3. Mixture of ice and water form a

- A.  Closed system B.  Open system  
C.  Isolated system D.  Heterogeneous system

09 / 10 *Delu*

5. The entropy may be expressed as a function of

- A.  Pressure and temperature B.  Temperature and volume  
C.  Heat and work D.  All of these

6. Which of the following variables controls the physical properties of a perfect gas

- (a) pressure (b) temperature (c) volume (d) all of the above

7. A closed system is one in which

- (a) mass does not cross boundaries of the system, though energy may do so  
(b) mass crosses the boundary but not the energy  
(c) neither mass nor energy crosses the boundaries of the system  
(d) both energy and mass cross the boundaries of the system

8. Which of the following quantities is not the property of the system

- (a) pressure (b) temperature (c) specific volume (d) heat

9. The term N.T.P. stands for

- (a) nominal temperature and pressure (b) natural temperature and pressure  
(c) normal temperature and pressure (d) normal thermodynamic practice

10. In an isothermal process, the internal energy of gas molecules

- (a) increases (b) decreases (c) remains constant  
(d) may increase/decrease depending on the properties of gas

Teacher In charge :- Surabhi Shukla

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =6/10

5. The entropy may be expressed as a function of

- A.  Pressure and temperature B.  Temperature and volume  
C.  Heat and work D.  All of these

6. Which of the following variables controls the physical properties of a perfect gas

- (a) pressure (b) temperature (c) volume (d) all of the above

7. A closed system is one in which

- (a) mass does not cross boundaries of the system, though energy may do so  
(b) mass crosses the boundary but not the energy  
(c) neither mass nor energy crosses the boundaries of the system  
(d) both energy and mass cross the boundaries of the system

8. Which of the following quantities is not the property of the system

- (a) pressure (b) temperature (c) specific volume (d) heat

9. The term N.T.P. stands for

- (a) nominal temperature and pressure (b) natural temperature and pressure  
(c) normal temperature and pressure (d) normal thermodynamic practice

10. In an isothermal process, the internal energy of gas molecules

- (a) increases (b) decreases (c) remains constant  
(d) may increase/decrease depending on the properties of gas

Teacher In charge :- Surabhi Shukla

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =6/10

# Govt. Madhav Science P.E. College Ujjain



CCE- Chalk Board Presentation

Session -2017-18

Topic- Antacids

*Surbhi Shukla*  
Submitted to :-  
Surbhi Shukla

Submitted By:-  
Kuldeep Arya  
M.Sc. II Sem  
Drug and Pharmaceutical Chemistry

09  
10

# Govt. Madhav Science P.E. College Ujjain



CCE- Chalk Board Presentation

Session -2017-18

Topic-Antacids

*Surbhi Shukla*  
Submitted to :-  
Surbhi Shukla

Submitted By:-  
Manish Ralotiya  
M.Sc. II Sem  
Drug and Pharmaceutical Chemistry

09  
10

## Introduction to antacids

### ☑ Composition of antacids:

The hydroxide is the base most commonly employed in antacids, but carbonate, bicarbonate and trisilicate ions are also used. The therapeutic efficacy and adverse effects depend on the metallic ion with which the base is combined and this is usually aluminium, magnesium or sodium.

### ☑ Mode/mechanism of action of antacids:

Antacids act as weak alkaline bases. They neutralize the excess gastric hydrochloride and relieve pain of peptic ulcer by raising the pH of gastric contents to about 4 (pain occurs when pH falls below 3.5).

## ANTACIDS

Antacids are substances which on ingestion react with the gastric acid and lower its contents. They produce a symptomatic relief of heartburn. Antacids are weak bases; pH above 4 by neutralising excess gastric hydrochloric acid.

### Ideal characteristics of antacids:

- Not be absorbable or cause systemic alkalosis;
- not liberate carbon dioxide, and cause rebound hyperacidity;
- not interfere with absorption of food;
- not be a laxative or cause constipation;
- be quick acting and exert its effect over a long period of time;

# Govt. Madhav Science P.G. College Ujjain



CCE- Chalk Board Presentation

Session -2017-18

Topic- Anti tubercular Drug

Submitted to :-  
Surbhi Shukla

Submitted By:-  
Priyanka Chouhan  
M.Sc. IV sem  
Drug and Pharmaceutical Chemistry

09  
10

# Govt. Madhav Science P.G. College Ujjain



CCE- Chalk Board Presentation

Session -2017-18

Topic- GIT[Gastro Intestinal Drugs]

Submitted to :-  
Surbhi Shukla

Submitted By:-  
Upma Tiwari  
M.Sc. IV Sem  
Drug and Pharmaceutical Chemistry

09  
10

## CLASSIFICATION OF DRUGS USED IN ANTI-TUBERCULOSIS TREATMENT

### FIRST LINE DRUGS

- ISONIAZIDE
- RIFAMPIN
- PYRAZINAMIDE
- ETHAMBUTOL
- STREPTOMYCIN

### SECOND LINE DRUGS

- AMIKACIN
- AMINOSALICYLIC ACID
- CAPREOMYCIN
- CIPROFLOXACIN
- CLOFAZIMINE
- CYCLOSERINE
- ETHIONAMIDE
- LEVOFLOXACIN
- RIFABUTIN
- RIFAPENTINE

## Classification of Antacids

### Nonsystemic Antacids:

Antacids which are not absorbed from the gut and does not interrupt acid base balance (metabolic alkalosis) are called nonsystemic antacids.

Non systemic antacids are divided into-**Buffer antacid & Non-buffer antacid.**

**Buffer antacid:** They limit the rise in pH of the gastric contents to below neutrality.

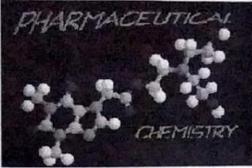
e.g. Aluminum Hydroxide Gel  $[\text{Al}(\text{OH})_3]$ , Magnesium hydroxide  $[\text{Mg}(\text{OH})_2]$ , Magnesium Trisilicate  $[2\text{MgO} \cdot 3\text{SiO}_2 \cdot x\text{H}_2\text{O}]$

**Non-buffer antacid:** They potentially permit the elevation in pH even above neutrality.

e.g. Calcium carbonate  $[\text{CaCO}_3]$ , Calcium phosphate  $[\text{Ca}_3(\text{PO}_4)_2]$ , Magnesium oxide  $[\text{MgO}]$ , Magnesium Carbonate  $[\text{MgCO}_3]$

2018-19

B.Sc. 1<sup>st</sup> Year



Department of Pharmaceutical Chemistry, Govt. Madhav Science P.G. College Ujjain (M.P.)

B.Sc I Yrs Session:-2018-2019

Principle of inorganic pharmaceutical chemistry

Q.1 Write about impurities.  
Q.2 Define accuracy and precision  
Q.3 Write short notes on indicators.  
Q.4 Define masking and demasking.  
Q.5 Write structural formula and uses of alum.

Teacher In charge :- Smt. Neha Jaiswal  
Faculty of Pharma Department  
Difficulty Level : Moderate  
Expected Average Score as per difficulty level =6/10

Govt. Madhav Science P.G. College, Ujjain

Signature of Principal

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : Kantab Malviya  
Father's Name : Kantab Malviya  
Class : B.Sc 1<sup>st</sup> Year  
Section : Pharmaceutical Chemistry  
Subject : Inorganic Pharmaceutical Chemistry  
Date of Examination : 30/1/2019  
Signature of Invigilator : [Signature] [Signature]

Signature of Valuer

08/10

Ques: Write about Impurities?

Ans: Impurities are chemical substance exists a confined amount of the liquid, gas or solid, which differ from the chemical composition of the material or compound.

Impurities are either naturally occurring or added during synthesis of a chemical or commercial product. During production, impurities may be purposely, accidentally, inevitably, or incidentally added into the substance.

The levels of impurities in a material are generally defined in relative terms. Standards have been established by various organizations that attempt to define the permitted levels of various impurities in a manufactured product. Strictly speaking, then a material's level of purity can only be stated as being more or less pure than some other material.

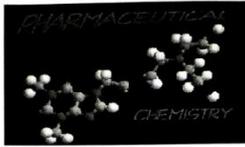
Impurities can be destructive when they obstruct the working nature of the material. Examples are include ash and debris in metals and leaf pieces in blank white papers. The removal of impurities is usually done chemically. For example, in the manufacturing of iron, calcium carbonate is added to the blast blast furnace to remove silicon dioxide from the iron ore. Zone refining is an economically important method for the purification of semiconductors.

However, some kinds of impurities can be removed by physical means. A mixture of water and salt can be separated by distillation, with water as the distillate and salt as the solid residue. Impurities are usually physically removed from liquids and gases. The removal of dust particles from metal ore is an example with solids.



Ajay Pal Singh

Aayush Sharma



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2018-2019

Paper - 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

1. A real solution is that which  
 A) Obey Raoult's Law B) Does not Obey Raoult's Law C) Obey Henry's Law D) Does not Obey Henry's Law
2. Which of the following is true for a closed system?  
 A) Mass does not enter or leave the system B) Mass entering = mass leaving C) Both a and b D) none of the mentioned
3. What is the H<sup>+</sup> ion concentration in pure water?  
 A) 1\*10<sup>-7</sup>m B) 1\*10<sup>-6</sup>m C) 1\*10<sup>-8</sup>m D) 1\*10<sup>-9</sup>m
4. As the pKa of an acid increases, the acid will be :-  
 A) More weaker B) More stronger C) Converted to neutral solution D) Converted to basic solution
5. Buffers are mixtures of :-  
 A) Strong acid and strong base B) Strong acid and weak base C) Weak base and their conjugate acid D) Weak Weak acid and their conjugate base
6. The water level in the human body is regulated by the hormone  
 A) ACTH B) Oxytocin C) FSH D) Epinephrine
7. Thermal power plant work on  
 A) Carnot -Cycle B) Joule Cycle C) Rankine Cycle D) Otto Cycle
8. Who is father of physics and chemistry?  
 A) Isaac Newton B) Antoine Lavosier C) Stewart Adams D) William T.G. Morton
9. Father of thermodynamics is -

09/10 Akshu

Jaydeep Singh



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2018-2019

Paper - 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

1. A real solution is that which  
 A) Obey Raoult's Law B) Does not Obey Raoult's Law C) Obey Henry's Law D) Does not Obey Henry's Law
2. Which of the following is true for a closed system?  
 A) Mass does not enter or leave the system B) Mass entering = mass leaving C) Both a and b D) none of the mentioned
3. What is the H<sup>+</sup> ion concentration in pure water?  
 A) 1\*10<sup>-7</sup>m B) 1\*10<sup>-6</sup>m C) 1\*10<sup>-8</sup>m D) 1\*10<sup>-9</sup>m
4. As the pKa of an acid increases, the acid will be :-  
 A) More weaker B) More stronger C) Converted to neutral solution D) Converted to basic solution
5. Buffers are mixtures of :-  
 A) Strong acid and strong base B) Strong acid and weak base C) Weak base and their conjugate acid D) Weak Weak acid and their conjugate base
6. The water level in the human body is regulated by the hormone  
 A) ACTH B) Oxytocin C) FSH D) Epinephrine
7. Thermal power plant work on  
 A) Carnot -Cycle B) Joule Cycle C) Rankine Cycle D) Otto Cycle
8. Who is father of physics and chemistry?  
 A) Isaac Newton B) Antoine Lavosier C) Stewart Adams D) William T.G. Morton
9. Father of thermodynamics is -

09/10 Akshu

Mayank Kinshuk



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2018-2019

Paper - 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

1. A real solution is that which  
 A) Obey Raoult's Law B) Does not Obey Raoult's Law C) Obey Henry's Law D) Does not Obey Henry's Law
2. Which of the following is true for a closed system?  
 A) Mass does not enter or leave the system B) Mass entering = mass leaving C) Both a and b D) none of the mentioned
3. What is the H<sup>+</sup> ion concentration in pure water?  
 A) 1\*10<sup>-7</sup>m B) 1\*10<sup>-6</sup>m C) 1\*10<sup>-8</sup>m D) 1\*10<sup>-9</sup>m
4. As the pKa of an acid increases, the acid will be :-  
 A) More weaker B) More stronger C) Converted to neutral solution D) Converted to basic solution
5. Buffers are mixtures of :-  
 A) Strong acid and strong base B) Strong acid and weak base C) Weak base and their conjugate acid D) Weak Weak acid and their conjugate base
6. The water level in the human body is regulated by the hormone  
 A) ACTH B) Oxytocin C) FSH D) Epinephrine
7. Thermal power plant work on  
 A) Carnot -Cycle B) Joule Cycle C) Rankine Cycle D) Otto Cycle
8. Who is father of physics and chemistry?  
 A) Isaac Newton B) Antoine Lavosier C) Stewart Adams D) William T.G. Morton
9. Father of thermodynamics is -

09/10 Akshu



Drug and Pharmaceutical Chemistry

M.Sc. I Semester

2018-2019

Paper - 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

1. A real solution is that which  
 A) Obey Raoult's Law B) Does not Obey Raoult's Law C) Obey Henry's Law D) Does not Obey Henry's Law
2. Which of the following is true for a closed system?  
 A) Mass does not enter or leave the system B) Mass entering = mass leaving C) Both a and b D) none of the mentioned
3. What is the H<sup>+</sup> ion concentration in pure water?  
 A) 1\*10<sup>-7</sup>m B) 1\*10<sup>-6</sup>m C) 1\*10<sup>-8</sup>m D) 1\*10<sup>-9</sup>m
4. As the pKa of an acid increases, the acid will be :-  
 A) More weaker B) More stronger C) Converted to neutral solution D) Converted to basic solution
5. Buffers are mixtures of :-  
 A) Strong acid and strong base B) Strong acid and weak base C) Weak base and their conjugate acid D) Weak Weak acid and their conjugate base
6. The water level in the human body is regulated by the hormone  
 A) ACTH B) Oxytocin C) FSH D) Epinephrine
7. Thermal power plant work on  
 A) Carnot -Cycle B) Joule Cycle C) Rankine Cycle D) Otto Cycle
8. Who is father of physics and chemistry?  
 A) Isaac Newton B) Antoine Lavosier C) Stewart Adams D) William T.G. Morton
9. Father of thermodynamics is -

09/10 Akshu

# Govt. Madhavi Science P.G. College Ujjain



CCE- Chalk Board Presentation

Session -2018-19

Topic- Dental Product

*Shukla*  
Submitted to :-  
Surbhi Shukla

Submitted By:-  
Mayank Kinshuk  
M.Sc. II Sem  
Drug and Pharmaceutical Chemistry

09  
10

## Classification:

- Preventive dental materials
- Restorative dental materials
- Auxiliary dental materials

# Govt. Madhavi Science P.G. College Ujjain



CCE- Chalk Board Presentation

Session -2018-19

Topic- Dental Product

*Shukla*  
Submitted to :-  
Surbhi Shukla

Submitted By:-  
Jaydeep Singh  
M.Sc. II Sem  
Drug and Pharmaceutical Chemistry

09  
10

## What is Dental Material?

- **Dental materials** are specially fabricated materials, designed for use in dentistry. There are many different types of dental material, and their characteristics vary according to their intended purpose
- Likewise the structures in the oral cavity are lost or damaged due to disease such as caries and periodontal disease and trauma.
- The main goal in dentistry is to maintain or improve the quality of life through replacement or alteration of tooth structure.

Manish Kalsotra

Asadi Patidar



Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2018-2019  
Paper - 303 Medicinal Chemistry - I  
Mode:- MCQ

Multiple Choice Questions :-

Marks :-10

1. What mixtures of gases are used in anesthesia?  
 A) O<sub>2</sub> & N<sub>2</sub>O  B) O<sub>2</sub> & Co<sub>2</sub>  C) Co<sub>2</sub> & N<sub>2</sub>O  D) O<sub>2</sub>, Co<sub>2</sub> & N<sub>2</sub>O
2. Which of the Following is known as laughing gas?  
 A) N<sub>2</sub>O  B) Co<sub>2</sub>  C) B<sub>2</sub>O  D) O<sub>2</sub>
3. Which Of the Following Local anesthetic Agent would be preferred in prolong- surgical procedure?  
 A) Bupivacaine  B) Cocaine  C) Lignocaine  D) Prilocaine
4. It is Difficult to obtain local infiltration anesthesia in the presence o inflammation because of:  
 A) A decreased pH  B) Increased Vascularity  C) Oedema  D) Pain
5. Wjich of the following is derived from the hemp plant "Cannabis Sativa"  
 A) Opium  B) Marijuana  C) MDMA  D) Crak
6. A Synthetic form of opium was developed by Germany during WWII . This is known as ?  
 A) Prednisalone  B) Cortisone  C) Methadone  D) Polyheroin

09/10

Anjali kishor



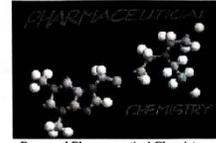
Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2018-2019  
Paper - 303 Medicinal Chemistry - I  
Mode:- MCQ

Multiple Choice Questions :-

Marks :-10

1. What mixtures of gases are used in anesthesia?  
 A) O<sub>2</sub> & N<sub>2</sub>O  B) O<sub>2</sub> & Co<sub>2</sub>  C) Co<sub>2</sub> & N<sub>2</sub>O  D) O<sub>2</sub>, Co<sub>2</sub> & N<sub>2</sub>O
2. Which of the Following is known as laughing gas?  
 A) N<sub>2</sub>O  B) Co<sub>2</sub>  C) B<sub>2</sub>O  D) O<sub>2</sub>
3. Which Of the Following Local anesthetic Agent would be preferred in prolong- surgical procedure?  
 A) Bupivacaine  B) Cocaine  C) Lignocaine  D) Prilocaine
4. It is Difficult to obtain local infiltration anesthesia in the presence o inflammation because of:  
 A) A decreased pH  B) Increased Vascularity  C) Oedema  D) Pain
5. Which of the following is derived from the hemp plant "Cannabis Sativa"  
 A) Opium  B) Marijuana  C) MDMA  D) Crak
6. A Synthetic form of opium was developed by Germany during WWII . This is known as ?  
 A) Prednisalone  B) Cortisone  C) Methadone  D) Polyheroin

09/10



Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2018-2019  
Paper - 303 Medicinal Chemistry - I  
Mode:- MCQ

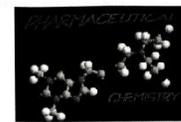
Multiple Choice Questions :-

Marks :-10

1. What mixtures of gases are used in anesthesia?  
 A) O<sub>2</sub> & N<sub>2</sub>O  B) O<sub>2</sub> & Co<sub>2</sub>  C) Co<sub>2</sub> & N<sub>2</sub>O  D) O<sub>2</sub>, Co<sub>2</sub> & N<sub>2</sub>O
2. Which of the Following is known as laughing gas ?  
 A) N<sub>2</sub>O  B) Co<sub>2</sub>  C) B<sub>2</sub>O  D) O<sub>2</sub>
3. Which Of the Following Local anesthetic Agent would be preferred in prolong- surgical procedure ?  
 A) Bupivacaine  B) Cocaine  C) Lignocaine  D) Prilocaine
4. It is Difficult to obtain local infiltration anesthesia in the presence o inflammation because of :  
 A) A decreased pH  B) Increased Vascularity  C) Oedema  D) Pain
5. Which of the following is derived from the hemp plant "Cannabis Sativa"  
 A) Opium  B) Marijuana  C) MDMA  D) Crak
6. A Synthetic form of opium was developed by Germany during WWII . This is known as ?  
 A) Prednisalone  B) Cortisone  C) Methadone  D) Polyheroin

10/10

Kuldeep Arora



Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2018-2019  
Paper - 303 Medicinal Chemistry - I  
Mode:- MCQ

Multiple Choice Questions :-

Marks :-10

1. What mixtures of gases are used in anesthesia?  
 A) O<sub>2</sub> & N<sub>2</sub>O  B) O<sub>2</sub> & Co<sub>2</sub>  C) Co<sub>2</sub> & N<sub>2</sub>O  D) O<sub>2</sub>, Co<sub>2</sub> & N<sub>2</sub>O
2. Which of the Following is known as laughing gas?  
 A) N<sub>2</sub>O  B) Co<sub>2</sub>  C) B<sub>2</sub>O  D) O<sub>2</sub>
3. Which Of the Following Local anesthetic Agent would be preferred in prolong- surgical procedure  
 A) Bupivacaine  B) Cocaine  C) Lignocaine  D) Prilocaine
4. It is Difficult to obtain local infiltration anesthesia in the presence o inflammation because of :  
 A) A decreased pH  B) Increased Vascularity  C) Oedema  D) Pain
5. Which of the following is derived from the hemp plant "Cannabis Sativa"  
 A) Opium  B) Marijuana  C) MDMA  D) Crak
6. A Synthetic form of opium was developed by Germany during WWII . This is known as ?  
 A) Prednisalone  B) Cortisone  C) Methadone  D) Polyheroin

10/10

# Govt. Madhav Science P.G. College Ujjain



CCE- Chalk Board Presentation

Session -2018-19

Topic- Chemotherapy

Submitted to:-  
Surbhi Shukla

Submitted By:-  
Seemab Khan  
M.Sc. IV Sem  
Drug and Pharmaceutical Chemistry

09  
10

# Govt. Madhav Science P.G. College Ujjain



CCE- Chalk Board Presentation

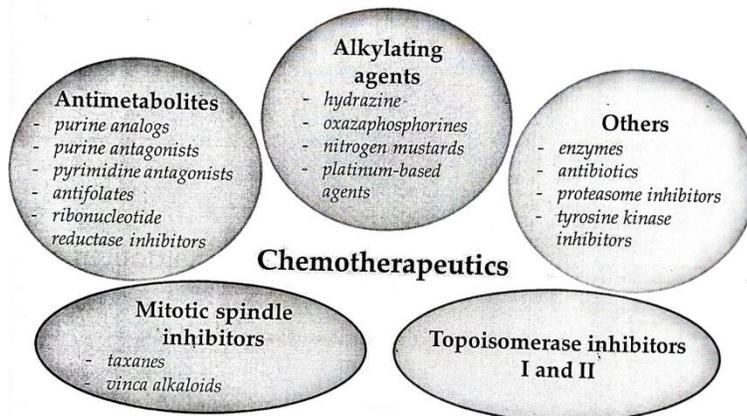
Session -2018-19

Topic- Anti tubercular Drug

Submitted to:-  
Surbhi Shukla

Submitted By:-  
Anjali Lodwal  
M.Sc. IV Sem  
Drug and Pharmaceutical Chemistry

09  
10



## Introduction

- Tuberculosis - most important communicable disease in the world.
- Mycobacteria are intrinsically resistant to most antibiotics
  - Grows more slowly than other bacteria – antibiotics active against **rapidly growing cells**
  - **lipid-rich mycobacterial cell wall** is impermeable to many agents
  - It grows inside macrophage – poorly penetrated by drugs
  - Excellent ability to develop resistance – Multiple Drug Resistant (MDR)

2019-20

B.Sc. 1<sup>st</sup> Year



Department of pharmaceutical Chemistry

B.Sc. 1 Year 2019-20

Paper- Organic

Mode: Written Test

Que1. Discuss Imperial and metric system.

Que2.- Define Infusions.

Que3. Write note on Surface active agent.

Que4. Write short note on Syrup.

Que5. Explain different types of medicinal system.

- Teacher In charge :- Shruti Sharma
- Faculty of Pharma Department
- Difficulty Level : Moderate
- Expected Average Score as per difficulty level =6/10

Govt. Madhav Science P.G. College, Ujjain

Signature of Principal

Name : Simanshi Tiwari  
Father's Name : Manish Tiwari  
Class : B.Sc. 1<sup>st</sup> year.  
Section : B1.  
Subject : Pharmaceutical chemistry  
Date of Examination : 20/11/19.  
Signature of Invigilator : \_\_\_\_\_

Signature of Valuer

08/10

Govt. Madhav Science P.G. College, Ujjain

Signature of Principal

Name : Ravi Parmar  
Father's Name : Mr. Sitaramji Parmar  
Class : BSC 1<sup>st</sup> year  
Section : B2  
Subject : pharmaceutical chemistry  
Date of Examination : 20/11/2019  
Signature of Invigilator : \_\_\_\_\_

Signature of Valuer

08/10

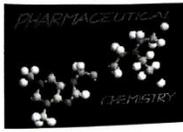
Govt. Madhav Science P.G. College, Ujjain

Signature of Principal

Name : Ajish Khan  
Father's Name : Hais Khan  
Class : B.S.C I year.  
Section : B2  
Subject : Pharmaceutical chem.  
Date of Examination : 20-11-19.  
Signature of Invigilator : Akhan

Signature of Valuer

08/10



Department of Pharmaceutical Chemistry

B.Sc. II Year  
Session -2019-2020  
Paper:- Medicinal Chemistry  
Mode:- Assignment

Marks :-10

- Question -1. Write structure , synthesis and uses of Aspirin.  
Question -2. Write structure , synthesis and uses of Paracetamol.  
Question -3. Write structure , synthesis and uses of Diphenylhydramine.  
Question-4 . Give the classification of antipyretic and analgesic .  
Question -5. Explain the SAR of Morphine.

Teacher In charge - Surbhi shukla

Faculty of Pharma Department

Difficulty Level : Moderate

Expected Average Score as per difficulty level =6/10

Due to the property of sedative, antiemetic and antitussive property it is also used in seasonal allergic conditions.

4. Give the classification of Antipyretic and Analgesic.  
Ans: Antipyretic - Antipyretic are substance that reduce fever. Antipyretic cause the Hypothalamus to override a prostaglandin induced increases in temperature. The body then work to lower the temperature which results in a reduction in fever. (used to prevent or reduce fever).  
eg: Aspirin, Paracetamol.

Mechanism of Action:  
CNS

Hypothalamus Centre

Heat Regulating Centre

Heat Maintain.

08/10 ~~09/10~~ ~~08/10~~ ~~09/10~~

Date: / /

Q.2 Write structure and uses of paracetamol?

PARACETAMOL

Structure - Oc1ccc(NC(=O)C)cc1

Synthesis - Oc1ccc([N+](=O)[O-])cc1 + (CH3CO)2O >> Oc1ccc(N)cc1 + CH3COOH >> Oc1ccc(NC(=O)C)cc1

P-nitro Phenol + Acetic anhydride → P-amino phenol + Paracetamol

Uses - Uses of paracetamol -

- 1) Paracetamol is used to reduce fever.
- 2) Treat mild to moderate pain from headaches, menstrual periods, toothache, backaches, pains.

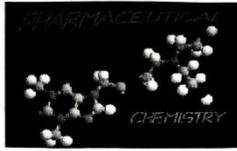
09/10 ~~08/10~~ ~~09/10~~

Date: / / Page no: 7

7)	Allylic unsaturated linkage	-CH=CH- replaced by CH <sub>2</sub> -CH <sub>2</sub> group to obtain dihydromorphine	1-2 times more active than morphine
8)	Tertiary Nitrogen	N-CH <sub>3</sub> group is replaced by NH group to obtain (not morphine)	less active than morphine
9)		N-CH <sub>3</sub> group is replaced by NCH <sub>2</sub> CH <sub>2</sub> group	14 times more active than morphine
10)		N-CH <sub>3</sub> group is replaced by N(CH <sub>2</sub> ) <sub>2</sub> group	more active than morphine
11)		N-CH <sub>3</sub> is replaced by N(CH <sub>2</sub> ) <sub>2</sub> group	It is drug do not have analgesic properties.

09/10 ~~08/10~~ ~~09/10~~

Nirmal Asthal



Drug and Pharmaceutical Chemistry  
M.Sc. I Semester  
2019-2020

Paper – 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

1. The study of the flow of heat or any other form of energy into is called  
A) Thermochemistry B) Thermokinetics C) Thermodynamics D) Thermochemical
2. Thermodynamic is applicable to  
A) Microscopic system only B) Macroscopic system only C) Homogenous system only D) Heterogenous System
3. A system that can transfer neither matter nor energy to and from its surroundings is called  
A) A closed system B) An isolated system C) An open System D) A homogenous system
4. Entropy is a measure ..... of the molecule of the system.  
A) Concentration B) Velocity D) Zig-Zag motion D) Randomness or disorder
5. The entropy of the system increases in the order.  
A) gas<liquid< solid B) gas<Solid <Liquid C) solid <gas<liquid D) None of these
6. Normality of a solution is the number of ..... of solute per litre o the solution .  
A) Moles B) Equivalent C) Formula weight D) Mole fraction
7. When a non-volatile is dissolved in a pure solvent , the vapor pressure of the pure solvent

09/10 Ashul

Kavita Rathore



Drug and Pharmaceutical Chemistry  
M.Sc. I Semester  
2019-2020

Paper – 104 Physical Pharmacy -I

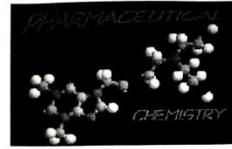
Multiple Choice Questions :-

Marks :-10

1. The study of the flow of heat or any other form of energy into is called  
A) Thermochemistry B) Thermokinetics C) Thermodynamics D) Thermochemical
2. Thermodynamic is applicable to  
A) Microscopic system only B) Macroscopic system only C) Homogenous system only D) Heterogenous System
3. A system that can transfer neither matter nor energy to and from its surroundings is called  
A) A closed system B) An isolated system C) An open System D) A homogenous system
4. Entropy is a measure ..... of the molecule of the system.  
A) Concentration B) Velocity D) Zig-Zag motion D) Randomness or disorder
5. The entropy of the system increases in the order.  
A) gas<liquid< solid B) gas<Solid <Liquid C) solid <gas<liquid D) None of these
6. Normality of a solution is the number of ..... of solute per litre o the solution .  
A) Moles B) Equivalent C) Formula weight D) Mole fraction
7. When a non-volatile is dissolved in a pure solvent , the vapor pressure of the pure solvent

09/10 Ashul

Narayan Alotija



Drug and Pharmaceutical Chemistry  
M.Sc. I Semester  
2019-2020

Paper – 104 Physical Pharmacy -I

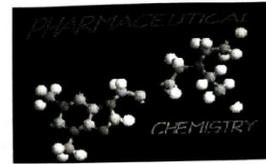
Multiple Choice Questions :-

Marks :-10

1. The study of the flow of heat or any other form of energy into is called  
A) Thermochemistry B) Thermokinetics C) Thermodynamics D) Thermochemical
2. Thermodynamic is applicable to  
A) Microscopic system only B) Macroscopic system only C) Homogenous system only D) Heterogenous System
3. A system that can transfer neither matter nor energy to and from its surroundings is called  
A) A closed system B) An isolated system C) An open System D) A homogenous system
4. Entropy is a measure ..... of the molecule of the system.  
A) Concentration B) Velocity D) Zig-Zag motion D) Randomness or disorder
5. The entropy of the system increases in the order.  
A) gas<liquid< solid B) gas<Solid <Liquid C) solid <gas<liquid D) None of these
6. Normality of a solution is the number of ..... of solute per litre o the solution .  
A) Moles B) Equivalent C) Formula weight D) Mole fraction
7. When a non-volatile is dissolved in a pure solvent , the vapor pressure of the pure solvent

09/10 Ashul

Maya Solanki



Drug and Pharmaceutical Chemistry  
M.Sc. I Semester  
2019-2020

Paper – 104 Physical Pharmacy -I

Multiple Choice Questions :-

Marks :-10

1. The study of the flow of heat or any other form of energy into is called  
A) Thermochemistry B) Thermokinetics C) Thermodynamics D) Thermochemical
2. Thermodynamic is applicable to  
A) Microscopic system only B) Macroscopic system only C) Homogenous system only D) Heterogenous System
3. A system that can transfer neither matter nor energy to and from its surroundings is called  
A) A closed system B) An isolated system C) An open System D) A homogenous system
4. Entropy is a measure ..... of the molecule of the system.  
A) Concentration B) Velocity D) Zig-Zag motion D) Randomness or disorder
5. The entropy of the system increases in the order.  
A) gas<liquid< solid B) gas<Solid <Liquid C) solid <gas<liquid D) None of these
6. Normality of a solution is the number of ..... of solute per litre o the solution .  
A) Moles B) Equivalent C) Formula weight D) Mole fraction
7. When a non-volatile is dissolved in a pure solvent , the vapor pressure of the pure solvent

08/10 Ashul



Mayank Kinshuk



Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2019-2020  
Paper – 303 Medicinal Chemistry –I  
Mode:- MCQ

Multiple Choice Questions :-

Marks :-10

- The major route of elimination of the volatile general anesthetics is via  
A) Kidneys B) Skin C) Lungs D) Liver
- Anesthesia of mucous membrane is called  
A) Infiltration Anesthesia B) Filed Block Anesthesia C) Nerve Block Anesthesia D) Topical Anesthesia
- Which are of the following belongs to long acting –barbiturate?  
A) Pentobarbital B) Phenobarbital C) Thiopental D) Hexobarbital
- One of the following belongs to imidazoline-2,4-dione class  
A) Phenytoin B) Trimethadione C) Phenasuximide D) Paramethadione
- The B<sub>1</sub> receptors are located in .....  
A) Heart B) Lungs C) Kidney D) Adrenal Gland
- 6,3,4-dihydrox-1-[isopropylamine] methyl benzyl alcohol is  
A) Adrenaline B) Propanolol C) Phenylephrine D) Isoprenaline
- Acetyl Choline is biosynthesized from

08/10

Ayush sharma



Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2019-2020  
Paper – 303 Medicinal Chemistry –I  
Mode:- MCQ

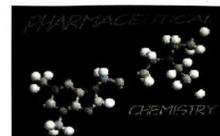
Multiple Choice Questions :-

Marks :-10

- The major route of elimination of the volatile general anesthetics is via  
A) Kidneys B) Skin C) Lungs D) Liver
- Anesthesia of mucous membrane is called  
A) Infiltration Anesthesia B) Filed Block Anesthesia C) Nerve Block Anesthesia D) Topical Anesthesia
- Which are of the following belongs to long acting –barbiturate?  
A) Pentobarbital B) Phenobarbital C) Thiopental D) Hexobarbital
- One of the following belongs to imidazoline-2,4-dione class  
A) Phenytoin B) Trimethadione C) Phenasuximide D) Paramethadione
- The B<sub>1</sub> receptors are located in .....  
A) Heart B) Lungs C) Kidney D) Adrenal Gland
- 6,3,4-dihydrox-1-[isopropylamine] methyl benzyl alcohol is  
A) Adrenaline B) Propanolol C) Phenylephrine D) Isoprenaline
- Acetyl Choline is biosynthesized from

09/10

Jaydeep Singh



Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2019-2020  
Paper – 303 Medicinal Chemistry –I  
Mode:- MCQ

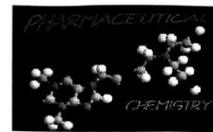
Multiple Choice Questions :-

Marks :-10

- The major route of elimination of the volatile general anesthetics is via  
A) Kidneys B) Skin C) Lungs D) Liver
- Anesthesia of mucous membrane is called  
A) Infiltration Anesthesia B) Filed Block Anesthesia C) Nerve Block Anesthesia D) Topical Anesthesia
- Which are of the following belongs to long acting –barbiturate?  
A) Pentobarbital B) Phenobarbital C) Thiopental D) Hexobarbital
- One of the following belongs to imidazoline-2,4-dione class  
A) Phenytoin B) Trimethadione C) Phenasuximide D) Paramethadione
- The B<sub>1</sub> receptors are located in .....  
A) Heart B) Lungs C) Kidney D) Adrenal Gland
- 6,3,4-dihydrox-1-[isopropylamine] methyl benzyl alcohol is  
A) Adrenaline B) Propanolol C) Phenylephrine D) Isoprenaline
- Acetyl Choline is biosynthesized from

09/10

Ajay Pal Singh



Drug and Pharmaceutical Chemistry  
M.Sc. III Semester  
2019-2020  
Paper – 303 Medicinal Chemistry –I  
Mode:- MCQ

Multiple Choice Questions :-

Marks :-10

- The major route of elimination of the volatile general anesthetics is via  
A) Kidneys B) Skin C) Lungs D) Liver
- Anesthesia of mucous membrane is called  
A) Infiltration Anesthesia B) Filed Block Anesthesia C) Nerve Block Anesthesia D) Topical Anesthesia
- Which are of the following belongs to long acting –barbiturate?  
A) Pentobarbital B) Phenobarbital C) Thiopental D) Hexobarbital
- One of the following belongs to imidazoline-2,4-dione class  
A) Phenytoin B) Trimethadione C) Phenasuximide D) Paramethadione
- The B<sub>1</sub> receptors are located in .....  
A) Heart B) Lungs C) Kidney D) Adrenal Gland
- 6,3,4-dihydrox-1-[isopropylamine] methyl benzyl alcohol is  
A) Adrenaline B) Propanolol C) Phenylephrine D) Isoprenaline
- Acetyl Choline is biosynthesized from

09/10

# Govt. Madhav Science P.E. College Ujjain

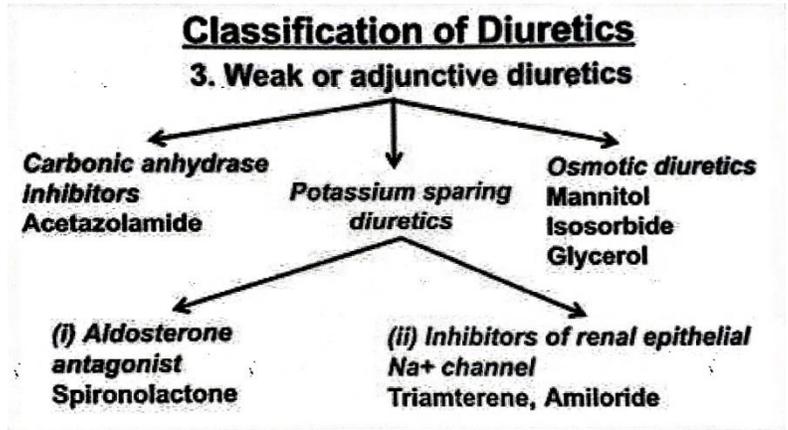


CCE- Chalk Board Presentation  
Session -2019-20  
Topic- Diuretics

Submitted to:-  
Surbhi Shukla

Submitted By:-  
Vishnu Chouhan  
M.Sc. IV Sem  
Drug and Pharmaceutical Chemistry

09  
10



# Govt. Madhav Science P.E. College Ujjain

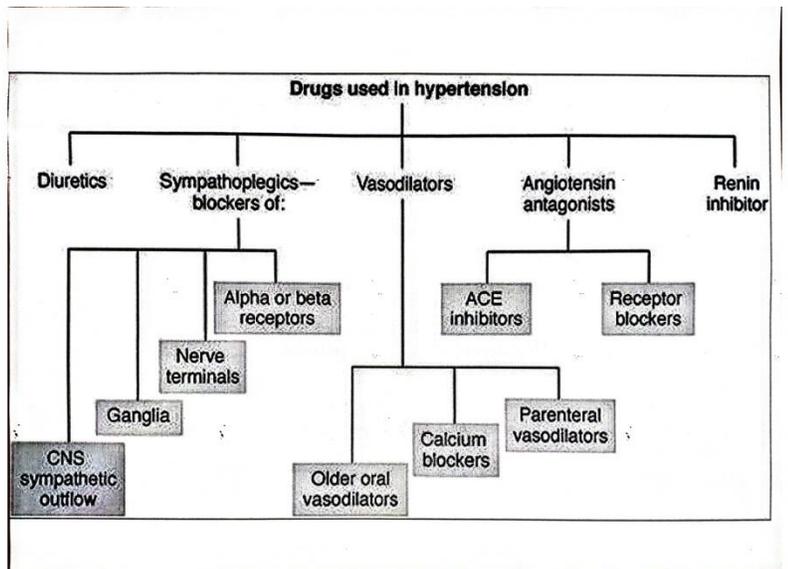


CCE- Chalk Board Presentation  
Session -2019-20  
Topic- Antihypertensive

Submitted to:-  
Surbhi Shukla

Submitted By:-  
Aayush Sharma  
M.Sc. IV Sem  
Drug and Pharmaceutical Chemistry

08  
10



# BCA

CCE  
BCA

Sr. No.	Classes	Session	CCE Mode
1	BCA I SEM	2015-16	<b>PRESENTASTION</b>
2	BCA II SEM	2015-16	<b>MCQ</b>
3	BCA III SEM	2015-16	<b>MCQ</b>
4			

Sr. No.	Classes	Session	CCE Mode
1	BCA I SEM	2016-17	<b>PRESENTASTION</b>
2	BCA II SEM	2016-17	<b>PRESENTASTION</b>
3	BCA III SEM	2016-17	<b>PRESENTASTION</b>
4			

Sr. No.	Classes	Session	CCE Mode
1	BCA I year	2017-18	<b>PRESENTASTION</b>
2	BCA II year	2017-18	<b>PRESENTASTION</b>
3	BCA III year	2017-18	<b>PRESENTASTION</b>
4			

CCE  
BCA

Sr. No.	Classes	Session	CCE Mode
1	BCA I year	2018-19	<b>PRESENTASTION</b>
2	BCA II year	2018-19	<b>PRESENTASTION</b>
3	BCA III year	2018-19	<b>PRESENTASTION</b>
4			

CCE  
BCA

Sr. No.	Classes	Session	CCE Mode
1	BCA I year	2019-20	<b>MCQ</b>
2	BCA II year	2019-20	<b>MCQ</b>
3	BCA III year	2019-20	<b>MCQ</b>

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



**BCA 1<sup>st</sup> Year.**  
**Mode: PRESENTATION**  
**Session: 2015-16**

### Separate compilation

- ▶ A C program consists of source code in one or more files
- ▶ Each source file is run through the **preprocessor** and **compiler**, resulting in a file containing object code
- ▶ Object files are tied together by the **linker** to form a single executable program

### Separate compilation

- Advantage: Quicker compilation
  - When modifying a program, a programmer typically edits only a few source code files at a time.
  - With separate compilation, only the files that have been edited since the last compilation need to be recompiled when re-building the program.
  - For very large programs, this can save a lot of time.

### How to compile (UNIX)

- ▶ To compile and link a C program that is contained entirely in one source file:
 

```
cc program.c
```

  - ▶ The executable program is called `a.out` by default.
  - ▶ If you don't like this name, choose another using the `-o` option:
 

```
cc program.c -o exciting_executable
```
- ▶ To compile and link several C source files:
 

```
cc main.c extra.c more.c
```

  - ▶ This will produce object (`.o`) files, that you can use in a later compilation:
 

```
cc main.o extra.o more.c
```
  - ▶ Here, only `more.c` will be compiled - the `main.o` and `extra.o` files will be used for linking.
- ▶ To produce object files, without linking, use `-c`:
 

```
cc -c main.c extra.c more.c
```

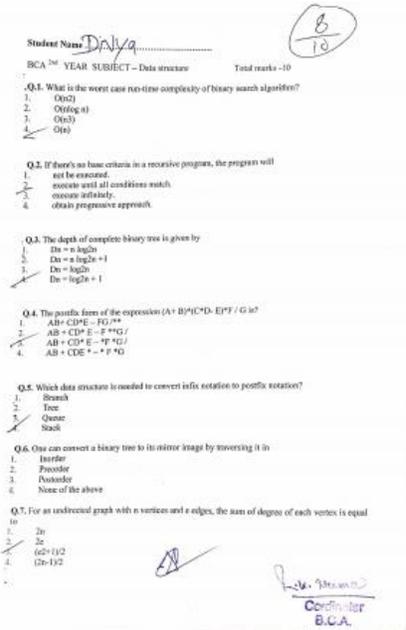
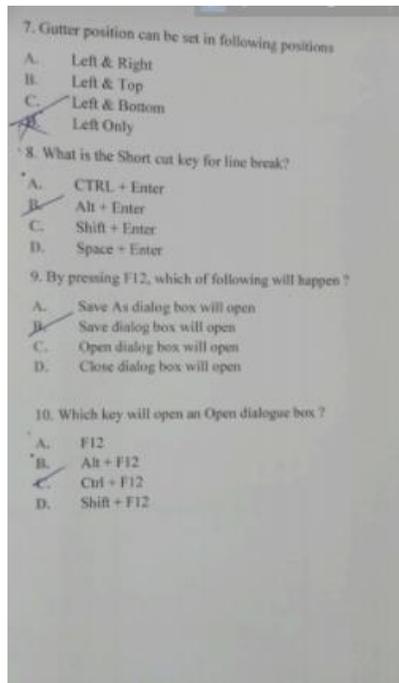
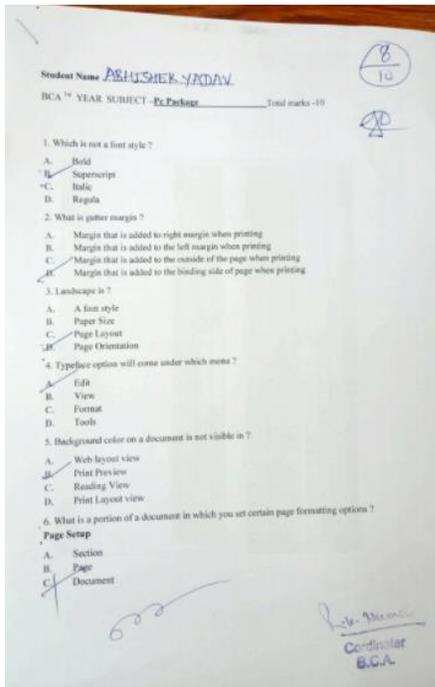
### The preprocessor

- ▶ The **preprocessor** takes your source code and - following certain **directives** that you give it - tweaks it in various ways before compilation.
- ▶ A directive is given as a line of source code starting with the `#` symbol
- ▶ The preprocessor works in a very crude, "word-processor" way, simply cutting and pasting - it doesn't really know anything about C!

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



**BCA II Year.  
Mode: MCQ  
Session: 2015-16**



Q.8. A data structure in which elements can be inserted or deleted at/from both the ends but not in the middle is?

1. Queue
2. Circular queue
3. Dequeue
4. Priority queue

Q.9. What would be the asymptotic time complexity to add a node at the end of singly linked list, if the pointer is initially pointing to the head of the list?

1. O(1)
2. O(n)
3. O(n^2)
4. O(1)

Q.10. Consider the following definition in c programming language

```
struct node
{
    int data;
    struct node * next;
}
typedef struct node NODE;
NODE * ptr;
```

Which of the following c code is used to create new node?

1. ptr = (NODE\*)malloc(sizeof(NODE));
2. ptr = (NODE\*)malloc(NODE);
3. ptr = (NODE\*)malloc(sizeof(NODE\*));
4. ptr = (NODE\*)malloc(sizeof(NODE));

OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



BCA III Year.  
Mode: MCQ  
Session: 2015-16

Student Name: Pooja (112) 8/10  
BCA 3<sup>rd</sup> YEAR SUBJECT - ERP & OR Total marks -10

1. Which of the following describes an ERP system?  
A) ERP systems provide a foundation for collaboration between departments  
B) ERP systems enable people in different business areas to communicate  
C) ERP systems have been widely adopted in large organizations to store critical knowledge used to make the decisions that drive the organization's performance  
D) All of the above  
 D

2. What is at the heart of any ERP system?  
A) Information  
B) Employees  
C) Customers  
D) Database  
 D

3. What must a system do to qualify as a true ERP solution?  
A) Be flexible  
B) Be modular and closed  
C) Extend within the company  
D) All of the above  
 D

4. Which of the following is a reason for ERP's explosive growth?  
A) ERP is a logical solution to the mess of incompatible applications  
B) ERP addresses the need for global information sharing and reporting  
C) ERP is used to avoid the pain and expense of fixing legacy systems  
D) All of the above  
 D

5. Which of the following occurs when everyone involved in sourcing, producing, and delivering the company's product works with the same information?  
A) Eliminates redundancies  
B) Cuts down wasted time  
C) Removes misinformation  
D) All of the above  
 D

6. What are several different types of software, which sit in the middle of and provide connectivity between two or more software applications?  
A) Middleware  
B) Enterprise application integration middleware  
C) Automated business process  
D) e-business infrastructure  
 A

7. What is one of the key resources of every organization, in today's competitive business environment?  
a. Employee  
b. Information  
c. ERP  
d. Database  
 b

*Pooja*

8. Who are the primary users of SCM systems?  
A) Sales, marketing, customer service  
B) Accounting, finance, logistics, and production  
C) Customers, resellers, partners, suppliers, and distributors  
D) All of the above  
 B
9. What are the primary business benefits of an ERP system?  
A) Sales forecasts, sales strategies, and marketing campaigns  
B) Market demand, resource and capacity constraints, and real-time scheduling  
C) Forecasting, planning, purchasing, material management, warehousing, inventory, and distribution  
D) All of the above  
 A
10. Who are the primary users of ERP systems?  
A) Sales, marketing, customer service  
B) Accounting, finance, logistics, and production  
C) Customers, resellers, partners, suppliers, and distributors  
D) All of the above  
 D

Student Name: Ritika Yadav 8/10  
BCA 3<sup>rd</sup> YEAR SUBJECT - AI&Expert system Total marks -10

1. Who is the father of Artificial Intelligence?  
A. Doug Cutting  
B. John McCarthy  
C. William S.  
D. Ramms Lerdorf  
 B

2. What are the main goals of AI?  
A. To Create Expert Systems  
B. To Implement Human Intelligence in Machines  
C. Both A and B  
D. None of the Above  
 C

3. Which of the following areas can contribute to build an intelligent system?  
A. Philosophy  
B. Biology  
C. Sociology  
D. All of the above  
 D

4. A computer program with AI can not answer the generic questions it is meant to solve.  
A. TRUE  
B. FALSE  
C. AI is not used to answer question  
D. None of the Above  
 B

5. Which of the following is not the type of AI?  
A. Reactive machines  
B. Unlimited memory  
C. Theory of mind  
D. Self-awareness  
 B

6. Which of the following is an application of AI?  
A. Gaming  
B. Expert Systems  
C. Vision Systems  
D. All of the above  
 D

*Ritika*

7. In which university the first demonstration of AI program run?  
A. Carnegie Mellon University  
B. Oxford University  
C. Cambridge University  
D. Stanford University  
 A
8. Expert Ease was developed under the direction of \_\_\_\_\_  
A. John McCarthy  
B. Donald Michie  
C. Lofti Zadeh  
D. Alan Turing  
 B
9. What is Artificial intelligence?  
A. Putting your intelligence into Computer  
B. Programming with your own intelligence  
C. Making a Machine intelligent  
D. Playing a Game  
 B
10. Which of the following, is a component of an expert system?  
A. Inference engine  
B. Knowledge base  
C. User interface  
D. All of the above  
 D

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



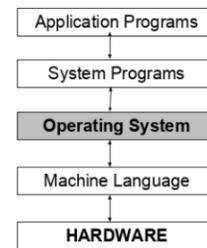
**BCA 1<sup>st</sup> Year.**  
**Mode: PRESENTATION**  
**Session: 2016-17**

### 1.1 General Definition

- The OS manages these resources and allocates them to specific programs and users.
- With the management of the OS, a programmer is rid of difficult hardware considerations.
- An OS provides services for
  - Processor Management
  - Memory Management
  - File Management
  - Device Management
  - Concurrency Control

### 1.1 General Definition

- Another aspect for the usage of OS is that; it is used as a *predefined library* for hardware-software interaction.
- This is why, system programs apply to the installed OS since they cannot reach hardware directly.



### 1.1 General Definition

- Since we have an already written library, namely the OS, to add two numbers we simply write the following line to our program:

$c = a + b ;$

### 1.1 General Definition

- in a system where there is no OS installed, we should consider some hardware work as:  
(Assuming an MC 6800 computer hardware)

LDAA \$80 □ Loading the number at memory location 80  
LDAB \$81 □ Loading the number at memory location 81  
ADDB □ Adding these two numbers  
STAA \$55 □ Storing the sum to memory location 55

- As seen, we considered memory locations and used our hardware knowledge of the system.

### 1.1 General Definition

- In an OS installed machine, since we have an intermediate layer, our programs obtain *some advantage of mobility* by not dealing with hardware.
- For example, the above program segment would not work for an 8086 machine, where as the “ $c = a + b ;$ ” syntax will be suitable for both.

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



**BCA II Year.  
Mode: PRESENTATION  
Session: 2016-17**

### The preprocessor

- The **preprocessor** takes your source code and – following certain **directives** that you give it – tweaks it in various ways before compilation.
- A directive is given as a line of source code starting with the # symbol
- The preprocessor works in a very crude, “word-processor” way, simply cutting and pasting – it doesn’t really know anything about C!



### Separate compilation

- Advantage: Quicker compilation
  - When modifying a program, a programmer typically edits only a few source code files at a time.
  - With separate compilation, only the files that have been edited since the last compilation need to be recompiled when re-building the program.
  - For very large programs, this can save a lot of time.

### How to compile (UNIX)

- To compile and link a C program that is contained entirely in one source file:  
cc program.c
- The executable program is called a.out by default.  
If you don't like this name, choose another using the -o option:  
cc program.c -o exciting\_executable
- To compile and link several C source files:  
cc main.c extra.c more.c
- This will produce object (.o) files, that you can use in a later compilation:  
cc main.o extra.o more.c
- Here, only more.c will be compiled – the main.o and extra.o files will be used for linking.
- To produce object files, without linking, use -c:  
cc -c main.c extra.c more.c

### A first program: Text rearranger

- Input
  - First line: pairs of nonnegative integers, separated by whitespace, then terminated by a negative integer  
 $x_1 y_1 x_2 y_2 \dots x_n y_n -1$
  - Each subsequent line: a string of characters
- Output
  - For each string S, output substrings of S:
    - First, the substring starting at location  $x_1$  and ending at  $y_1$ ;
    - Next, the substring starting at location  $x_2$  and ending at  $y_2$ ;
    - ...
    - Finally, the substring starting at location  $x_n$  and ending at  $y_n$ .

### Sample input/output

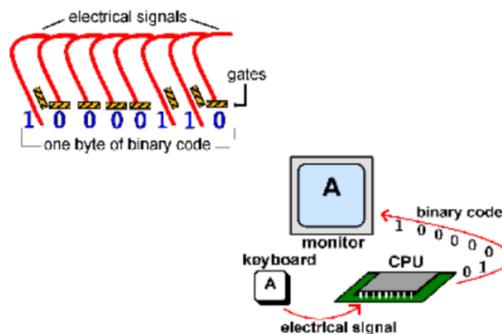
- Initial input: 0 2 5 7 10 12 -1
- Next input line: deep C diving
- Output: deeC ding
- Next input line: excitement!
- Output: exceme!
- ... *continue ad nauseum...*
- Terminate with ctrl-D (signals end of keyboard input)

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



**BCA III Year.  
Mode: PRESENTATION  
Session: 2016-17**



**Basic Units of Measurement**

- 1,000 bytes =1 kilobyte (K or KB)
- 1,000 KB =1 megabyte (MB)
- 1,000 MB =1 gigabyte (GB)
- 1,000 GB =1 Terabyte (TB)

**BASIC PC HARDWARE**

- **HARDWARE** is the tangible part of a computer system.



# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



BCA 1<sup>st</sup> Year.  
Mode: PRESENTATION  
Session: 2017-18

Fundamental of computer  
guided by –  
Sy.Er.Sumanshu Sharma

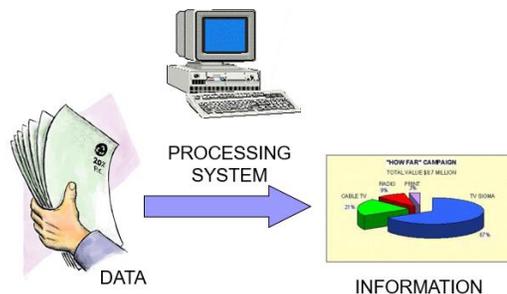
Mohak Dikshit, Nidhi  
chouhan, Ganesh panwar,  
ritesh gome, ritika yadav

## Information Processing System

- DATA is a collection of independent and unorganized facts.
- INFORMATION is the processed and organized data presented in a meaningful form.
- DATA PROCESSING is the course of doing things in a sequence of steps.

## Information Processing System

- COMPUTER is an electronic machine that follows a set of instructions in order that it may be able to accept and gather data and transform these into information.



### Three Major Components of an Information Processing System

- HARDWARE is the tangible part of a computer system.
- SOFTWARE is the non-tangible part that tells the computer how to do its job.
- PEOPLEWARE refer to people who use and operate the computer system, write computer programs, and analyze and design the information system.

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



**BCA II Year.  
Mode: PRESENTATION  
Session: 2017-18**

**INTRODUCTION TO C  
SESSION 2017-18  
BCA 1 YEAR  
GUIDED BY  
DR. NITIN TIWARI**

Mohak Dikshit, Nidhi Chouhan, Ganesh panwar, ritesh gome, ritika yadav

### C: History

- ▣ Developed in the 1970s – in conjunction with development of UNIX operating system
  - When writing an OS kernel, efficiency is crucial. This requires low-level access to the underlying hardware:
    - e.g. programmer can leverage knowledge of how data is laid out in memory, to enable faster data access
  - UNIX originally written in low-level assembly language – but there were problems:
    - No structured programming (e.g. encapsulating routines as “functions”, “methods”, etc.) – code hard to maintain
    - Code worked only for particular hardware – not portable

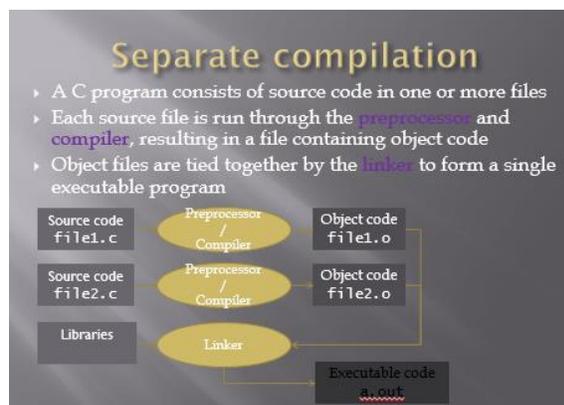
### C: Characteristics

- ▣ C takes a middle path between low-level assembly language...
  - Direct access to memory layout through pointer manipulation
  - Concise syntax, small set of keywords
- ▣ ... and a high-level programming language like Java:
  - Block structure
  - Some encapsulation of code, via functions
  - Type checking (pretty weak)

Footer 3

### C: Dangers

- ▣ C is not object oriented!
  - Can't “hide” data as “private” or “protected” fields
  - You can follow standards to write C code that looks object-oriented, but you have to be disciplined – will the other people working on your code also be disciplined?
- ▣ C has portability issues
  - Low-level “tricks” may make your C code run well on one platform – but the tricks might not work elsewhere
- ▣ The compiler and runtime system will rarely stop your C program from doing stupid/bad things
  - Compile-time type checking is weak
  - No run-time checks for array bounds errors, etc. like in Java



# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



BCA 1<sup>st</sup> Year.  
Mode: PRESENTATION  
Session: 2017-18

Fundamental of computer  
guided by –  
Sy.Er.Sumanshu Sharma

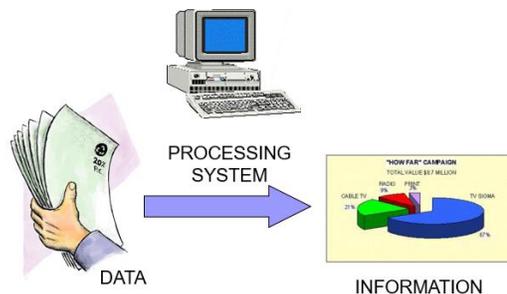
Mohak Dikshit, Nidhi  
chouhan, Ganesh panwar,  
ritesh gome, ritika yadav

## Information Processing System

- DATA is a collection of independent and unorganized facts.
- INFORMATION is the processed and organized data presented in a meaningful form.
- DATA PROCESSING is the course of doing things in a sequence of steps.

## Information Processing System

- COMPUTER is an electronic machine that follows a set of instructions in order that it may be able to accept and gather data and transform these into information.



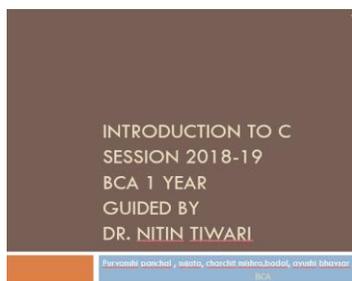
### Three Major Components of an Information Processing System

- HARDWARE is the tangible part of a computer system.
- SOFTWARE is the non-tangible part that tells the computer how to do its job.
- PEOPLEWARE refer to people who use and operate the computer system, write computer programs, and analyze and design the information system.

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



**B.Sc. 1<sup>st</sup> Year.**  
**Mode: PRESENTATION**  
**Session: 2018-19**



### C: History

- Developed in the 1970s – in conjunction with development of UNIX operating system
  - When writing an OS kernel, efficiency is crucial
    - This requires low-level access to the underlying hardware:
      - e.g. programmer can leverage knowledge of how data is laid out in memory, to enable faster data access
  - UNIX originally written in low-level assembly language – but there were problems:
    - No structured programming (e.g. encapsulating routines as “functions”, “methods”, etc.) – code hard to maintain
    - Code worked only for particular hardware – not portable

### C: Characteristics

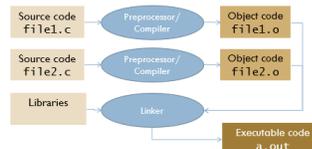
- C takes a middle path between low-level assembly language...
  - ▢ Direct access to memory layout through pointer manipulation
  - ▢ Concise syntax, small set of keywords
- ... and a high-level programming language like Java:
  - ▢ Block structure
  - ▢ Some encapsulation of code, via functions
  - ▢ Type checking (pretty weak)

### C: Dangers

- C is not object oriented!
  - Can't “hide” data as “private” or “protected” fields
  - You can follow standards to write C code that looks object-oriented, but you have to be disciplined – will the other people working on your code also be disciplined?
- C has portability issues
  - Low-level “tricks” may make your C code run well on one platform – but the tricks might not work elsewhere
- The compiler and runtime system will rarely stop your C program from doing stupid/bad things
  - Compile-time type checking is weak
  - No run-time checks for array bounds errors, etc. like in Java

### Separate compilation

- A C program consists of source code in one or more files
- Each source file is run through the **preprocessor** and **compiler**, resulting in a file containing object code
- Object files are tied together by the **linker** to form a single executable program



### Separate compilation

- Advantage: Quicker compilation
  - ▢ When modifying a program, a programmer typically edits only a few source code files at a time.
  - ▢ With separate compilation, only the files that have been edited since the last compilation need to be recompiled when re-building the program.
  - ▢ For very large programs, this can save a lot of time.

### How to compile (UNIX)

- To compile and link a C program that is contained entirely in one source file:
 

```
cc program.c
```

  - The executable program is called **a.out** by default.
  - If you don't like this name, choose another using the **-o** option:
 

```
cc program.c -o exciting_executable
```
- To compile and link several C source files:
 

```
cc main.c extra.c more.c
```

  - This will produce object (.o) files, that you can use in a later compilation:
 

```
cc main.o extra.o more.c
```
  - Here, only **more.c** will be compiled – the **main.o** and **extra.o** files will be used for linking.
- To produce object files, without linking, use **-c**:
 

```
cc -c main.c extra.c more.c
```

# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



**B.Sc. 2<sup>nd</sup> Year.**  
**Mode: PRESENTATION**  
**Session: 2018-19**

BCA 2<sup>nd</sup> year  
session 2018-19  
guided to — Sy.Er.Sumanshu Sharma

Object-Oriented Analysis and Design  
Mohak Dikshit, Nidhi Chouhan, Ganesh Panwar, Ritesh Gome, Ritika Yadav

## Disclaimer

- Slides come from a variety of sources:
  - Craig Larman-developed slides; author of this classic textbook.
  - Dr. Constantinos Constantinides, University of London
  - Slides from the University of Pittsburg
  - Slides from many of my existing slides on these same topics
  - New slides from sources unknown...

- Chapter one covers a host of many topics central to today's technologies.
- These skills are essential in today's professional community.
- We will talk about (in some detail) iterative development, evolutionary development, the Unified Process, agile approaches, UML,
- Later on we will advance into more complex concepts that address framework design and architectural analysis.
- Please note that the materials are meant to be foundational.

But it is far more essential to 'think' in terms of **objects** as providing '**services**' and accommodating '**responsibilities**.'

**Discuss:** What is meant by '**services**'? How indicated?

- How might you think these 'services' impact the design of classes?
- How might a client access these services?
- What is encapsulation? How does it relate to reusability? Self-governance? Design?

**Discuss:** What is meant by '**responsibilities**'?

- Encapsulation of data and services?

## Object-Oriented Analysis (Overview)

- An **investigation** of the **problem** (rather than how a solution is defined)
- During OO analysis, there is an emphasis on **finding and describing the objects (or concepts) in the problem domain**.
- For example, concepts in a Library Information System include *Book*, and *Library*.
- High level views found in the application domain.
- Oftentimes called **domain objects**; **entities**.

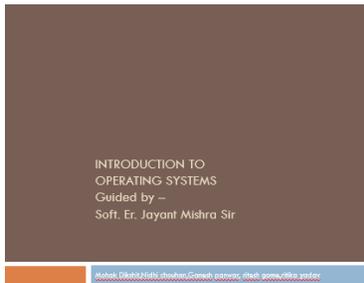
## Thinking in Terms of Objects and UML - 4

- **Object-Oriented Design**
  - Emphasizes a conceptual **solution** that **fulfills the requirements**.
  - Need to define **software objects** and how they **collaborate** to meet the requirements.
  - For example, in the Library Information System, a *Book* software object may have a *title* attribute and a *getChapter* method.
    - What are the methods needed to process the attributes?
- Designs are **implemented** in a programming language.
  - In the example, we will have a *Book* class in Java.

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



**B.Sc. III Year.  
Mode: PRESENTATION  
Session: 2017-18**



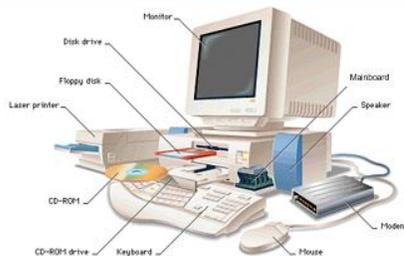
**1.1 General Definition**

- An OS is a program which acts as an **interface** between computer system users and the computer hardware.
- It provides a user-friendly environment in which a user may easily develop and execute programs.
- Otherwise, hardware knowledge would be mandatory for computer programming.
- So, it can be said that an OS hides the complexity of hardware from uninterested users.

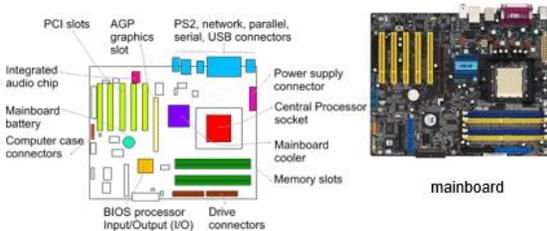
**1.1 General Definition**

- In general, a computer system has some resources which may be utilized to solve a problem. They are
  - Memory
  - Processor(s)
  - I/O
  - File System
  - etc.

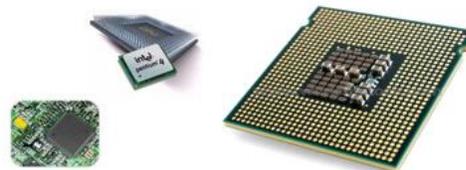
**1.1 General Definition**



**1.1 General Definition**



mainboard



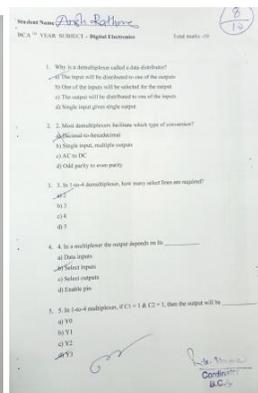
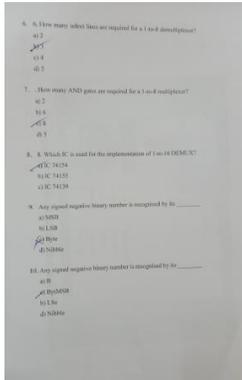
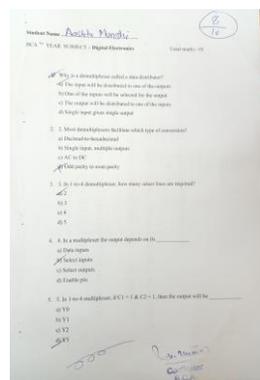
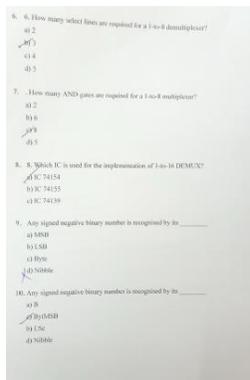
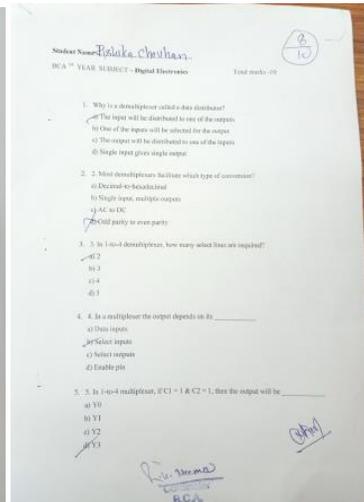
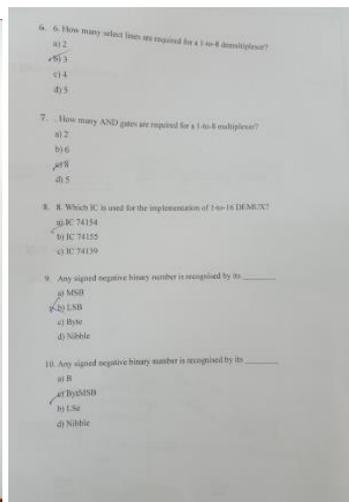
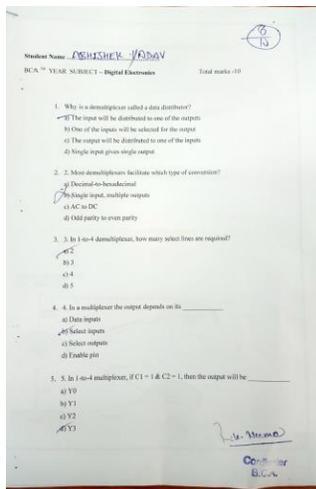
processor

# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



B.Sc. 1<sup>st</sup> Year.  
Mode: MCQ  
Session: 2019-20



**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



**BCA II YEAR.  
Mode: MCQ  
Session: 2019-20**

Student Name: Danya 8/10

BCA<sup>2nd</sup> YEAR SUBJECT - Data structure Total marks -10

Q.1. What is the worst case run-time complexity of binary search algorithm?  
1. O(n)  
2. O(n log n)  
3. O(n<sup>2</sup>)  
4. O(1)

Q.2. If there is no base criteria in a recursive program, the program will  
1. not be executed  
2. execute until all conditions match.  
3. execute infinitely.  
4. obtain progressive approach.

Q.3. The depth of complete binary tree is given by  
1. Dn = n log<sub>2</sub>n  
2. Dn = log<sub>2</sub>n + 1  
3. Dn = log<sub>2</sub>n  
4. Dn = log<sub>2</sub>n - 1

Q.4. The postfix form of the expression (A \* B) / (C \* D) - E \* F / G is?  
1. AB \* CDE / - FG \*\*  
2. AB \* CDE / - \* F \* G /  
3. AB \* CDE / - \* F \* G /  
4. AB \* CDE \* - \* F \* G /

Q.5. Which data structure is needed to convert infix notation to postfix notation?  
1. Branch  
2. Tree  
3. Queue  
4. Stack

Q.6. One can convert a binary tree to its mirror image by traversing it in  
1. Inorder  
2. Preorder  
3. Postorder  
4. None of the above

Q.7. For an undirected graph with n vertices and e edges, the sum of degree of each vertex is equal to  
1. 2e  
2. 2e + 1/2  
3. (2e + 1)/2  
4. (2e - 1)/2

*P. N. Sharma*  
Coordinator  
B.C.A.

Q.8. A data structure in which elements can be inserted or deleted at/from both the ends but not in the middle is?  
1. Queue  
2. Circular queue  
3. Dequeue  
4. Priority queue

Q.9. What would be the asymptotic time complexity to add a node at the end of singly linked list, if the pointer is initially pointing to the head of the list?  
1. O(1)  
2. O(n)  
3. O(n<sup>2</sup>)  
4. O(1)

Q.10. Consider the following definition in c programming language

```
struct node
{
    int data;
    struct node * next;
}
typedef struct node NODE;
NODE *ptr;
```

Which of the following c code is used to create new node?  
1. ptr = (NODE\*)malloc(sizeof(NODE));  
2. ptr = (NODE\*)malloc(NODE);  
3. ptr = (NODE\*)malloc(sizeof(NODE\*));  
4. ptr = (NODE\*)malloc(sizeof(NODE));

Student Name: Sujata 8/10

BCA<sup>2nd</sup> YEAR SUBJECT - Data structure Total marks -10

Q.1. What is the worst case run-time complexity of binary search algorithm?  
1. O(n)  
2. O(n log n)  
3. O(n<sup>2</sup>)  
4. O(1)

Q.2. If there is no base criteria in a recursive program, the program will  
1. not be executed  
2. execute until all conditions match.  
3. execute infinitely.  
4. obtain progressive approach.

Q.3. The depth of complete binary tree is given by  
1. Dn = n log<sub>2</sub>n  
2. Dn = log<sub>2</sub>n - 1  
3. Dn = log<sub>2</sub>n  
4. Dn = log<sub>2</sub>n + 1

Q.4. The postfix form of the expression (A \* B) / (C \* D) - E \* F / G is?  
1. AB \* CDE / - FG \*\*  
2. AB \* CDE / - \* F \* G /  
3. AB \* CDE / - \* F \* G /  
4. AB \* CDE \* - \* F \* G /

Q.5. Which data structure is needed to convert infix notation to postfix notation?  
1. Branch  
2. Tree  
3. Queue  
4. Stack

Q.6. One can convert a binary tree to its mirror image by traversing it in  
1. Inorder  
2. Preorder  
3. Postorder  
4. None of the above

Q.7. For an undirected graph with n vertices and e edges, the sum of degree of each vertex is equal to  
1. 2e  
2. 2e + 1/2  
3. (2e + 1)/2  
4. (2e - 1)/2

*P. N. Sharma*  
Coordinator  
B.C.A.

Student Name: Spandan 7/10

BCA<sup>2nd</sup> YEAR SUBJECT - Data structure Total marks -10

Q.1. What is the worst case run-time complexity of binary search algorithm?  
1. O(n)  
2. O(n log n)  
3. O(n<sup>2</sup>)  
4. O(1)

Q.2. If there is no base criteria in a recursive program, the program will  
1. not be executed  
2. execute until all conditions match.  
3. execute infinitely.  
4. obtain progressive approach.

Q.3. The depth of complete binary tree is given by  
1. Dn = n log<sub>2</sub>n  
2. Dn = log<sub>2</sub>n + 1  
3. Dn = log<sub>2</sub>n  
4. Dn = log<sub>2</sub>n - 1

Q.4. The postfix form of the expression (A \* B) / (C \* D) - E \* F / G is?  
1. AB \* CDE / - FG \*\*  
2. AB \* CDE / - \* F \* G /  
3. AB \* CDE / - \* F \* G /  
4. AB \* CDE \* - \* F \* G /

Q.5. Which data structure is needed to convert infix notation to postfix notation?  
1. Branch  
2. Tree  
3. Queue  
4. Stack

Q.6. One can convert a binary tree to its mirror image by traversing it in  
1. Inorder  
2. Preorder  
3. Postorder  
4. None of the above

Q.7. For an undirected graph with n vertices and e edges, the sum of degree of each vertex is equal to  
1. 2e  
2. 2e + 1/2  
3. (2e + 1)/2  
4. (2e - 1)/2

*P. N. Sharma*  
Coordinator  
B.C.A.

Q.8. A data structure in which elements can be inserted or deleted at/from both the ends but not in the middle is?  
1. Queue  
2. Circular queue  
3. Dequeue  
4. Priority queue

Q.9. What would be the asymptotic time complexity to add a node at the end of singly linked list, if the pointer is initially pointing to the head of the list?  
1. O(1)  
2. O(n)  
3. O(n<sup>2</sup>)  
4. O(1)

Q.10. Consider the following definition in c programming language

```
struct node
{
    int data;
    struct node * next;
}
typedef struct node NODE;
NODE *ptr;
```

Which of the following c code is used to create new node?  
1. ptr = (NODE\*)malloc(sizeof(NODE));  
2. ptr = (NODE\*)malloc(NODE);  
3. ptr = (NODE\*)malloc(sizeof(NODE\*));  
4. ptr = (NODE\*)malloc(sizeof(NODE));

Q.8. A data structure in which elements can be inserted or deleted at/from both the ends but not in the middle is?  
1. Queue  
2. Circular queue  
3. Dequeue  
4. Priority queue

Q.9. What would be the asymptotic time complexity to add a node at the end of singly linked list, if the pointer is initially pointing to the head of the list?  
1. O(1)  
2. O(n)  
3. O(n<sup>2</sup>)  
4. O(1)

Q.10. Consider the following definition in c programming language

```
struct node
{
    int data;
    struct node * next;
}
typedef struct node NODE;
NODE *ptr;
```

Which of the following c code is used to create new node?  
1. ptr = (NODE\*)malloc(sizeof(NODE));  
2. ptr = (NODE\*)malloc(NODE);  
3. ptr = (NODE\*)malloc(sizeof(NODE\*));  
4. ptr = (NODE\*)malloc(sizeof(NODE));

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.  
A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



**BCA III YEAR.  
Mode: MCQ  
Session: 2019-20**

Student Name: Debar Singh (11/10)

BCA 3<sup>rd</sup> YEAR SUBJECT - Computer Graphics & Multimedia Total marks -10

1) Expand JPEG:  
 (A) Joint Photo Experts Group  
 (B) Joint Photographic Experts Group  
 (C) Joint Photographic Experts Group  
 (D) Joint Photographic Expression Group

2) Expand GIF?  
 (A) Graphic Information File  
 (B) Graphic Interchange Format  
 (C) Graphic Information Format  
 (D) Graphic Interchange File

3) Which compressions provide some level of quality?  
 (A) Lossy  
 (B) Loss less  
 (C) Cell based  
 (D) Object based

4) Which of the following is a computer based presentation technique?  
 (A) Slides  
 (B) Tutorial  
 (C) Multimedia  
 (D) Data processing

5) What does MMF stand for  
 (A) Multimedia System  
 (B) Multimedia Messaging System  
 (C) Multimedia Messaging Services  
 (D) Multimedia Services

Coordinator  
B.C.A.

6) How many types of video compressions?  
 (A) 2  
 (B) 3  
 (C) 4  
 (D) 5

7) Which image files are a lossy format?  
 (A) GIF  
 (B) MPEG  
 (C) JPEG  
 (D) PNG

8) How many step process for creating a 3D animation?  
 (A) 1  
 (B) 2  
 (C) 3  
 (D) 4

9) Which file creates a perfect reproduction of the original images?  
 (A) Shockwave  
 (B) NX View  
 (C) JPG  
 (D) GIF

10) Which of the following is a technique to blend two or more images to form a new image?  
 (A) Modeling  
 (B) Morphing  
 (C) Animating  
 (D) Warping

Student Name: Rishik Khare (7/10)

BCA 3<sup>rd</sup> YEAR SUBJECT - Computer Graphics & Multimedia Total marks -10

1) Expand JPEG:  
 (A) Joint Photo Experts Group  
 (B) Joint Photographic Experts Group  
 (C) Joint Photographic Experts Group  
 (D) Joint Photographic Expression Group

2) Expand GIF?  
 (A) Graphic Information File  
 (B) Graphic Interchange Format  
 (C) Graphic Information Format  
 (D) Graphic Interchange File

3) Which compressions provide some loss of quality?  
 (A) Lossy  
 (B) Loss less  
 (C) Cell based  
 (D) Object based

4) Which of the following is a computer based presentation technique?  
 (A) Slides  
 (B) Tutorial  
 (C) Multimedia  
 (D) Data processing

5) What does MMF stand for  
 (A) Multimedia System  
 (B) Multimedia Messaging System  
 (C) Multimedia Messaging Services  
 (D) Multimedia Services

Coordinator  
B.C.A.

Student Name: Pooja Puri (9/10)

BCA 3<sup>rd</sup> YEAR SUBJECT - Computer Graphics & Multimedia Total marks -10

6) How many types of video compressions?  
 (A) 2  
 (B) 3  
 (C) 4  
 (D) 5

7) Which image files are a lossy format?  
 (A) GIF  
 (B) MPEG  
 (C) JPEG  
 (D) PNG

8) How many step process for creating a 3D animation?  
 (A) 1  
 (B) 2  
 (C) 3  
 (D) 4

9) Which file creates a perfect reproduction of the original images?  
 (A) Shockwave  
 (B) NX View  
 (C) JPG  
 (D) GIF

10) Which of the following is a technique to blend two or more images to form a new image?  
 (A) Modeling  
 (B) Morphing  
 (C) Animating  
 (D) Warping

Coordinator  
B.C.A.

Student Name: Pooja Puri (9/10)

BCA 3<sup>rd</sup> YEAR SUBJECT - Computer Graphics & Multimedia Total marks -10

1) Expand JPEG:  
 (A) Joint Photo Experts Group  
 (B) Joint Photographic Experts Group  
 (C) Joint Photographic Experts Group  
 (D) Joint Photographic Expression Group

2) Expand GIF?  
 (A) Graphic Information File  
 (B) Graphic Interchange Format  
 (C) Graphic Information Format  
 (D) Graphic Interchange File

3) Which compressions provide some loss of quality?  
 (A) Lossy  
 (B) Loss less  
 (C) Cell based  
 (D) Object based

4) Which of the following is a computer based presentation technique?  
 (A) Slides  
 (B) Tutorial  
 (C) Multimedia  
 (D) Data processing

5) What does MMF stand for  
 (A) Multimedia System  
 (B) Multimedia Messaging System  
 (C) Multimedia Messaging Services  
 (D) Multimedia Services

Coordinator  
B.C.A.

Student Name: Pooja Puri (9/10)

BCA 3<sup>rd</sup> YEAR SUBJECT - Computer Graphics & Multimedia Total marks -10

6) How many types of video compressions?  
 (A) 2  
 (B) 3  
 (C) 4  
 (D) 5

7) Which image files are a lossy format?  
 (A) GIF  
 (B) MPEG  
 (C) JPEG  
 (D) PNG

8) How many step process for creating a 3D animation?  
 (A) 1  
 (B) 2  
 (C) 3  
 (D) 4

9) Which file creates a perfect reproduction of the original images?  
 (A) Shockwave  
 (B) NX View  
 (C) JPG  
 (D) GIF

10) Which of the following is a technique to blend two or more images to form a new image?  
 (A) Modeling  
 (B) Morphing  
 (C) Animating  
 (D) Warping

Coordinator  
B.C.A.

## CCE

### Bioinformatics

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Sem	2015-16	Bioinformatics	Multiple Choice Question, learner Centric
2.	B.Sc. 2 <sup>nd</sup> Sem	2015-16	Bioinformatics	Multiple Choice Question, learner Centric
3.	B.Sc. 3 <sup>rd</sup> Sem	2015-16	Bioinformatics	Multiple Choice Question, learner Centric
4.	B.Sc. 4 <sup>th</sup> Sem	2015-16	Bioinformatics	Multiple Choice Question, learner Centric
5.	B.Sc. 5 <sup>th</sup> Sem	2015-16	Bioinformatics	Multiple Choice Question, learner Centric
6.	B.Sc. 6 <sup>th</sup> Sem	2015-16	Bioinformatics	Multiple Choice Question, learner Centric

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Sem	2016-17	Bioinformatics	Multiple Choice Question, learner Centric
2.	B.Sc. 2 <sup>nd</sup> Sem	2016-17	Bioinformatics	Multiple Choice Question, learner Centric
3.	B.Sc. 3 <sup>rd</sup> Sem	2016-17	Bioinformatics	Multiple Choice Question, learner Centric
4.	B.Sc. 4 <sup>th</sup> Sem	2016-17	Bioinformatics	Multiple Choice Question, learner Centric
5.	B.Sc. 5 <sup>th</sup> Sem	2016-17	Bioinformatics	Multiple Choice Question, learner Centric
6.	B.Sc. 6 <sup>th</sup> Sem	2016-17	Bioinformatics	Poster

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Year	2017-18	Bioinformatics	Multiple Choice Question, learner Centric
2.	B.Sc. 3 <sup>rd</sup> Sem	2017-18	Bioinformatics	Multiple Choice Question, learner Centric
3.	B.Sc. 4 <sup>th</sup> Sem	2017-18	Bioinformatics	Multiple Choice Question, learner Centric
4.	B.Sc. 5 <sup>th</sup> Sem	2017-18	Bioinformatics	Multiple Choice Question, learner Centric
5.	B.Sc. 6 <sup>th</sup> Sem	2017-18	Bioinformatics	Multiple Choice Question, learner Centric

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Year	2018-19	Bioinformatics	Assignment submission, learner Centric Written exam, learner Centric
2.	B.Sc. 2 <sup>nd</sup> Year	2018-19	Bioinformatics	Written Teat, learner Centric
3.	B.Sc. 5 <sup>th</sup> Sem	2018-19	Bioinformatics	Written test, learner Centric
4.	B.Sc. 6 <sup>th</sup> Sem	2018-19	Bioinformatics	Written test, learner Centric

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Year	2019-20	Bioinformatics	Written Teat, learner Centric
2.	B.Sc. 2 <sup>nd</sup> Year	2019-20	Bioinformatics	Written Teat, learner Centric
3.	B.Sc. 3 <sup>rd</sup> Year	2019-20	Bioinformatics	Assignment submission, learner Centric

2015-16  
1st Sem

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2015-16

CLASS: BSC. 1<sup>ST</sup> SEM.

PAPER: BASICS OF BIOINFORMATICS

MAX. MARKS: 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Applications of Bioinformatics, SCOPE Of bioinformatics in India, Genes, Genomes DNA ,RNA,Chromosomes, Protein.

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- I

Name.....Akshay.....Sampale..

- Margaret Day hoff ने first protein sequence database developed किया जिसे कहते हैं.....  
a) SWISSPROT                      b) PDB  
c) PIR                                      d) UNIPROT                      Ans.....f
- डेटाबेस के प्रत्येक record को कहते हैं  
a) Entry                                      b) File  
c) Record                                      d) Ticket                      Ans.....b
- Literature databases सम्मिलित हैं  
a) MEDLINE and PubMed                      b) MEDLINE and PDB  
c) PubMed and PDB                      d) MEDLINE and PDS                      Ans.....e
- Protein sequence database हैं  
a) DDBJ                                      b) EMBL  
c) GenBank                                      d) PIR                      Ans.....d
- GenBank, nucleic acid sequence database को maintained करता है  
a) Brookhaven laboratory                      b) DNA database of Japan (DDBJ)  
c) European Molecular Biology laboratory                      d) National Centre for Biotechnology Information                      Ans....
- Sequences Submission के लिए GenBank use करता है  
a) BankIt and Sequin                      b) BankIt and BankIn  
c) Sequin and BankIn                      d) Entrez                      Ans.....f
- Human genetics Diseases और molecular biology के अध्ययन के लिये किस डेटाबेस का उपयोग क्या जाता है  
a) PDB                                      b) STAG  
c) OMIM                                      d) PSD                      Ans.....c
- Biological database मिलकर बना होता है  
a) DNA                                      b) Protein  
c) Structure                                      d) All of the above                      Ans.....d
- NCBI GenBank information retrieval के लिये कौन सा tool उपयोग करता है  
a) Entrez                                      b) STAG  
c) Sequin                                      d) text search                      Ans.....f
- दिया गया कौन सा sequence सही है:  
a) DNA, RNA, Protein                      b) DNA, Protein, RNA  
c) RNA, DNA, Protein                      d) Protein, DNA, RNA                      Ans....e

Prasad  
4/12/15  
14/15

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- I

Name.....राविकांत.....

- Margaret Day hoff ने first protein sequence database developed किया जिसे कहते हैं.....  
a) SWISSPROT                      b) PDB  
c) PIR                                      d) UNIPROT                      Ans.....
- डेटाबेस के प्रत्येक record को कहते हैं  
a) Entry                                      b) File  
c) Record                                      d) Ticket                      Ans.....
- Literature databases सम्मिलित हैं  
a) MEDLINE and PubMed                      b) MEDLINE and PDB  
c) PubMed and PDB                      d) MEDLINE and PDS                      Ans.....
- Protein sequence database हैं  
a) DDBJ                                      b) EMBL  
c) GenBank                                      d) PIR                      Ans.....
- GenBank, nucleic acid sequence database को maintained करता है  
a) Brookhaven laboratory                      b) DNA database of Japan (DDBJ)  
c) European Molecular Biology laboratory                      d) National Centre for Biotechnology Information                      Ans....
- Sequences Submission के लिए GenBank use करता है  
a) BankIt and Sequin                      b) BankIt and BankIn  
c) Sequin and BankIn                      d) Entrez                      Ans.....
- Human genetics Diseases और molecular biology के अध्ययन के लिये किस डेटाबेस का उपयोग क्या जाता है  
a) PDB                                      b) STAG  
c) OMIM                                      d) PSD                      Ans.....
- Biological database मिलकर बना होता है  
a) DNA                                      b) Protein  
c) Structure                                      d) All of the above                      Ans.....
- NCBI GenBank information retrieval के लिये कौन सा tool उपयोग करता है  
a) Entrez                                      b) STAG  
c) Sequin                                      d) text search                      Ans.....
- दिया गया कौन सा sequence सही है:  
a) DNA, RNA, Protein                      b) DNA, Protein, RNA  
c) RNA, DNA, Protein                      d) Protein, DNA, RNA                      Ans.....

Prasad  
4/12/15  
15

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- II

Name.....Devi Varun.....

- PAM stands for... Point Accepted Matrix
- HTML stands for... Hyper Text Markup Language
- Perl Stand for... Practical Extraction Reporting Language
- SQL stand for.....
- Shebang line of Perl... /usr/bin/perl
- Page Designed in HTML is called is :-  
A) Web page B) yellow page C) front page D) server page  
Ans.....
- Which is not programming language: -  
A) Perl B) Python C) C++ D) Basic  
Ans.....
- Which of the following is an Interpreted programming?  
A) Perl B) C C) C++ D) Pascal  
Ans.....
- Perl is available for: -  
A) Window B) Linux C) Macintosh D) All of the above  
Ans.....
- Which of the Following variable is not used in Perl?  
A) Scalar B) Hashes C) Array D) Character  
Ans.....
- The matrix used for the best local alignment of protein sequences is  
A) BLOSUM62 B) IUB C) BLOSUM80 D) PAM20  
Ans.....
- What is hyper link tag.  
<a href = " " >

Sum  
16/11/16  
6/15

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- II

Name.....Devi Varun.....

- PAM stands for... Point Accepted Matrix
- HTML stands for... Hyper Text Markup Language
- Perl Stand for... Practical Extraction Reporting Language
- SQL stand for.....
- Shebang line of Perl... /usr/bin/perl
- Page Designed in HTML is called is :-  
A) Web page B) yellow page C) front page D) server page  
Ans..... webrage
- Which is not programming language: -  
A) Perl B) Python C) C++ D) Basic  
Ans..... Basic
- Which of the following is an Interpreted programming?  
A) Perl B) C C) C++ D) Pascal  
Ans..... pascal
- Perl is available for: -  
A) Window B) Linux C) Macintosh D) All of the above  
Ans..... All of the above
- Which of the Following variable is not used in Perl?  
A) Scalar B) Hashes C) Array D) Character  
Ans..... Character
- The matrix used for the best local alignment of protein sequences is  
A) BLOSUM62 B) IUB C) BLOSUM80 D) PAM20  
Ans..... BLOSUM 62
- What is hyper link tag.  
<a href = " " >

Sum  
16/11/16  
6/15

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- II

Name.....Devi Varun.....

- PAM stands for... Point accepted mutation
- HTML stands for... Hyper text markup language
- Perl Stand for... practical extraction and report language
- SQL stand for... Structured extraction and query language
- Shebang line of Perl... /usr/
- Page Designed in HTML is called is :-  
A) Web page B) yellow page C) front page D) server page  
Ans..... webrage
- Which is not programming language: -  
A) Perl B) Python C) C++ D) Basic  
Ans..... Basic
- Which of the following is an Interpreted programming?  
A) Perl B) C C) C++ D) Pascal  
Ans..... pascal
- Perl is available for: -  
A) Window B) Linux C) Macintosh D) All of the above  
Ans..... All of above
- Which of the Following variable is not used in Perl?  
A) Scalar B) Hashes C) Array D) Character  
Ans..... character
- The matrix used for the best local alignment of protein sequences is  
A) BLOSUM62 B) IUB C) BLOSUM80 D) PAM20  
Ans..... IUB
- What is hyper link tag.

Sum  
16/11/16  
5/15

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- II

Name.....Devi Varun.....

- PAM stands for... Point accepted mutation
- HTML stands for... Hyper text markup language
- Perl Stand for... practical extraction and report language
- SQL stand for... Structured Query Language
- Shebang line of Perl... /usr/
- Page Designed in HTML is called is :-  
A) Web page B) yellow page C) front page D) server page  
Ans..... webrage
- Which is not programming language: -  
A) Perl B) Python C) C++ D) Basic  
Ans..... BASIC
- Which of the following is an Interpreted programming?  
A) Perl B) C C) C++ D) Pascal  
Ans..... pascal
- Perl is available for: -  
A) Window B) Linux C) Macintosh D) All of the above  
Ans..... All of above
- Which of the Following variable is not used in Perl?  
A) Scalar B) Hashes C) Array D) Character  
Ans..... character
- The matrix used for the best local alignment of protein sequences is  
A) BLOSUM62 B) IUB C) BLOSUM80 D) PAM20  
Ans..... IUB
- What is hyper link tag.  
The <a> tag defines a hyperlink, which is used to link from one page to another.

Sum  
16/11/16  
8/15

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2015-16

CLASS: BSC.III SEM.

PAPER : BIOSTATISTICS AND BIOINFORMATICS TECHNIQUES

MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Gel Electrophoresis: PAGE and SDS PAGE, Chromatography and its types, Introduction to plasmid and vectors, Gene cloning and its Application

Ajlii Silawat

CCE EXAMINATION 2015-2016 Subject- Bioinformatics Semester- III

1) The color of phosphorus atom in Rasmol is.....

- A. White
B. Yellow
C. Red
D. Orange

2) Which of the following is not a measure of central location?

- a. mean
b. median
c. variance
d. mode

3) Exhibit 1

A researcher has collected the following sample data.

X=0 1 2 3 4 5 6
f= 7 7 10 5 3 2 1

Refer to Exhibit 1. The mean is

- a. 5
b. 2
c. 3
d. 8
e. None of the above answers is correct.

4) 39. The descriptive measure of dispersion that is based on the concept of a deviation about the mean is

- a. the range
b. the interquartile range
c. both a and b
d. the standard deviation
e. None of the above answers is correct.

5) The measure of dispersion that is influenced most by extreme values is

- a. the variance
b. the standard deviation
c. the range
d. the interquartile range
e. None of the above answers is correct.

6) Exhibit-2 SpeedMiles per Hour Frequency
x f

Handwritten calculation: 8/15

CCE EXAMINATION 2015-2016 Subject- Bioinformatics Semester- III

1) The color of phosphorus atom in Rasmol is.....

- A. White
B. Yellow
C. Red
D. Orange

2) Which of the following is not a measure of central location?

- a. mean
b. median
c. variance
d. mode

3) Exhibit 1

A researcher has collected the following sample data.

X=0 1 2 3 4 5 6
f= 7 7 10 5 3 2 1

Refer to Exhibit 1. The mean is

- a. 5
b. 2
c. 3
d. 8
e. None of the above answers is correct.

4) 39. The descriptive measure of dispersion that is based on the concept of a deviation about the mean is

- a. the range
b. the interquartile range
c. both a and b
d. the standard deviation
e. None of the above answers is correct.

5) The measure of dispersion that is influenced most by extreme values is

- a. the variance
b. the standard deviation
c. the range
d. the interquartile range
e. None of the above answers is correct.

6) Exhibit-2 SpeedMiles per Hour Frequency
x f

Handwritten calculation: 7/15

Handwritten signature

CCE EXAMINATION 2015-2016 Subject- Bioinformatics Semester- III

1) The color of phosphorus atom in Rasmol is.....

- A. White
B. Yellow
C. Red
D. Orange

2) Which of the following is not a measure of central location?

- a. mean
b. median
c. variance
d. mode

3) Exhibit 1

A researcher has collected the following sample data.

X=0 1 2 3 4 5 6
f= 7 7 10 5 3 2 1

Refer to Exhibit 1. The mean is

- a. 5
b. 2
c. 3
d. 8
e. None of the above answers is correct.

4) 39. The descriptive measure of dispersion that is based on the concept of a deviation about the mean is

- a. the range
b. the interquartile range
c. both a and b
d. the standard deviation
e. None of the above answers is correct.

5) The measure of dispersion that is influenced most by extreme values is

- a. the variance
b. the standard deviation
c. the range
d. the interquartile range
e. None of the above answers is correct.

6) Exhibit-2 SpeedMiles per Hour Frequency
x f

Handwritten calculation: 8/15

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2015-16

CLASS: BSC. IV SEM.

PAPER: GENOMICS AND PROTIOMICS

MAX. MARKS: 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Introduction of Genomics, Functional Genomics, Tools and techniques in proteomics, Protein- Protein interactions

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- IV

नाम - हेरी सिंह दागी

- The complete set of mRNA in an organism is called as..... डी.एन.ए. मैसेज
- The most popular plot, Phi-Psi plot for protein conformation is known as..... रामाचंद्रन प्लॉट
- 3D Structure Validation Proteomics tools is.....
- Give the 2 Name of PPI Databases.....
- Give the Name of Hydroxy Amino Acid.....
- PDB identifier is assigned by  
A) 4 character B) 3 character  
C) 5 character D) 7 characters  
Ans... A
- Which among the following is not functional genomics  
A) Transcriptomics B) Proteomics  
C) Genome sequencing D) Metabonomics  
Ans..... d
- Which type of genomics studies the physical nature of genomes?  
A) Comparative genomics B) Structural genomics  
C) Functional genomics D) All of these  
Ans..... b
- Proteomics is  
A) Branch of quantum physics  
B) The study of algal genomes  
C) The study of the entire collection of proteins expressed by an organism  
D) All of these  
Ans... C
- Which is Not Proteomics Techniques?  
A) Yeast Two Hybrid  
B) Mass spectrometry  
C) Protein Microarray  
D) None of these  
Ans..... C

10/3/16

6/15

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- IV

नाम - अरुण मकवान

- The complete set of mRNA in an organism is called as..... डी.एन.ए. मैसेज
- The most popular plot, Phi-Psi plot for protein conformation is known as..... रामाचंद्रन प्लॉट
- 3D Structure Validation Proteomics tools is.....
- Give the 2 Name of PPI Databases.....
- Give the Name of Hydroxy Amino Acid.....
- PDB identifier is assigned by  
A) 4 character B) 3 character  
C) 5 character D) 7 characters  
Ans..... A
- Which among the following is not functional genomics  
A) Transcriptomics B) Proteomics  
C) Genome sequencing D) Metabonomics  
Ans..... d
- Which type of genomics studies the physical nature of genomes?  
A) Comparative genomics B) Structural genomics  
C) Functional genomics D) All of these  
Ans..... d
- Proteomics is  
A) Branch of quantum physics  
B) The study of algal genomes  
C) The study of the entire collection of proteins expressed by an organism  
D) All of these  
Ans..... A
- Which is Not Proteomics Techniques?  
A) Yeast Two Hybrid  
B) Mass spectrometry  
C) Protein Microarray  
D) None of these  
Ans..... d

अरुण कुमार

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- IV

- The complete set of mRNA in an organism is called as..... डी.एन.ए. मैसेज
- The most popular plot, Phi-Psi plot for protein conformation is known as..... रामाचंद्रन प्लॉट
- 3D Structure Validation Proteomics tools is.....
- Give the 2 Name of PPI Databases.....
- Give the Name of Hydroxy Amino Acid.....
- PDB identifier is assigned by  
A) 4 character B) 3 character  
C) 5 character D) 7 characters  
Ans..... d
- Which among the following is not functional genomics  
A) Transcriptomics B) Proteomics  
C) Genome sequencing D) Metabonomics  
Ans..... d
- Which type of genomics studies the physical nature of genomes?  
A) Comparative genomics B) Structural genomics  
C) Functional genomics D) All of these  
Ans..... d
- Proteomics is  
A) Branch of quantum physics  
B) The study of algal genomes  
C) The study of the entire collection of proteins expressed by an organism  
D) All of these  
Ans... C
- Which is Not Proteomics Techniques?  
A) Yeast Two Hybrid  
B) Mass spectrometry  
C) Protein Microarray  
D) None of these  
Ans..... D

10/3/16

6/15

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2015-16

CLASS: BSC.V SEM.

PAPER : COMPUTATIONAL AND STRUCTURE BIOINFORMATICS

MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Introduction and working of microarray, Microarray: technique, Design, Analysis, Introduction to Human Genome Project, Introduction to HGO Ethical issues related to HGP

जगदीश्वर सिंह भादव

**CCE EXAMINATION 2015-2016**  
**Subject- Bioinformatics**  
**Semester- v**

- The two main features of any phylogenetic tree are the
  - edges and the nodes
  - topology and the branch lengths
  - edges and the root
  - alignment and the bootstrap
- The number of edges that meet at every branch node of the phylogenetic tree is.....
  - 2
  - 3
  - 4
  - All of these
- Which of the following sequence is correct:
  - DNA, RNA, Protein
  - DNA, Protein, RNA
  - RNA, DNA, Protein
  - Protein, DNA, RNA
- Which are the repositories for raw sequence data
  - Gen Bank
  - EMBL
  - DDBJ
  - GGPP
- human genome contains about
  - 2 billion base pair
  - 3 billion base pair
  - 4 billion base pair
  - 3.5 billion base pair
- Deposition of c DNA into inert structure is
  - DNA fingerprinting
  - DNA polymerase
  - DNA probes
  - DNA microarrays
- The identification of drug through genomic study
  - Genomics
  - Cheminformatics
  - Pharmagenomics
  - Pharmacogenetics

10/11/15 13/15

**CCE EXAMINATION 2015-2016**  
**Subject- Bioinformatics**  
**Semester- v**

- The two main features of any phylogenetic tree are the
  - edges and the nodes
  - topology and the branch lengths
  - edges and the root
  - alignment and the bootstrap
- The number of edges that meet at every branch node of the phylogenetic tree is.....
  - 2
  - 3
  - 4
  - All of these
- Which of the following sequence is correct:
  - DNA, RNA, Protein
  - DNA, Protein, RNA
  - RNA, DNA, Protein
  - Protein, DNA, RNA
- Which are the repositories for raw sequence data
  - Gen Bank
  - EMBL
  - DDBJ
  - GGPP
- human genome contains about
  - 2 billion base pair
  - 3 billion base pair
  - 4 billion base pair
  - 3.5 billion base pair
- Deposition of c DNA into inert structure is
  - DNA fingerprinting
  - DNA polymerase
  - DNA probes
  - DNA microarrays
- The identification of drug through genomic study
  - Genomics
  - Cheminformatics
  - Pharmagenomics
  - Pharmacogenetics

10/11/15 14/15

कुमा चौहान

**CCE EXAMINATION 2015-2016**  
**Subject- Bioinformatics**  
**Semester- v**

- The two main features of any phylogenetic tree are the
  - edges and the nodes
  - topology and the branch lengths
  - edges and the root
  - alignment and the bootstrap
- The number of edges that meet at every branch node of the phylogenetic tree is.....
  - 2
  - 3
  - 4
  - All of these
- Which of the following sequence is correct:
  - DNA, RNA, Protein
  - DNA, Protein, RNA
  - RNA, DNA, Protein
  - Protein, DNA, RNA
- Which are the repositories for raw sequence data
  - Gen Bank
  - EMBL
  - DDBJ
  - GGPP
- human genome contains about
  - 2 billion base pair
  - 3 billion base pair
  - 4 billion base pair
  - 3.5 billion base pair
- Deposition of c DNA into inert structure is
  - DNA fingerprinting
  - DNA polymerase
  - DNA probes
  - DNA microarrays
- The identification of drug through genomic study
  - Genomics
  - Cheminformatics
  - Pharmagenomics
  - Pharmacogenetics

10/11/15 12/15

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- VI

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCEINCE COLLAGE

SESSION: 2015-16

CLASS: BSC. VI SEM.

PAPER : MOLECULAR MODELING AND DRUG DESIGN

MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Introduction to Molecular Modeling, Methods of Molecular modelling, Introduction & Technique of Molecular Dynamics &Monti Carlo.

Name... आशीष सिंसोदिया

- Swiss model is... Protein Modeling software
- Evaluation of homology model is done by... Ensat plot
- Threading is a method of... 3D structure of protein
- The percentage of safe zone in Homology modeling is... great than
- The most popular plot, Phi-Psi plot for protein conformation is known as... रामाचन्द्रन
- Verify 3D is used for  
A. Model optimization B. loop Modeling  
C. Evaluation of model D. side chain Modeling  
Ans... C
- PDB identifier is assigned by  
A) 4 character B) 3 character  
C) 5 character D) 7 characters  
Ans... d
- We can build 3D model of  
A) Template B) Trsion  
C) Target D) Tarns of a protein  
Ans... C
- Which is not Homology Modeling server?  
A) Phyre B) CPHModel  
C) SAVES D) Swiss Model  
Ans... C
- The drug discrimination process can be used to study.  
A) Structure-activity Relationship  
B) Stereo selectivity  
C) Mechanism of action  
D) All of the above  
Ans... d

10/15  
15/15

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- VI

Name... Annu

- Swiss model is... Protein Modeling software
- Evaluation of homology model is done by... Ensat plot
- Threading is a method of... 3D structure of protein
- The percentage of safe zone in Homology modeling is... great than
- The most popular plot, Phi-Psi plot for protein conformation is known as... रामाचन्द्रन
- Verify 3D is used for  
A. Model optimization B. loop Modeling  
C. Evaluation of model D. side chain Modeling  
Ans... A
- PDB identifier is assigned by  
A) 4 character B) 3 character  
C) 5 character D) 7 characters  
Ans... A
- We can build 3D model of  
A) Template B) Trsion  
C) Target D) Tarns of a protein  
Ans... C
- Which is not Homology Modeling server?  
A) Phyre B) CPHModel  
C) SAVES D) Swiss Model  
Ans... A
- The drug discrimination process can be used to study.  
A) Structure-activity Relationship  
B) Stereo selectivity  
C) Mechanism of action  
D) All of the above  
Ans... A

10/15  
10/15

CCE EXAMINATION 2015-2016  
Subject- Bioinformatics  
Semester- VI

Name... सुनील अलि

- Swiss model is... Homology modeling software
- Evaluation of homology model is done by... Ensat plot
- Threading is a method of...
- The percentage of safe zone in Homology modeling is...
- The most popular plot, Phi-Psi plot for protein conformation is known as... रामाचन्द्रन
- Verify 3D is used for  
A. Model optimization B. loop Modeling  
C. Evaluation of model D. side chain Modeling  
Ans... C
- PDB identifier is assigned by  
A) 4 character B) 3 character  
C) 5 character D) 7 characters  
Ans... a
- We can build 3D model of  
A) Template B) Trsion  
C) Target D) Tarns of a protein  
Ans... C
- Which is not Homology Modeling server?  
A) Phyre B) CPHModel  
C) SAVES D) Swiss Model  
Ans.....
- The drug discrimination process can be used to study.  
A) Structure-activity Relationship  
B) Stereo selectivity  
C) Mechanism of action  
D) All of the above  
Ans.....

10/15  
9/15



CCE EXAMINATION 2016-2017  
Subject- Bioinformatics  
Semester- II

Name... काविताराव

- PAM stands for... Point Mutation Accepted Mutation
- HTML stands for... Hypertext Markup Language
- Perl Stand for... Practical Extraction and Report Language
- SQL stand for... Structure Query Language
- Shebang line of Perl.....
- Page Designed in HTML is called is -:  
A) Web page B) yellow page C) front page D) server page Ans..A
- Which is not programming language: -  
A) Perl B) Python C) C++ D)Basic Ans...D
- Which of the following is an Interpreted programming?  
A) Perl B) C C) C++ D) Pascal Ans.....D
- Perl is available for: -  
A) Window B) Linux C) Macintosh D) All of the above Ans...D
- Which of the Following variable is not used in Perl?  
A) Scalar B)Hashes C) Array D) Character Ans...B
- The matrix used for the best local alignment of protein sequences is  
A BLOSUM62 B) IUB C) BLOSUM80 D) PAM20 Ans...A
- What is hyper link tag.  
.....  
.....

काविताराव (13/15)

CCE EXAMINATION 2016-2017  
Subject- Bioinformatics  
Semester- II

Name... सोनीय ज्योती

- PAM stands for... Point Mutation Accepted Mutation
- HTML stands for... Hypertext Markup Language
- Perl Stand for... Practical Extraction and Report Language
- SQL stand for... Structure Query Language
- Shebang line of Perl.....
- Page Designed in HTML is called is -:  
A) Web page B) yellow page C) front page D) server page Ans..C
- Which is not programming language: -  
A) Perl B) Python C) C++ D)Basic Ans .....B
- Which of the following is an Interpreted programming?  
A) Perl B) C C) C++ D) Pascal Ans .....A
- Perl is available for: -  
A) Window B) Linux C) Macintosh D) All of the above Ans.....C
- Which of the Following variable is not used in Perl?  
A) Scalar B)Hashes C) Array D) Character Ans.....D
- The matrix used for the best local alignment of protein sequences is  
A) BLOSUM62 B) IUB C) BLOSUM80 D) PAM20 Ans...A
- What is hyper link tag.  
.....  
.....

सोनीय ज्योती (9/12)

CCE EXAMINATION 2016-2017  
Subject- Bioinformatics  
Semester- II

Name... Jayesh Salanki

- PAM stands for... Point expectation mutation
- HTML stands for... hypertext markup language
- Perl Stand for... Practical extraction and report language
- SQL stand for... Structure query language
- Shebang line of Perl... All unix shell which interpret an unix
- Page Designed in HTML is called is -:  
A) Web page B) yellow page C) front page D) server page Ans.....
- Which is not programming language: -  
A) Perl B) Python C) C++ D)Basic Ans.....
- Which of the following is an Interpreted programming?  
A) Perl B) C C) C++ D) Pascal Ans.....
- Perl is available for: -  
A) Window B) Linux C) Macintosh D) All of the above Ans.....
- Which of the Following variable is not used in Perl?  
A) Scalar B)Hashes C) Array D) Character Ans.....
- The matrix used for the best local alignment of protein sequences is  
A BLOSUM62 B) IUB C) BLOSUM80 D) PAM20 Ans.....
- What is hyper link tag.  
.....  
.....

जयेश सालंकी (11/15)

Name... Jayesh Salanki

- PAM stands for... practical every meta
- HTML stands for... hypertext markup language
- Perl Stand for... practical extraction and report language
- SQL stand for... Structure query language
- Shebang line of Perl... shell a unix shell interpreted to pass the script. the shell option.
- Page Designed in HTML is called is -:  
A) Web page B) yellow page C) front page D) server page Ans.....
- Which is not programming language: -  
A) Perl B) Python C) C++ D)Basic Ans.....
- Which of the following is an Interpreted programming?  
A) Perl B) C C) C++ D) Pascal Ans.....
- Perl is available for: -  
A) Window B) Linux C) Macintosh D) All of the above Ans.....
- Which of the Following variable is not used in Perl?  
A Scalar B)Hashes C) Array D) Character Ans.....
- The matrix used for the best local alignment of protein sequences is  
A BLOSUM62 B) IUB C) BLOSUM80 D) PAM20 Ans.....
- What is hyper link tag.  
.....  
.....

जयेश सालंकी (11/15)

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2016-17

CLASS: BSC.III SEM.

PAPER : BIOSTATISTICS AND BIOINFORMATICS TECHNIQUES

MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Gel Electrophoresis: PAGE and SDS PAGE, Chromatography and its types, Introduction to plasmid and vectors, Gene cloning and its Application

*Ashwini samay.*

CCE EXAMINATION 2016-2017  
Subject- Bioinformatics  
Semester- III

1) The color of phosphorus atom in Rasmol is.....

- A. White
- B. Yellow
- C. Red
- D. Orange

2) Which of the following is not a measure of central location?

- a. mean
- b. median
- c. variance
- d. mode

3) Exhibit 1

A researcher has collected the following sample data.

X=0 1 2 3 4 5 6  
f= 7 7 10 53 2 1

Refer to Exhibit 1. The mean is

- a. 5
- b. 2
- c. 3
- d. 8
- e. None of the above answers is correct.

4) 39. The descriptive measure of dispersion that is based on the concept of a deviation about the mean is

- a. the range
- b. the interquartile range
- c. both a and b
- d. the standard deviation
- e. None of the above answers is correct.

5). The measure of dispersion that is influenced most by extreme values is

- a. the variance
- b. the standard deviation
- c. the range
- d. the interquartile range
- e. None of the above answers is correct.

6) Exhibit-2 SpeedMiles per Hour Frequency

x f

*Answer*  
*2311116*  
*14/15*

1) The color of phosphorus atom in Rasmol is.....

- A. White
- B. Yellow
- C. Red
- D. Orange

2) Which of the following is not a measure of central location?

- a. mean
- b. median
- c. variance
- d. mode

3) Exhibit 1

A researcher has collected the following sample data.

X=0 1 2 3 4 5 6  
f= 7 7 10 53 2 1

Refer to Exhibit 1. The mean is

- a. 5
- b. 2
- c. 3
- d. 8
- e. None of the above answers is correct.

4) 39. The descriptive measure of dispersion that is based on the concept of a deviation about the mean is

- a. the range
- b. the interquartile range
- c. both a and b
- d. the standard deviation
- e. None of the above answers is correct.

5). The measure of dispersion that is influenced most by extreme values is

- a. the variance
- b. the standard deviation
- c. the range
- d. the interquartile range
- e. None of the above answers is correct.

6) Exhibit-2 SpeedMiles per Hour Frequency

x f

*Answer*  
*2311116*

*14/15*

Name - Lakshman

CCE EXAMINATION 2016-2017  
Subject- Bioinformatics  
Semester- III

1) The color of phosphorus atom in Rasmol is.....

- A. White
- B. Yellow
- C. Red
- D. Orange

2) Which of the following is not a measure of central location?

- a. mean
- b. median
- c. variance
- d. mode

3) Exhibit 1

A researcher has collected the following sample data.

X=0 1 2 3 4 5 6  
f= 7 7 10 53 2 1

Refer to Exhibit 1. The mean is

- a. 5
- b. 2
- c. 3
- d. 8
- e. None of the above answers is correct.

4) 39. The descriptive measure of dispersion that is based on the concept of a deviation about the mean is

- a. the range
- b. the interquartile range
- c. both a and b
- d. the standard deviation
- e. None of the above answers is correct.

5). The measure of dispersion that is influenced most by extreme values is

- a. the variance
- b. the standard deviation
- c. the range
- d. the interquartile range
- e. None of the above answers is correct.

6) Exhibit-2 SpeedMiles per Hour Frequency

x f

*Answer*  
*2311116*  
*6/15*

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2016-17

CLASS: BSC. IV SEM.

PAPER : GENOMICS AND PROTIOMICS

MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Introduction of Genomics. Functional Genomics, Tools and techniques in proteomics, Protein- Protein interactions

Name: Satyanarayan

Short Note

1. EXON  
Exons are coding sections of an RNA transcript on the RNA encoding it that are translated into protein.
2. 5' UTR  
Unique to every reference no. are 5 digit codes that uniquely identify you are your business, they are used by NCBI.
3. Transcriptome  
Advise rapid isolation and purification of genomic and plasmid DNA by Novof express high quality pmo/.
4. Watson-crick Base pairing  
Watson - crick structure of DNA: Deoxyribo-nucleic Acid (DNA) is a double stranded helical molecule.
5. Structure Proteomics  
In order to organize the large amount of DNA within the nucleus. These protein-chromosome complexes are called chromatin.
6. The complete set of mRNA in an organism is called as.....
7. The most popular plot, Phi-Psi plot for protein conformation is known as.....
8. 3D Structure Validation Proteomics tools is..... spinning tools
9. Give the 2 Name of PPI Databases.....
10. Give the Name of Hydroxy Amino Acid.....

18/3/17 12/15

Name: Siddharth

Short Note

1. EXON  
Exons are coding sections of an RNA transcript on the DNA encoding it that are translated into protein.
2. 5' UTR  
Unique to every reference no. are 5 digit codes that uniquely identify you are your business.
3. Transcriptome  
Advise rapid isolation of genomic DNA. Deoxyribo-nucleic acid is a double stranded helical molecule.
4. Watson-crick Base pairing  
Watson - crick structure of DNA: Deoxyribo-nucleic Acid (DNA) is a double stranded helical molecule.
5. Structure Proteomics  
In order to organize the large amount of DNA within the nucleus. These protein-chromosome complexes are called chromatin.
6. The complete set of mRNA in an organism is called as.....
7. The most popular plot, Phi-Psi plot for protein conformation is known as.....
8. 3D Structure Validation Proteomics tools is..... spinning tools
9. Give the 2 Name of PPI Databases.....
10. Give the Name of Hydroxy Amino Acid.....

18/3/17 8/15

Name: Anshu Khandelwal

Short Note

1. EXON  
DNA में वो भाग होते हैं जिसका जेटीन बनता है उसको Exon कि कहते हैं और जिसका प्रोटीन नहीं बनता उसको 5'UTR कहते हैं।
2. 5' UTR  
एन डीएससेस रिजन यह mRNA अवर भाग है जो जेटीन नहीं बनाता है पर mRNA के ड फाइव डे एंड को बनाने लगता है।
3. Transcriptome  
किसी organism के डे मंदर बनने वाले mRNA को खेह को त्रान्सक्रिप्टोम कहते हैं।
4. Watson-crick Base pairing  
यह वाटसन क्रिक डेपर वाटसन क्रिक के द्वारा दिया गया है जिसमें डे एडिनि ग्वाइनिन डे साथ हाइड्रोजन बंध बनाता है और ग्वाइनिन-साइटोसीन डे साथ हाइड्रोजन बंध बनाता है।
5. Structure Proteomics  
किसी organism डे मंदर बांधे जाने वाले डे प्रोटीन डे स्टडी को प्रोटेओमिक्स कहते हैं।
6. The complete set of mRNA in an organism is called as..... जीनोमिक्स
7. The most popular plot, Phi-Psi plot for protein conformation is known as..... डे फाइव डे एंड
8. 3D Structure Validation Proteomics tools is..... प्रोटीक
9. Give the 2 Name of PPI Databases.....
10. Give the Name of Hydroxy Amino Acid.....

18/3/17 14/15

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2016-17

CLASS: BSC.V SEM.

PAPER : COMPUTATIONAL AND STRUCTURE BIOINFORMATICS

MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Introduction and working of microarray, Microarray: technique, Design, Analysis, Introduction to Human Genome Project, Introduction to HGO Ethical issues related to HGP

Aasidi Makwana

CCE EXAMINATION 2016-2017  
Subject- Bioinformatics  
Semester- v

- 1) The two main features of any phylogenetic tree are the
  - A. edges and the nodes
  - B. topology and the branch lengths
  - C. edges and the root
  - D. alignment and the bootstrap
- 2) The number of edges that meet at every branch node of the phylogenetic tree is.....
  - a. 2
  - b. 3
  - c. 4
  - d. All of these
- 3) Which of the following sequence is correct:
  - a. DNA, RNA, Protein
  - b. DNA, Protein, RNA
  - c. RNA, DNA, Protein
  - d. Protein, DNA, RNA
- 4) Which are the repositories for raw sequence data
  - e. A) Gen Bank
  - f. B) EMBL
  - g. C) DDBJ
  - h. D) GGPP
- 5) human genome contains about
  - A. 2 billion base pair
  - B. 3 billion base pair
  - C. 4 billion base pair
  - D. 3.5 billion base pair
- 6) Deposition of c DNA into inert structure is
  - A. DNA fingerprinting
  - B. DNA polymerase
  - C. DNA probes
  - D. DNA microarrays
- 7) The identification of drug through genomic study
  - A. Genomics
  - B. Cheminformatics
  - C. Pharmagenomics
  - D. Pharmacogenetics

Vinod Kumar

CCE EXAMINATION 2016-2017  
Subject- Bioinformatics  
Semester- v

- 1) The two main features of any phylogenetic tree are the
  - A. edges and the nodes
  - B. topology and the branch lengths
  - C. edges and the root
  - D. alignment and the bootstrap
- 2) The number of edges that meet at every branch node of the phylogenetic tree is.....
  - a. 2
  - b. 3
  - c. 4
  - d. All of these
- 3) Which of the following sequence is correct:
  - a. DNA, RNA, Protein
  - b. DNA, Protein, RNA
  - c. RNA, DNA, Protein
  - d. Protein, DNA, RNA
- 4) Which are the repositories for raw sequence data
  - e. A) Gen Bank
  - f. B) EMBL
  - g. C) DDBJ
  - h. D) GGPP
- 5) human genome contains about
  - A. 2 billion base pair
  - B. 3 billion base pair
  - C. 4 billion base pair
  - D. 3.5 billion base pair
- 6) Deposition of c DNA into inert structure is
  - A. DNA fingerprinting
  - B. DNA polymerase
  - C. DNA probes
  - D. DNA microarrays
- 7) The identification of drug through genomic study
  - A. Genomics
  - B. Cheminformatics
  - C. Pharmagenomics
  - D. Pharmacogenetics

23/11/16 5/15

CCE EXAMINATION 2016-2017  
Subject- Bioinformatics  
Semester- v

- 1) The two main features of any phylogenetic tree are the
  - A. edges and the nodes
  - B. topology and the branch lengths
  - C. edges and the root
  - D. alignment and the bootstrap
- 2) The number of edges that meet at every branch node of the phylogenetic tree is.....
  - a. 2
  - b. 3
  - c. 4
  - d. All of these
- 3) Which of the following sequence is correct:
  - a. DNA, RNA, Protein
  - b. DNA, Protein, RNA
  - c. RNA, DNA, Protein
  - d. Protein, DNA, RNA
- 4) Which are the repositories for raw sequence data
  - e. A) Gen Bank
  - f. B) EMBL
  - g. C) DDBJ
  - h. D) GGPP
- 5) human genome contains about
  - A. 2 billion base pair
  - B. 3 billion base pair
  - C. 4 billion base pair
  - D. 3.5 billion base pair
- 6) Deposition of c DNA into inert structure is
  - A. DNA fingerprinting
  - B. DNA polymerase
  - C. DNA probes
  - D. DNA microarrays
- 7) The identification of drug through genomic study
  - a. Genomics
  - B. Cheminformatics
  - C. Pharmagenomics
  - D. Pharmacogenetics

23/11/16 5/15

**Govt. Madhav Science P.G. College, Ujjain**  
 DST-FIST COLLEGE  
 "A" GRADE ACCREDITED THROUGH NAAC  
 Department of Bioinformatics

**BASICS OF BIOINFORMATICS**

**Bioinformatics** is the application of computer technology to get the information that's stored in certain types of biological data. Bioinformatics provides central, globally accessible databases that enable scientists to submit, search and analyse information. It offers analysis software for data studies and comparisons and provides tools for modelling, visualising, exploring and interpreting data. Main goal is to convert multitude of complex data into useful information and knowledge.

**INTERDISCIPLINARY APPROACHES**  
 AIMS AND SCOPE :



**What are the career options?**  
 Bioinformatics plays an important role in biomedical research. Research work in the area of genetic diseases and medical genomics is rapidly increasing and the future of personalized medicine depends on bioinformatics approaches. Bioinformatics is a rapidly growing career field and an emerging scientific discipline. This course focuses on employing existing bioinformatic resources - mainly web-based programs and databases - to account the wealth of data to answer questions relevant to the general biologist, and is highly hands-on.

**What are the job roles?**

<ul style="list-style-type: none"> <li>• Professor</li> <li>• Science Technician</li> <li>• Research Assistant</li> <li>• Bioinformatics Specialist</li> <li>• Bioinformatics Analyst</li> <li>• Junior Research Fellow</li> <li>• Research Associate</li> <li>• Bioinformatics Software</li> </ul>	<ul style="list-style-type: none"> <li>• Gene Analyst</li> <li>• Protein Analyst</li> <li>• Biogeneticist</li> <li>• Research Software</li> <li>• Bio-statistician</li> <li>• Cheminformatician</li> <li>• Database programmer</li> </ul>
---	---

**Who can study this course?**

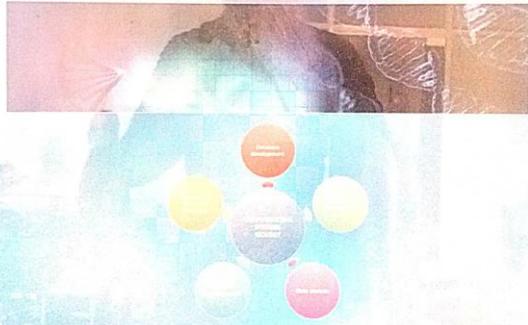
- Candidates who have passed 11-12th science disciplines can pursue bioinformatics in bachelor's degree level.
- Few of the higher courses offer B.Tech, B.Sc., B.Ph. in Bioinformatics.
- Candidates who have passed bachelor's degree in Bioinformatics are eligible to pursue bioinformatics in master and doctoral level at Indian and foreign universities.

Designed & Submitted By :  
 B.Sc. VI Sem,  
 Batch B1 (Group No.1) 2016-17

**Govt. Madhav Science P.G. College, Ujjain**  
 DST-FIST COLLEGE  
 "A" GRADE ACCREDITED THROUGH NAAC

**Basics of Bioinformatics**

**Introduction:** The collection, classification, storage and analysis of biochemical and biological information using computer especially as applied to molecular genetics and genomics.



**Goals of Bioinformatics:**

- ▶ Manage biological information.
- ▶ Organize biological information using databases.
- ▶ Process, analyze and visualize biological data.
- ▶ Share biological information to the public using the internet.

Designed & Presented By :  
 B.Sc. VI Sem , Group 7  
 Batch 2016-17

2017-18  
1 Year

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2017-18

CLASS: BSC.1<sup>ST</sup> YEAR

PAPER 101 : INTRODUCTION OF BIOINFORMATICS

MAX. MARKS : 10

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Bioinformatics introduction , Introduction of Biological databases.

Akshay Nayak

राज - निदेश शर्मा

CCE EXAMINATION 2017-2018  
Subject- Bioinformatics  
Semester- 1 Year

CCE EXAMINATION 2017-2018  
Subject- Bioinformatics  
Semester- 1 Year

- Margaret Day hoff developed the first protein sequence database called.....  
A) SWISSPROT  
 C) PIR  
B) PDB  
D) UNIPROT
- Each record in a database is called an  
 a) Entry  
c) Record  
b) File  
d) Ticket
- Literature databases include  
 a) MEDLINE and PubMed  
c) PubMed and PDB  
b) MEDLINE and PDB  
d) MEDLINE and PDS
- Which of the following is a protein sequence database?  
a) DDBJ  
c) GenBank  
b) EMBL  
d) PIR
- GenBank, the nucleic acid sequence database is maintained by  
a) Brookhaven laboratory  
c) European Molecular Biology laboratory  
b) DNA database of Japan (DDBJ)  
d) National Centre for Biotechnology Information
- Submission to GenBank are made using  
 a) BankIt and Sequin  
c) Sequin and BankIn  
b) BankIt and BankIn  
d) Entrez
- A comprehensive database for the study of human genetics Diseases and molecular biology is  
a) PDB  
c) OMIM  
b) STAG  
d) PSD
- All the following are protein sequence databases except  
a) PIR  
c) SWISS PROT  
b) PSD  
d) EMBL
- The information retrieval tool of NCBI GenBank is  
 a) Entrez  
c) SeqIn  
b) STAG  
d) text search
- Which of the following is a sequence alignment tool  
a) BLAST  
c) PROSITE  
b) PRINT  
d) PIR
- Name the database that deals with structure classification.  
a) SCOP  
b) VEST  
b) CATH  
 d) All of these

- Margaret Day hoff developed the first protein sequence database called.....  
A) SWISSPROT  
 C) PIR  
B) PDB  
D) UNIPROT
- Each record in a database is called an  
 a) Entry  
c) Record  
b) File  
d) Ticket
- Literature databases include  
 a) MEDLINE and PubMed  
c) PubMed and PDB  
b) MEDLINE and PDB  
d) MEDLINE and PDS
- Which of the following is a protein sequence database?  
a) DDBJ  
c) GenBank  
b) EMBL  
d) PIR
- GenBank, the nucleic acid sequence database is maintained by  
a) Brookhaven laboratory  
c) European Molecular Biology laboratory  
b) DNA database of Japan (DDBJ)  
d) National Centre for Biotechnology Information
- Submission to GenBank are made using  
a) BankIt and Sequin  
c) Sequin and BankIn  
b) BankIt and BankIn  
d) Entrez
- A comprehensive database for the study of human genetics Diseases and molecular biology is  
a) PDB  
c) OMIM  
b) STAG  
d) PSD
- All the following are protein sequence databases except  
a) PIR  
c) SWISS PROT  
b) PSD  
d) EMBL
- The information retrieval tool of NCBI GenBank is  
a) Entrez  
c) SeqIn  
b) STAG  
d) text search
- Which of the following is a sequence alignment tool  
a) BLAST  
c) PROSITE  
b) PRINT  
d) PIR
- Name the database that deals with structure classification.  
a) SCOP  
b) VEST  
b) CATH  
 d) All of these

18/01/17

10

18/01/17

6

3<sup>rd</sup> Sem

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2017-18

CLASS: BSC.III SEM.

PAPER : BIostatISTICS AND BIOINFORMATICS TECHNIQUES

MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Gel Electrophoresis: PAGE and SDS PAGE, Chromatography and its types, Introduction to plasmid and vectors, Gene cloning and its Application

15

Date  
Page

Name - Shrushti Mandloi  
Father's Name - Anil Mandloi  
Class - Bsc III sem Bi  
Roll No - 16143107

7  
15

Ravikant  
22/09/17

"JSM"

Date  
Page

(CCE)

Ques 1 what is gel electrophoresis? (3)

Ques 2 what is chromatography? (3)

Ques 3 explain NMR & X-Ray-1  
crystallography? (3)

Ques 4: explain graph. (3)

Ques 5- what is western blotting? (3)

Ques 6 what is Diagram? (3)

4<sup>th</sup> Sem  
**BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE**  
 SESSION: 2017-18  
 CLASS: BSC. IV SEM.  
**PAPER : GENOMICS AND PROTIOMICS**

MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Introduction of Genomics. Functional Genomics, Tools and techniques in proteomics, Protein- Protein interactions

DATE \_\_\_\_\_  
PAGE \_\_\_\_\_

CCE

Name - Sanjay Choudhary

class - B.Sc IV<sup>th</sup> Sem B1

Sub - Bioinformatics

college - Madhav science college Ujjain

Roll no. - 16143104

Enrollment No. - V16R166050329

DATE \_\_\_\_\_  
PAGE \_\_\_\_\_

Q. 1 जीनोमिक्स क्या है। Functional जीनोमिक्स को समझाए।

Ans जीनोमिक्स :- किसी आर्गैनिज्म में उपस्थित जीन के function को जीनोमिक्स कहते हैं।

फंक्शनल जीनोमिक्स :- किसी आर्गैनिज्म में उपस्थित जीनोम के फंक्शन को फंक्शनल जीनोमिक्स कहते हैं। फंक्शनल जीनोमिक्स में जीनोम के फंक्शन और इसके बारे में सभी जानकारी उपलब्ध करता है। फंक्शनल जीनोमिक्स के अंतर्गत सभी प्रकार के इंटरैक्शन प्राप्त करते हैं। फंक्शनल जीनोमिक्स को निम्न प्रकार से भी समझ सकते हैं। इसके अंतर्गत जीन के फंक्शन को ज्ञात करने में 1) जीनोम में उपस्थित जीन को ज्ञात करने में 2) विभिन्न प्रकार के जीन इंटरैक्शन में 3) जीनोम के फंक्शनल में identification

5<sup>th</sup> Sem

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2017-18

CLASS: BSC.V SEM.

PAPER : COMPUTATIONAL AND STRUCTURE BIOINFORMATICS

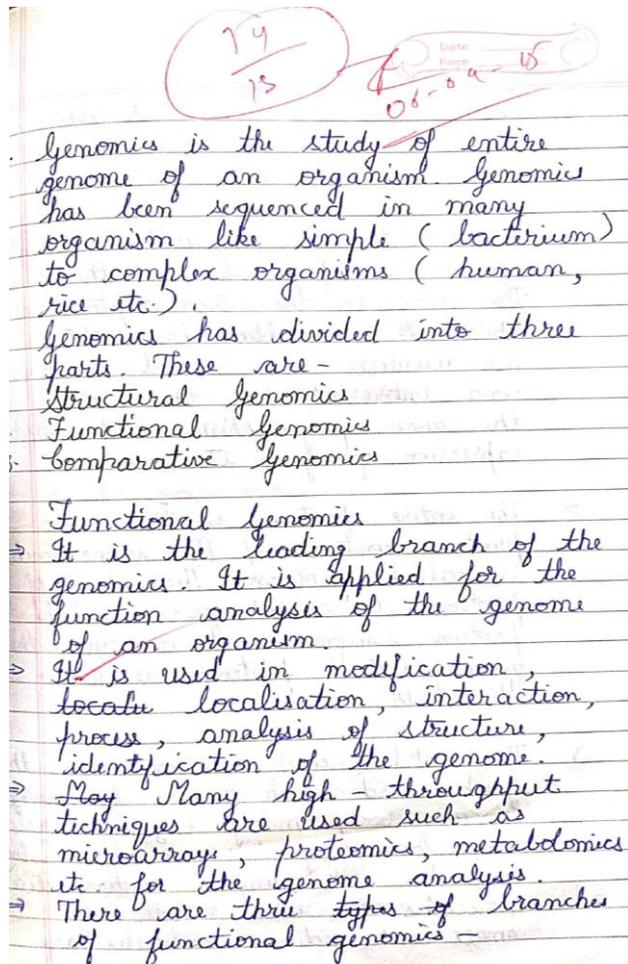
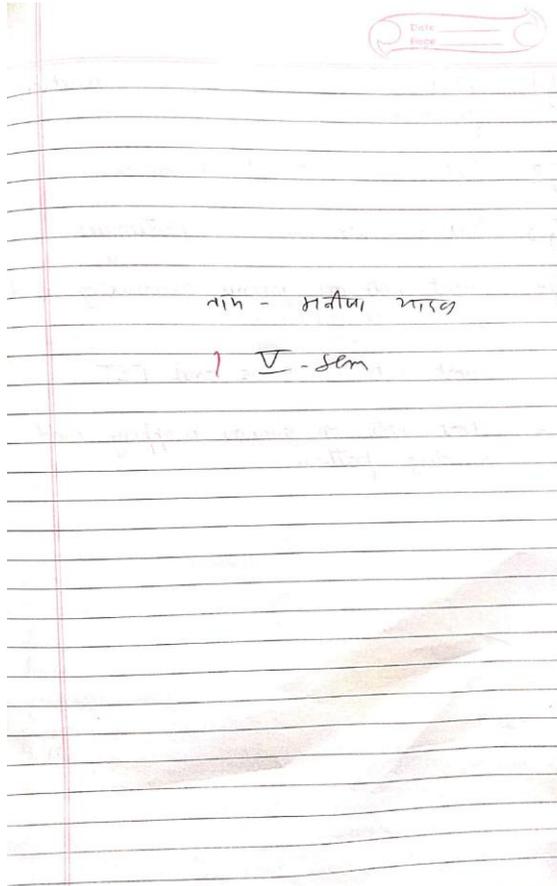
MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Introduction and working of microarray, Microarray: technique, Design, Analysis, Introduction to Human Genome Project, Introduction to HGO Ethical issues related to HGP



6th Sem

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2017-18

CLASS: BSC.VI SEM.

PAPER : MOLECULAR MODELING AND DRUG DESIGN

MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Multiple Choice Question, learner Centric

Difficulty Level: Moderate

Topic covered: Introduction to Molecular Modeling, Methods of Molecular modelling, Introduction & Technique of Molecular Dynamics &Monti Carlo.

CCE

Page  
Date

Name Sanjay choudhary

class B.Sc VI<sup>th</sup> Sem (III<sup>rd</sup> year)

Subject - Bioinformatics (CCE)

Section - B1

Roll No. - 16143104

Father's Name - Kamal choudhary

6  
15

Page  
Date

Q.1

रेसमॉल्यूटल ⇒

Ans

रेसमॉल्यूटल एक प्रकार का ड्रग्स एण्ड प्रोग्राम है। इसके द्वारा विभिन्न प्रकार के साफ्टवेयर को आसानी से बनाया जा सकता है। इसके द्वारा हम विभिन्न प्रकार के साफ्टवेयर की होमोलाजी मांडोला कर सकते हैं। रेसमॉल्यूटल एक प्रकार का प्रोग्राम है। इसके द्वारा हम आसानी से विभिन्न प्रकार के प्रोग्राम को विभिन्न प्रकार के साफ्टवेयर की सहायता से बनाया जा सकता है। रेसमॉल्यूटल के द्वारा कम्प्यूटर में विभिन्न प्रकार के साफ्टवेयर को बना सकते हैं। तथा कम्प्यूटर में विभिन्न प्रकार के साफ्टवेयर को लगाकर विभिन्न प्रकार के प्रोग्राम को बना सकते हैं। रेसमॉल्यूटल एक प्रकार का आसानी से उपयोग में आना

2018-19  
1st Year

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2018-19

CLASS: BSC.1<sup>ST</sup> YEAR

PAPER 101 : INTRODUCTION OF BIOINFORMATICS

MAX. MARKS : 10

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Assignment submission, learner Centric

Difficulty Level: Moderate

Topic covered: Bioinformatics introduction, Introduction of Biological databases, sequence alignment and types, sequence modification, gap, gap penalty and gap weights, dynamic programming, Introduction to nucleic acid database, Protein sequence database, Introduction to structure database.

Answer any five question.

1. What is sequence alignment?
2. Write two software name of scoring matrix?
3. What is gap penalty?
4. Define type of sequence modification in sequence alignment?
5. Define type of matrix using in sequence alignment?
6. Write short note on type of gap penalty?

DATE PAGE

जय श्री कृष्ण  
श्रीकाल

Name - JAYDEEP - BHATT  
Father's Name - AKSHAY BHATT  
Class - B.S.C. I year 2018-19  
Sub - Bioinformatics  
CCE-I  
12/oct/2018  
CBU checked  
12/10/18  
9/10

DATE PAGE

B.S.C  
CCE - I  
Sub - Bioinformatics

Questions: Any five,

1. What is Sequence Alignment?
2. Write two soft ware Name Scoring Matrix?
3. What is Gap Penalty?
4. Define types of Sequence Modification in Sequence alignment?
5. Define types of Matrix using in Sequence alignment?

DATE PAGE 12/oct/18

6. Write a Short Note on types of Gap Penalty?

Answers.

Ans. I. Sequence alignment → In bioinformatics a sequence alignment is a way of arranging DNA, RNA or Protein to identify region of similarity that may be helpful to identify function, structure or evolutionary relationship between the sequence alignment.

Sequences of nucleotide or amino acid residues typically represented as rows within a matrix.

2<sup>nd</sup> Sem

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2018-19

CLASS: BSC.1<sup>ST</sup> YEAR

PAPER 101 : INTRODUCTION COMPUTER AND PROGRAMMING

MAX. MARKS : 10

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Written Test, learner Centric.

Difficulty Level: Moderate

Topic covered: Introduction of computer, computer component and number system.

CCE - II<sup>nd</sup>

9



Govt. Madhav Science P.G. College, Ujjain

Department of Bioinformatics  
Govt. Madhav Science P.G. College, Ujjain  
Signature of Principal

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Roll No :- 17109474  
Name : MAHESH KUMAR DANGAT  
Father's Name : KAILASH CHANDRA DANGAT  
Class : B.Sc II<sup>nd</sup> year  
Section : B<sub>1</sub> (Bioinformatics)  
Subject : Bioinformatics  
Date of Examination : 02/02/2019  
Signature of Invigilator : [Signature]  
Signature of Valuer : [Signature]

Section-C

1. Q.1

Generation of Computer :- अब तक computers की चार generation की चुकी है, और वर्तमान में 5<sup>th</sup> generation प्रचलन में है।

1. प्रथम पीढ़ी :-

यह पीढ़ी 1945 से 1959 तक प्रचलित थी। इनमें वैक्यूम ट्यूब का उपयोग किया जाता था। यह इन पीढ़ी के कंप्यूटर speed भी बहुत slow थी।

2. द्वितीय पीढ़ी :-

यह पीढ़ी लगभग 1959 से 1964 तक प्रचलन में थी। इन पीढ़ी के कंप्यूटर में ट्रांजिस्टर का उपयोग किया जाता था।

5<sup>th</sup> Sem

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2018-19

CLASS: BSC.V SEM.

PAPER : COMPUTATIONAL AND STRUCTURE BIOINFORMATICS

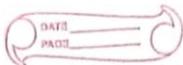
MAX. MARKS : 15

INSTRUCTOR NAME: Pradeep Saini

CCE mode: Written test, learner Centric

Difficulty Level: Moderate

Topic covered: Introduction of Phylogenetic Analysis, Methods Of Phylogenetic Analysis, Structural features of RNA: Primary, Secondary, Tertiary, Protein Tertiary structure prediction methods: Homology Modeling, Fold Recognition, Abintio Method



Name - Vikash Chouhan

Bsc. V Sem (B)

Sub. Bioinformatics

Roll. No. 16143111

20 18-19

~~12-18~~ (8/10)



(1) ~~the~~ microarray क्या है -  
DNA micro array  
Expression level है  
जिसका उपयोग analysis करने में किया जाता है  
DNA माइक्रोअरे को एक DNA chip से कहा जाता है  
DNA chip  
micro chip, Biochip  
DNA Array micro Array  
भावी नामों से भी जाना जाता है  
DNA  
microarray को 1990 में प्रस्तावित किया गया था  
जिसका उपयोग DNA में Hybridization जाता है DNA.

6<sup>th</sup> Sem

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2018-19

CLASS: BSC. VI SEM.

PAPER : MOLECULAR MODELING AND DRUG DESIGN

MAX. MARKS : 15

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Written test, learner Centric

Difficulty Level: Moderate

Topic covered: Introduction to Molecular Modeling, Methods of Molecular modelling, Introduction & Technique of Molecular Dynamics & Monte Carlo.

Name - kavita Rathore

Class - B.Sc. VI Sem.

Subject - Bioinformatics

Roll no - 16148084

7  
15

Question no - 4

Q-SAR →

Q-SAR एक ऐसा मॉडल है जो प्रोटीन मोलिक्यूल के डिजाइन में उपयोग किया जाता है। Q-SAR द्वारा प्रोटीन मोलिक्यूल Structure का पता करके उसका result निकाला जा सकता है। Protein Structure के द्वारा Q-SAR एक मोलिक्यूल का पता लगाते हैं।

Q-SAR ऐसा मॉडल है जो Protein molecular का result निकालता है।

यह Protein की Structure को निकालकर उसका result देता है। Q-SAR में NEBI के द्वारा उसे बनाया जाता है और उसका result निकाला जाता है।

यह molecule Structure की primary, secondary, tertiary के Structure को निकालता है। यह Q-SAR एक ऐसा molecular है जो होमोलॉजी मॉडलिंग की सहायता से अपना कार्य करता है।

Q-SAR के द्वारा होमोलॉजी

2019-20

1<sup>st</sup> Year

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2019-20

CLASS: BSC.1<sup>ST</sup> YEAR

PAPER 101 : INTRODUCTION OF BIOINFORMATICS

MAX. MARKS : 10

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Written Test, learner Centric.

Difficulty Level: Moderate

Topic covered: Bioinformatics introduction , Introduction of Biological databases.

Date: / / Page no: \_\_\_\_\_

CCE-11

Govt. Madhav Science  
College Ujjain (M.P.)

Name - Anjali Anjana

Father - Ritesh Anjana

Sub. - Bioinformatics

Section - B1

Submitted by  
Anjali Anjana

Guided by  
Mr. Ravi Kant Yadav

8/10

Date: / / Page no: 01

What is Bioinformatics? Explain history of Bioinformatics

1. "Bioinformatics is a constant of biology information technique and statics"
2. "Bioinformatics involves the application of computational technique to the representation and analysis of biological data."
3. Bioinformatics is intertwined with numbers different science.

Biological data :- DNA, RNA and Protein.

History of bioinformatics :-

Bioinformatics is a science which utilizes computer science and information technology to manage and analysis biological data. From 1950's awarded large amount of sequence data related to various living organism have been collected and stored in database. Bioinformatics has grown with a very fast pace and evolved with the initiation emission and completion of human Genome Project. So starting from early 1990's we lived in pre genome era while from 2003's awarded with the completion of human Genome project.

3<sup>rd</sup> Year

BIOINFORMATICS DEPARTMENT GOVT. MADHAV SCIENCE COLLEGE

SESSION: 2019-20

CLASS: BSC.III YEAR

PAPER 301 : Biostatistics

MAX. MARKS : 10

INSTRUCTOR NAME: MR. RAVIKANT YADAV

CCE mode: Assignment submission, learner Centric.

Difficulty Level: Moderate

Topic covered: Introduction of Biostatistics, data collection, central tendency and probability .

 **Govt. Madhav Science P.G. College, Ujjain**

(19)

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Signature of Principal

Name : RAHUL TRIVEDI

Father's Name : SHASHIKANT TI TRIVEDI

Class : BSc III year

Section : B1

Subject : Biostatistics

Date of Examination : \_\_\_\_\_

Signature of Invigilator : [Signature]

Signature of Valuer : \_\_\_\_\_

30  
419

$$2b = 8 - 4a$$

$$2b + a = 8 - 4$$

$$2b + a = 4$$

$$b + a = \frac{4}{2}$$

$$b + a = 2 \quad \text{--- (1)}$$

$$a - 2b = -3 \quad \text{--- (2)}$$

समी. (2) को 2 गुना करके (1) से घटाया गया है

$$a - 2b = -3 \times 2$$

$$a - 4b = -6$$

$$-2a = -6 + 4b$$

$$2a - b = -6 + 4b$$

$$2a - b = -6 + 4b$$

$$-b = -6 + 4b$$

$$2a - b = -10$$

$$a - b = -10 + 2$$

**CCE****Biotechnology**

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Sem	2015-16	Biotechnology	Short Answer Type test, Chart preparation
2.	B.Sc. 2 <sup>nd</sup> Sem	2015-16	Biotechnology	Long Answer Type test, Chart Preparation
3.	B.Sc. 3 <sup>rd</sup> Sem	2015-16	Biotechnology	Assignment, Chart Preparation
4.	B.Sc. 4 <sup>th</sup> Sem	2015-16	Biotechnology	Long Answer Type test, Chart Preparation
5.	B.Sc. 5 <sup>th</sup> Sem	2015-16	Biotechnology	Chart on various topics, Assignment
6.	B.Sc. 6 <sup>th</sup> Sem	2015-16	Biotechnology	Model Preparation, Assignment

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Sem	2016-17	Biotechnology	Long Answer Type test, Chart Preparation
2.	B.Sc. 2 <sup>nd</sup> Sem	2016-17	Biotechnology	Assignment, Chart Preparation
3.	B.Sc. 3 <sup>rd</sup> Sem	2016-17	Biotechnology	Short Answer Type test, Chart Preparation
4.	B.Sc. 4 <sup>th</sup> Sem	2016-17	Biotechnology	Chart on various topics, Assignment
5.	B.Sc. 5 <sup>th</sup> Sem	2016-17	Biotechnology	Short Answer Type test, Chart Preparation
6.	B.Sc. 6 <sup>th</sup> Sem	2016-17	Biotechnology	Long Answer Type test, Chart Preparation

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Year	2017-18	Biotechnology	Assignment, Chart Preparation
2.	B.Sc. 3 <sup>rd</sup> Sem	2017-18	Biotechnology	Short Answer Type test, Chart Preparation
3.	B.Sc. 4 <sup>th</sup> Sem	2017-18	Biotechnology	Short Answer Type test, Chart Preparation
4.	B.Sc. 5 <sup>th</sup> Sem	2017-18	Biotechnology	Charts on various topics, Assignment
5.	B.Sc. 6 <sup>th</sup> Sem	2017-18	Biotechnology	Long Answer Type test, Chart Preparation

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Year	2018-19	Biotechnology	Assignment, Chart Preparation
2.	B.Sc. 2 <sup>nd</sup> Year	2018-19	Biotechnology	Assignment, Chart Preparation
3.	B.Sc. 5 <sup>th</sup> Sem	2018-19	Biotechnology	Long Answer Type test, Chart Preparation
4.	B.Sc. 6 <sup>th</sup> Sem	2018-19	Biotechnology	Model Preparation, Assignment

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	B.Sc. 1 <sup>st</sup> Year	2019-20	Biotechnology	Charts on various topics, Assignment
2.	B.Sc. 2 <sup>nd</sup> Year	2019-20	Biotechnology	Long Answer Type test, Chart Preparation
3.	B.Sc. 3 <sup>rd</sup> Year	2019-20	Biotechnology	Assignment, Chart Preparation

2015-16

Govt. Madhav Science College, Ujjain

Department of Biotechnology

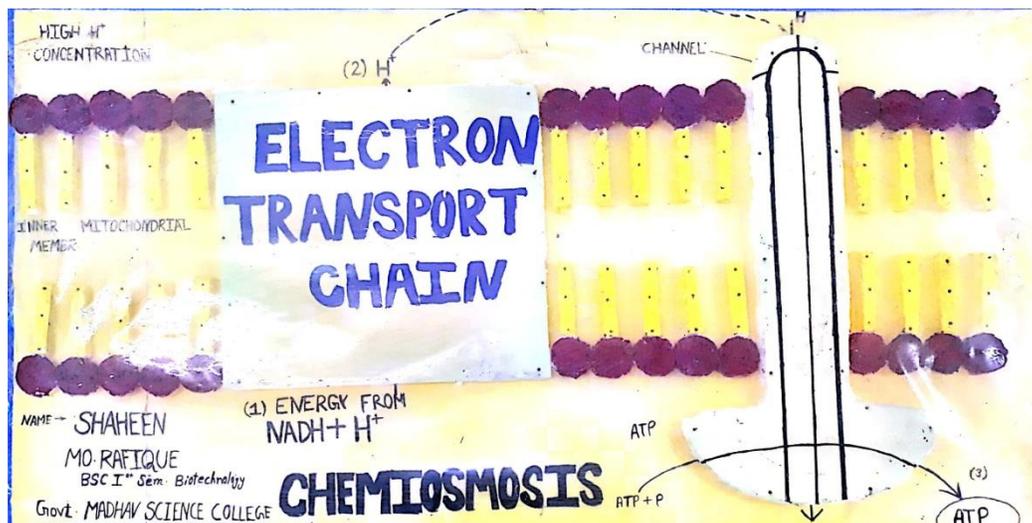
B.Sc. I Sem.

2015-16

Short Answer Type Question

Marks Max.-15

1. Write a short note on Peptidoglycan.
2. Define Enzymes.
3. Write applications of Chromatography.
4. Draw well labeled diagram of Clover leaf model of t-RNA.

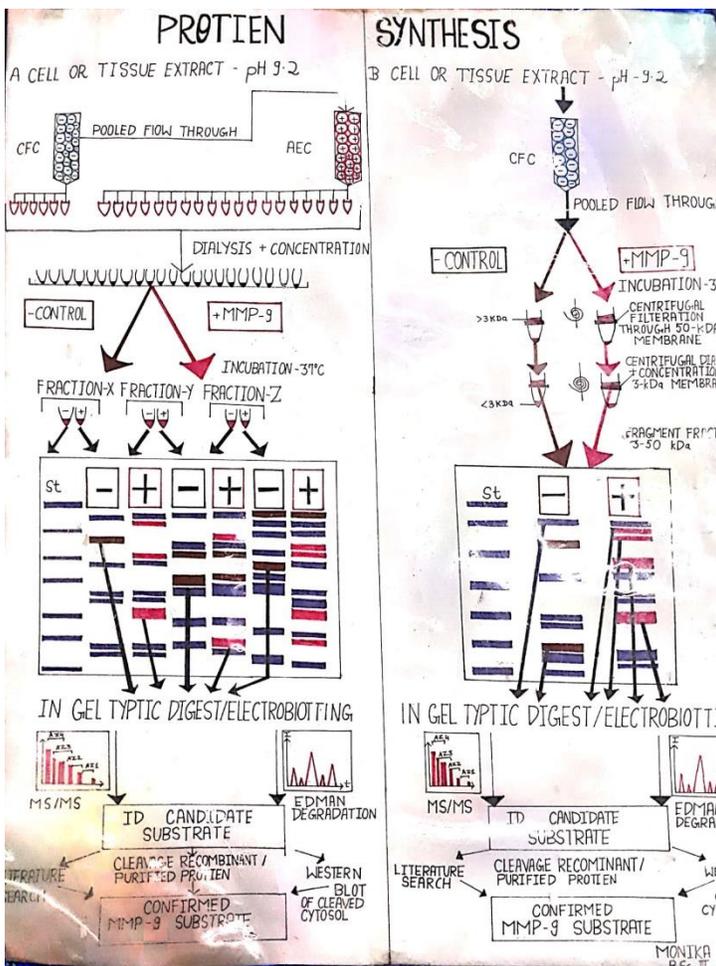


1. Write Short note-

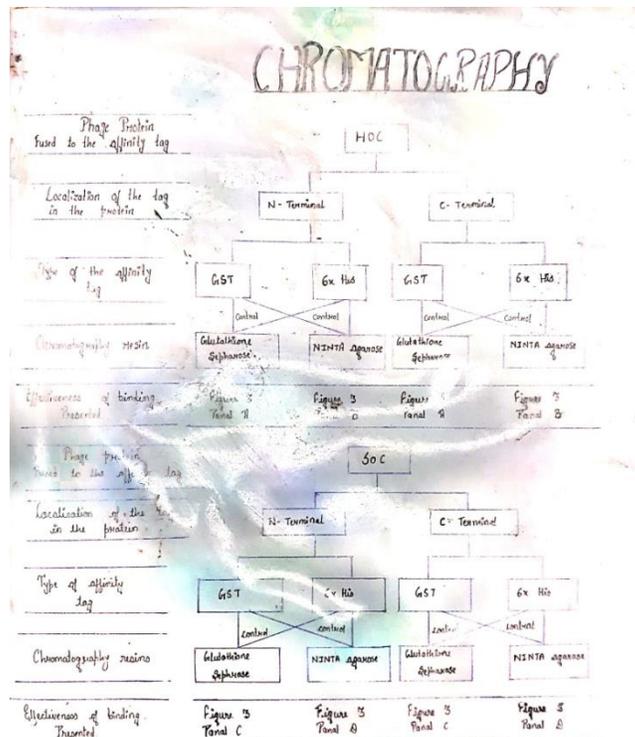
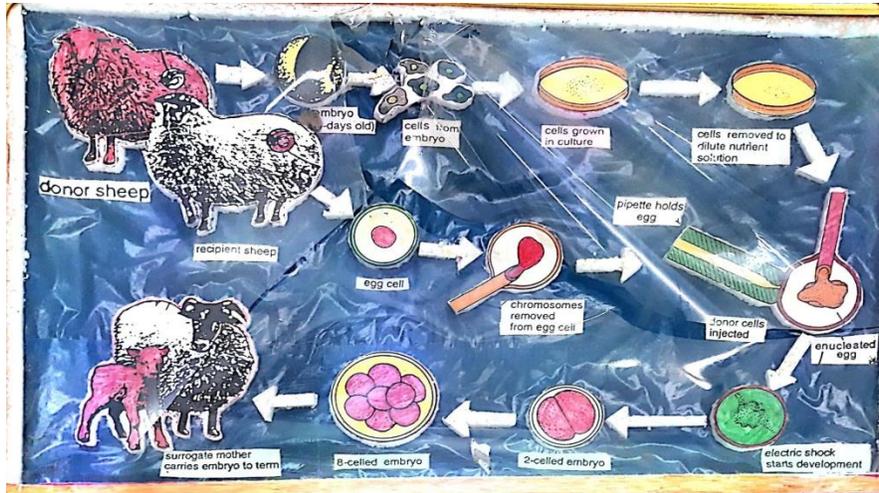
1. PPLO

2. Virus

2. Explain microbiological Media with its types.



1. Explain C-value paradox.
2. What is linkage and crossing over explain.
3. Write a note on chromosomal aberrations.
4. Write the different methods for DNA sequencing.



4<sup>th</sup> Sem

**Govt. Madhav Science College, Ujjain**

**Department of Biotechnology**

**B.Sc. IV Sem.**

**2015-16**

**Long Answer Type Question**

**Marks Max.-15**

- 1. Explain the industrial production of Penicillin.**
- 2. What is Probability. Explain with example.**

5<sup>th</sup> Sem

**Govt. Madhav Science College, Ujjain**

**Department of Biotechnology**

**B.Sc. V Sem.**

**2015-16**

**Assignment Type Question**

**Marks Max.-15**

- 1. Write a brief note on PCR.**
- 2. What is Hybridoma Technology. Explain.**
- 3. Describe cloning and regeneration.**
- 4. Write an essay on the Immobilization of Enzymes.**

6<sup>th</sup> Sem

**Govt. Madhav Science College, Ujjain**

**Department of Biotechnology**

**B.Sc. VI Sem.**

**2015-16**

**Assignment Type Question**

**Marks Max.-15**

- 1. Describe host defense mechanism.**
- 2. Write a brief note on organs of immune system.**
- 3. Explain antigen antibody reactions.**
- 4. Write an essay on the transplantation immunology.**

2016-17

Govt. Madhav Science College, Ujjain

Department of Biotechnology

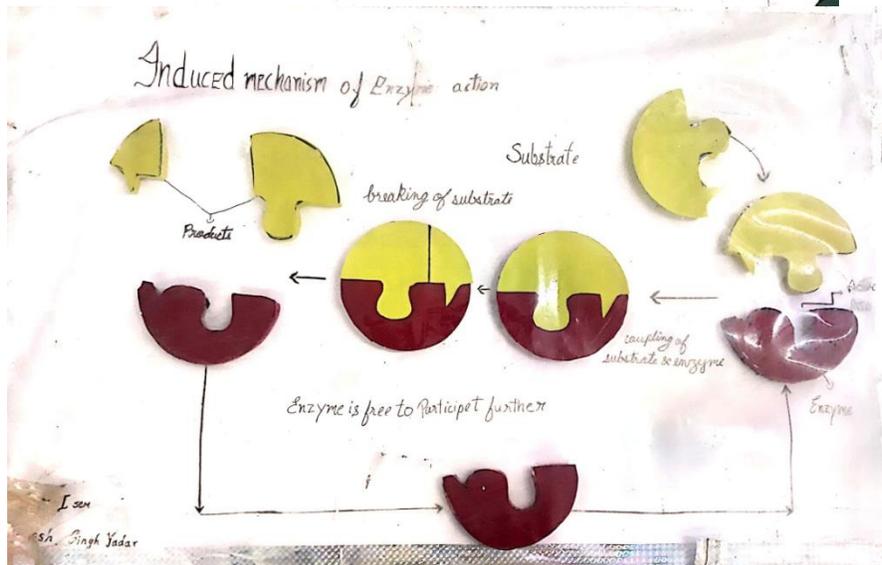
B.Sc. I Sem.

2016-17

Long Answer Type Question

Marks Max.-15

1. Write a note on classification of carbohydrates.
2. Explain the enzyme mechanism.



2<sup>nd</sup> Sem

Govt. Madhav Science College, Ujjain

Department of Biotechnology

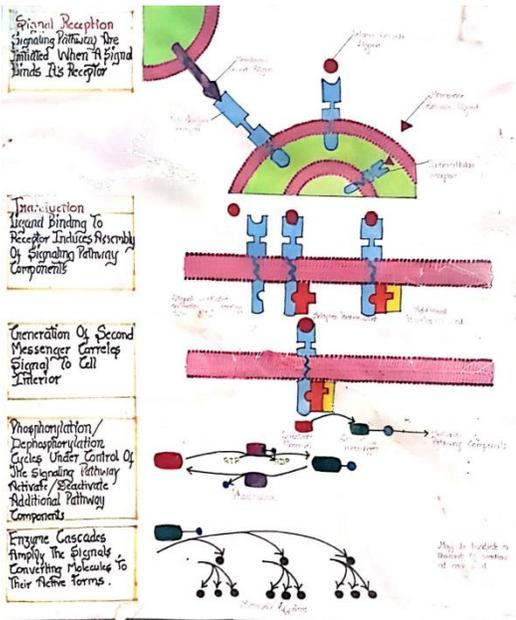
B.Sc. II Sem

2016-17

Assignment Question

Marks Max.-15

1. Write the contribution of Louis Pasteur in microbiology.
2. Explain the bacterial cell structure.
3. Draw the growth curve of bacterial cell.
4. Write the working and instrumentation of bright field microscope.



3<sup>rd</sup> Sem

Govt. Madhav Science College, Ujjain

Department of Biotechnology

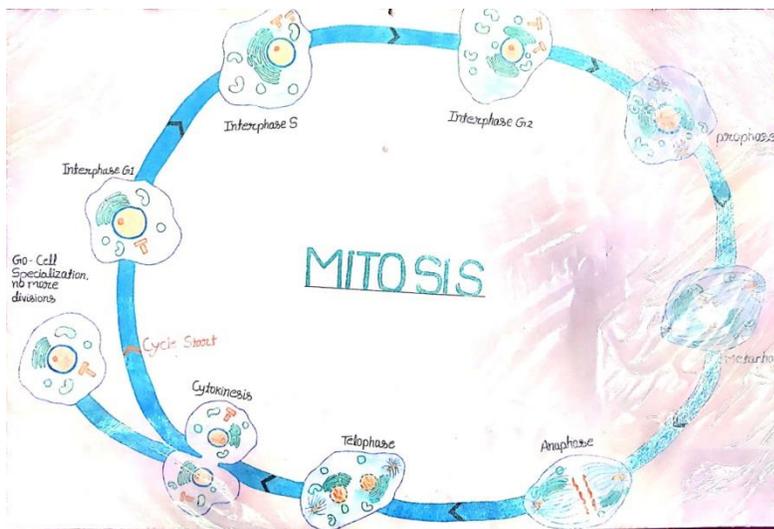
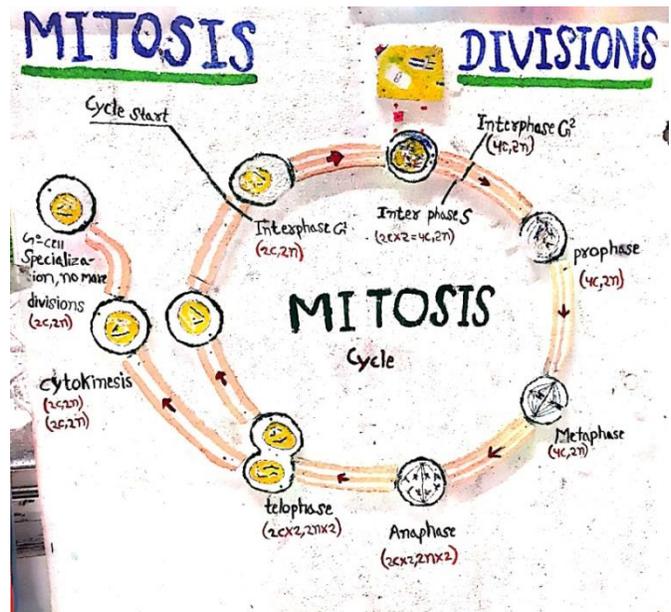
B.Sc. III Sem.

2016-17

Short Answer Type Question

Marks Max.-15

1. Explain Cell cycle.
2. Write a note on Genetic Code.
3. What is Banding Technique.
4. Define Synaptonimal complex.



# Zoology

Govt. Madhav Science P.G. College, Ujjain (M.P.)

Department of Zoology  
M.Sc. I Sem. CCE 2018-19

Paper III

Quantitative Zoology, Biodiversity and Wild Life

- Dr. Anil Pandey and Dr. Seema Trivedi

Mode: Assignment and Presentation

S.No.	Roll No.	Name of Student	Topic
1	18180331	Aayushi Gosar	Wild Life Sanctuaries
2	18180332	Abhilasha Masaniya	Correlation
3	18180333	Amit Vyas	Value of Wild Life
4	18180334	Ankita Davda	Biodiversity Conservation Method
5	18180336	Aruna Jawariya	Exponential Function
6	18180337	Hukum Singh Rathod	Project Tiger
7	18180338	Jayant Chouhan	Crocodile Breeding Project
8	18180339	Jayshree Patidar	Regression Analysis
9	18180340	Jitendra	Conservation of Wild Life in India
10	18180343	Karan Parmar	Wild Life in M.P. with reference to Reptiles, Birds and Mammals
11	18180344	Kavita Dangi	Matrices and Vectors
12	18180345	Khushboo Padihar	Endangered and Threatened Species
13	18180346	Kirti Bihaniya	Medieval uses of forest plants
14	18180352	Neha Choudhary	Concept and Principle of Biodiversity
15	18180354	Pooja Sisodiya	Project Tiger
16	18180356	Ravindra Malviya	Analysis of Variance
17	18180357	Rekha Gundiya	Biosphere Reserves
18	18180358	Shahnawaz Khan	National Parks of India
19	18180359	Shayana Khan	Endangered and Threatened Species of India
20	18180360	Shivani Rami	Values of Wild Life Positive and Negative
21	18180361	Shweta Choudhary	Causes of Loss of Biodiversity
22	18180362	Usha Bhuriya	Wild Life Protection Act
23	18180371	Azher Qureshi	Project Tiger
24	18180372	Kavita Sharma	Matrices and Vectors
25	18180374	Reeta Bhawsar	Regression
26	17109628	Vinod Gehlot	Medieval use of Forest Plant
27	18180348	Lalita Dangi	Biosphere Reserves
28	18180358	Manisha Malviya	Values of Wild Life Positive and Negative
29	18180342	Kalpna Gome	Biodiversity Conservation Method
30	18180347	Kajal Singhaniya	Biodiversity Conservation Method
31	18180341	Jyoti Sharma	Wild Life Protection Act
32	18180355	Rajesh Jat	Endangered and Threatened Species

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. I Sem. CCE 2018-19**

**Paper IV**

**Biomolecules and Structural Biology**

**- Dr. Shehla Ishaque and Dr. Rekha Khanna**

**Mode: Assignment and Presentation**

S.No.	Roll No.	Name of Student	Topic
1	18103331	Aayushi Gosar	Biomaterials
2	18180332	Abhilasha Masaniya	DNA & RNA : Double Helical Structure of DNA and RNA
3	18180333	Amit Vyas	Mechanism of Enzyme Action
4	18180334	Ankita Davda	Protein Synthesis in Eukaryotic Cells
5	18180335	Arti Tailor	Classification and Basis of Enzyme Kinetics
6	18180336	Aruna Jawariya	pH, pK, Acid, Bases, Buffers, Weak Bonds
7	18180337	Hukum Singh Rathod	Nano Particles
8	18180338	Jayant Chouhan	DNA & RNA : Double Helical Structure of DNA and RNA
9	18180339	Jayshree Patidar	Biomaterials
10	18180340	Jitendra Rajoria	DNA duplication, Recombination & Repair
11	18180341	Jyoti Sharma	Lac operon – Returned
12	18180342	Kalpana Gome	Acid soluble pool of living tissues, Amino acid, Monosachharide, Oligosachharide.
13	18180343	Karan Parmar	DNA Replication, Recombination and Repair
14	18180344	Kavita Dangi	Glycolysis and Glyconeogenesis
15	18180345	Khushboo Padihar	Protein Synthesis in Eukaryotic
16	18180346	Kirti Bihaniya	DNA Replication, Recombination and Repair
17	18180347	Koyal Singhaniya	Monosachharides, Oligosachharides, Nucleotides and Peptides
18	18180348	Lalita Dangi	Protein Synthesis in Eukaryotic
19	18180349	Mahima Suryavanshi	Basic concept of metabolism, coupled and interconnecting reaction of metabolism, cellular energy resources and ATP synthesis.

20	18180350	Maniha Malviya	Protein synthesis
21	18180351	Maya Panwar	Regulation of Enzymes
22	18180352	Neha Choudhary	RNA Synthesis and Splicing
23	1810353	Nidhi Malviya	Functional Importance of Lipid Storage and Membrane Lipids
24	1810354	Pooja Sisodiya	Nanoparticles
25	1810355	Rajesh Jat	DNA & RNA : Double Helical Structure of DNA.
26	1810356	Ravindar Malviya	Biosynthesis of Nucleotides
27	1810357	Rekha Gundiya	pH, pK, acids, bases, buffers, weak bonds
28	1810358	Shahnawaz Khan	Concept of free energy and thermodynamic principles in Biology
29	1810359	Shayana Khan	Glycolysis and Glyconeogenesis
30	1810360	Shivani Rami	Basic concept of metabolism : Coupled and interconnection reaction of metabolism, cellular energy resources and ATPs.
31	1810361	Shweta Choudhary	Protein synthesis
32	1810362	Usha Bhuriya	Oxidative phosphorylation, protein and its regulation
33	1810363	Vijay Kumar Solanki	Nano Particles
34	1810371	Azher Qureshi	Biosynthesis of amino acids
35	1810372	Kavita Sharma	Protein synthesis
36	1810373	Palkin Bhawsar	Regulation of Enzymes
37	1810374	Reetu Bhawsar	Mechanism of Enzyme Action.

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. I Sem. CCE 2019-20**

**Paper IV**

**Biomolecules and Structural Biology**

- **Dr. Shehla Ishaque and Dr. Rekha Khanna**

**Mode: Assignment and Presentation**

S.No.	Roll No.	Name of Student	Topic
1	19195330	Anil Bamniya	Questions related to Paper IV - Returned
2	19195331	Atul Singh Rajput	Questions related to Paper IV - Returned
3	19195332	Ayushi Bhawsar	Questions related to Paper IV - Returned
4	19195333	Balveer	Questions related to Paper IV - Returned
5	19195334	Bhawana Chauhan	Questions related to Paper IV - Returned
6	19195335	Bhavana Bhimavad	Questions related to Paper IV - Returned
7	19195336	Darshana	Questions related to Paper IV - Returned
8	19195337	Devkala	Questions related to Paper IV - Returned
9	19195338	Dilshad Mev	Questions related to Paper IV - Returned
10	19195339	Divya Patidar	Questions related to Paper IV - Returned
11	19195340	Garima Acharya	Questions related to Paper IV - Returned
12	19195341	Gulnaz Khan	Questions related to Paper IV - Returned
13	19195342	Harshita Jain	Nucleotides
14	19195343	Jaya Pandey	Questions related to Paper IV - Returned
15	19195344	Jayshri Sharma	Questions related to Paper IV - Returned
16	19195345	Johar Banu	Questions related to Paper IV - Returned
17	19195346	Jyoti Sharma	Questions related to Paper IV - Returned
18	19195347	Krihsna Sharma	Questions related to Paper IV - Returned
19	19195348	Kiran Waskel	Questions related to Paper IV - Returned
20	19195349	Komal Maheshwari	Questions related to Paper IV - Returned
21	19195350	Kusum Bhilala	Questions related to Paper IV - Returned
22	19195351	Laxmi Mori	Questions related to Paper IV - Returned
23	19195352	Madhu Patidar	Questions related to Paper IV - Returned
24	19195353	Manali Bhawsar	Questions related to Paper IV - Returned
25	19195354	Mayank Parihar	Questions related to Paper IV - Returned
26	19195355	Mohammad Shafiq	Questions related to Paper IV - Returned
27	19195356	Mohini Sharma	Questions related to Paper IV - Returned
28	19195357	Monika Patidar	Olligosachharides, DNA Repair, Fatty Acids, ATP, Lipid, RNA Synthesis
29	19195358	Monika Yadav	Questions related to Paper IV - Returned
30	19195359	Nidhi Umath	Questions related to Paper IV - Returned
31	19195360	Payal Rathore	Amino acids

32	19195361	Poonam Binjhade	Questions related to Paper IV - Returned
33	19195362	Priyanka Dwivedi	Questions related to Paper IV - Returned
34	19195363	Priyanka Rathore	Questions related to Paper IV - Returned
35	19195364	Priyanka Tailor	Questions related to Paper IV - Returned
36	19195365	Rahul Chawalkar	Questions related to Paper IV - Returned
37	19195366	Rajni Malviya	Questions related to Paper IV - Returned
38	19195367	Ravina Chaudhari	Questions related to Paper IV - Returned
39	19195368	Reetu Patidar	Questions related to Paper IV
40	19195369	Rishita Jain	Nucleotides
41	19195370	Rohit Kumar	Questions related to Paper IV - Returned
42	19195371	Roshanee Vasuniya	Questions related to Paper IV - Returned
43	19195372	Sadhana Mandloi	Questions related to Paper IV - Returned
44	19195373	Sanjay Panchal	Questions related to Paper IV - Returned
45	19195374	Shruti Sharma	Questions related to Paper IV - Returned
46	19195375	Sweta Alawa	Questions related to Paper IV - Returned
47	19195376	Sohan Sonvaniya	Lipid Storage
48	19195377	Sonam Saurashtry	Questions related to Paper IV - Returned
49	19195378	Sujata Soni	Questions related to Paper IV - Returned
50	19195379	Uma Gothi	Questions related to Paper IV - Returned
51	19195387	Vipul Dwivedi	Questions related to Paper IV - Returned
52	18180371	Azher Qureshi	Questions related to Paper IV - Returned
53		Mahima Suryawanshi	Questions related to Paper IV - Returned

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. IV Sem. CCE 2017-18**

**Paper I**

**Animal Behaviour and Neurophysiology**

**- Dr. Seema Trivedi and Dr. Anil Pandey**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	16143977	Aditi Panchal	Hormonal control of behaviour
2	16143980	Deepika Solanki	Motivation and Aggregation
3	16143981	Harsha Marmat	Social Behaviour
4	16143985	Leena Shukla	Perception of the Environment : Mechanical, visual and olfactory
5	16143988	Monika Parmar	Classification of Behavioural pattern
6	16143989	Neelam Tomar	Communication : Chemical, visual, light and audition of language
7	16143990	Nirmala Parmar	Biolumniscence
8	16143992	Prernan Shrivastav	What is Ecology ? Preparation of Ethogram.
9	16143993	Priyanka Sharma	Biological Rhyming
10	16143994	Rajun Garwal	Neural control of behaviour
11	16143995	Shraddha Mehar	Ethology, classification of behavioural pattern
12	16143996	Srashti Jain	Neural and hormonal control of behaviour
13	16143997	Tabassum Mansuri	Thermoregulation in Haemotherms and Poikotherms

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. IV Sem. CCE 2018-19**

**Paper I**

**Animal Behaviour and Neurophysiology**

- **Dr. Seema Trivedi and Dr. Anil Pandey**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	17131352	Ajay Dhanak	Inheritance behaviour and relationship
2	17131353	Alka Sharma	Migrations of turtles, birds and fishes
3	17131354	Anil Parmar	Reflex and complex behaviour
4	17109622	Anita Mikati	Group selection, kin selection
5	17131355	Antimbala Sharma	Bioluminescence
6		Babita Patidar	Physiology of vision and comparative study of photoreceptor
7		Bahadur Singh Parmar	Social organization in primates
8	17131358	Devshree Chandrawat	Evolution of language (Primates)
9		Divya Goswami	Altruism, reciprocal altruism
10	17131361	Harsha Suryawanshi	Genetic and Environmental components and developmental behaviour
11	17131362	Hemlata Saurashtriya	Chemical, visual light communication
12	17131365	Kailash Nandeda	Photoreceptor
13	17131366	Kalpana Kumari Patidar	Photoreceptor
14	17131367	Kavita Chouhan	Social organization in insects
15	17131368	Ku. Saloni Baranya	Animal Physiology
16	17131369	Manisha Sinha	Phonoreceptor
17	17131370	Manju Panwar	Aggregations
18	17131372	Monika Kuril	Circadian and circannual rhythms
19	17131372	Narsingh	Orientation and Navigation
20	17131373	Nena Rathore	Thermoregulation
21	17131374	Pooja Malviya	Biological Rhythms
22	17131375	Priyanka Vishwakarma	Perception of the Environment
23	17131376	Rajkumari Malviya	Learning and memory
24	17131377	Rju Malviya	Ethology as a branch of biology and orientation.
25	17131378	Rukhama Choudhary	Hearding in mammals

26	17131379	Sajan Lal Parmar	Parental care
27	17131381	Savita Rayhore	Thermoregulation - Homeothermic and Poikilothermic
28	17109625	Shiv Kumar Nagar	Poikilothermic
29	17109626	Shivani Gupta	Social organization in primates
30	17109627	Vaishali Bali	Chemoreceptor
31	17131383	Vinita Kumari Patel	Homing Territoriality - most parasite relationship
32	17109628	Vinod Gehlot	Homeothermic
33	17131384	Zuber Khan	Learning and reasoning
34	17109624	Monika Raikwar	Classification of behaviour pattern

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. II Sem. CCE 2019-20**

**Paper II**

**Population Ecology and Environmental Physiology**

- **Dr. Anil Pandey and Dr. Seema Trivedi**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	19195330	Anil Bamniya	Demography
2	19195331	Atul Singh Rajput	Population Regulation
3	19195332	Ayushi Bhawsar	Ecophysiological adaptation - Fresh water - Environment
4	19195333	Balveer	Ecophysiological adaptation - Marine wate - Environment
5	19195334	Bhawana Chauhan	Ecophysiological adaptation - Terrestrial - Environment
6	19195335	Bhavana Bhimavad	Limiting factor
7	19195336	Darshana	Inter and Intraspecific relationship
8	19195337	Devkala	Predator prey relationship
9	19195338	Dilshad Mev	Population growth
10	19195339	Divya Patidar	Population and their characters
11	19195340	Garima Aacharya	Conservation management - natural resources
12	19195341	Gulnaz Khan	Sustainable development
13	19195342	Harshita Jain	Endothermy
14	19195343	Jaya Pandey	Physiological response to body exercise
15	19195344	Jayshri Sharma	Physiological response to oxygen deficient stress
16	19195345	Johar Banu	Demography
17	19195346	Jyoti Sharma	Population characteristics
18	19195347	Krihsna Sharma	Population regulation
19	19195348	Kiran Waskel	Population and their characters
20	19195349	Komal Maheshwari	Limit factor
21	19195350	Kusum Bhilala	Life table, generation time and reproductive value
22	19195351	Laxmi Mori	Growth of organism with non-overlapping generation
23	19195352	Madhu Patidar	Time lag model of population grwoth
24	19195353	Manali Bhawsar	Stable age distribution
25	19195354	Mayank Parihar	Adaptation level of adaptation and

			significanc of body size.
26	19195355	Mohammad Shafiq	Extrinsic machanism of population growth
27	19195356	Mohini Sharma	Mediation, yoga and their benefits
28	19195357	Monika Patidar	Intrinsic mechanism of population growth
29	19195358	Monika Yadav	Aquatic Environment - Fresh water
30	19195359	Nidhi Umath	Aquatic Environment - Marine environment
31	19195360	Payal Rathore	Aquatic Environment - Shore and Estuarine
32	19195361	Poonam Binjhade	Predator Dynamics
33	19195362	Priyanka Dwivedi	Concept of Homeostasis
34	19195363	Priyanka Rathore	Optimal foraging theory
35	19195364	Priyanka Tailor	Prey selectivity
36	19195365	Rahul Chawalkar	Meditation
37	19195366	Rajni Malviya	Mutualism plant pollination interaction
38	19195367	Ravina Chaudhari	Yoga and their effecs
39	19195368	Reetu Patidar	Adaptation
40	19195369	Rishita Jain	Adaptation - Freshwater adaptation
41	19195370	Rohit Kumar	Adaptation - Marine adaptation
42	19195371	Roshanee Vasuniya	Adaptation - Terrestrial adaptation
43	19195372	Sadhana Mandloi	Demography
44	19195373	Sanjay Panchal	Life table
45	19195374	Shruti Sharma	Adaptation
46	19195375	Sweta Alawa	Generation time
47	19195376	Sohan Sonvaniya	Population and their characters
48	19195377	Sonam Saurashtry	Level of adaptation
49	19195378	Sujata Soni	Adaptation - Level of adaptation - signfication of body
50	19195379	Uma Gothi	Environment Impact assessment
51	19195387	Vipul Dwivedi	Time log model of population grwoth
52	18180371	Azher Qureshi	Demography
53		Mahima Suryawanshi	Adaptation - Level of adaptation - signfication of body

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. II Sem. CCE 2018-19**

**Paper I**

**General and Comparative Animal Physiology and Endocrinology**

**- Dr. Shehla Ishaque and Dr. Rekha Khanna**

**Mode: Assignment and Presentation**

S.No.	Roll No.	Name of Student	Topic
1	18180331	Aayushi Gosar	Chromatophores
2	18180332	Abhilasha Masaniya	Patterns of nitrogen excretion in different animals
3	18180333	Amit Vyas	Comparative study of Equilibrium receptors
4	18180334	Ankita Davda	Chromatophores and regulation of their functions
5	18180336	Aruna Jawariya	Patterns of nitrogen excretion in different animals
6	18180337	Hukum Singh Rathod	Gen and comparative animals physo of chemoreceptors
7	18180338	Jayant Singh Chouhan	Photoreceptors
8	18180339	Jayshree Patidar	Patterns of nitrogen excretion in different animals
9	18180340	Jitendra Rajoria	Comparative study of chemoreceptors
10	18180343	Karan Parmar	Hormones, their classification and chemical nature
11	18180344	Kavita Dangi	General and comparative animal physiology and endocrinology
12	18180345	Khushboo Padihar	Photoreceptors
13	18180346	Kirti Bihaniya	Regulation of respiration
14	18180352	Neha Choudhary	Respiratory pigments
15	18180354	Pooja Sisodiya	Patterns of nitrogen excretion in animal groups
16	18180356	Ravindra Malviya	Photoreceptors
17	18180357	Rekha Gundiya	Mechanism of hormone a tion
18	18180358	Shahnawaz Khan	Nitrogen excetion in different animal groups
19	18180359	Shayana Khan	Osmoregulation in different animals
20	18180360	Shivani Rami	Mechanoreception
21	18180361	Shweta Choudhary	Physiology of Nerve impulse
22	18180362	Usha Bhuriya	Physiology of impulse transmission through nerves and synapses
23	18180371	Azher Qureshi	Respiratory pigments in phylogene groups
24	18180372	Kavita Sharma	Regulation of respiration
25	18180371	Reetu Bhawsar	Comparative physiology of digestion
26	17109628	Vinod Gehlot	Photoreceptors

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. II Sem. CCE 2017-18**

**Paper I**

**General and Comparative Animal Physiology and Endocrinology**

**- Dr. Shehla Ishaque and Dr. Rekha Khanna**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	17131352	Ajay Dhanak	Autonomic nervous system
2	17131353	Alka Sharma	Hormones and their classification
3	17131354	Anil Parmar	Photoreceptors
4	17109622	Anita Mikati	Physiology of digestion
5	17131355	Antimbala Sharma	Mechanism of Hormone action
6		Babita Patidar	Bioluminescence
7		Bahadur Singh Parmar	Chromatophore
8	17131358	Devshree Chandrawat	Mechanoreceptors
9		Divya Goswami	Hormone receptors and signal transduction mechanism
10	17131361	Hemlata Sauryawanshi	Phylogeny of endocrine glands (Thyroid gland)
11	17131362	Hemlata Saurashtriya	Chromatophores
12	17131365	Kailash Nandeda	Osmoregulation
13	17131366	Kalpana KumariPatidar	Pheromones as means of communication among animals
14	17131367	Kavita Chouhan	Osmoregulation in different animal groups
15	17131368	Ku. Saloni Baranya	Physiology of digestion
16	17131369	Manisha Sinha	Osmoregulation in different animal groups
17	17131370	Manju Panwar	Mechanism of Hormone action
18	17131372	Monika Kuril	Chromatophores and regulation of their functions
19	17131372	Narsingh Tanwar	Mechanoreceptors
20	17131373	Neha Rathore	Respiratory pigments through different phylogenetic groups
21	17131374	Pooja	Bioluminescence
22	17131375	Priyanka Vishwakarma	Phylogeny of endocrine glands (Thyroid gland)
23	17131376	Rajkumari Malviya	Bioluminescence
24	17131377	Raju Malviya	Phylogeny of endocrine glands (Thyroid

			gland)
25	17131378	Rukhama Choudhary	Thermoregulation in Homeotherms, Parkilotherms
26	17131379	Sajan lal Parmar	Bioluminescence
27	17131381	Savita Rathore	Transport of O <sub>2</sub> and CO <sub>2</sub> in blood and body fluids
28	17109625	Shiv Kumar Nagar	Comparative study of phenoreceptors
29	17109626	Shivani Gupta	Bioluminescence as a means of communication among animals
30	17109627	Vaishali Bali	Respiration
31	17131383	Vinita Kumari Patel	Hormone their classification and chemical nature
32	17109628	Vinod Gehlot	Transport of O <sub>2</sub> and CO <sub>2</sub> in blood and body fluids
33	17131384	Zuber Khan	Kidney regulation
34	17109624	Monika Raikwar	Thermoregulation

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. I Sem. CCE 2019-20**

**Paper III**

**Quantitative Biology, Biodiversity and Wild Life**

**- Dr. Anil Pandey and Dr. Seema Trivedi**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	19195330	Anil Bamniya	Ten questions to each student
2	19195331	Atul Singh Rajput	Ten questions to each student
3	19195332	Ayushi Bhawsar	Ten questions to each student
4	19195333	Balveer	Ten questions to each student
5	19195334	Bhawana Chauhan	Ten questions to each student
6	19195335	Bhawana Bhimavad	Ten questions to each student
7	19195336	Darshana	Ten questions to each student
8	19195337	Devkala	Ten questions to each student
9	19195338	Dilshad Mev	Ten questions to each student
10	19195339	Divya Patidar	Ten questions to each student
11	19195340	Garima Acharya	Ten questions to each student
12	19195341	Gulnaz Khan	Ten questions to each student
13	19195342	Harshita Jain	Ten questions to each student
14	19195343	Jayaa Pandey	Ten questions to each student
15	19195344	Jayshri Sharma	Ten questions to each student
16	19195345	Johar banu	Ten questions to each student
17	19195346	Jyoti Sharma	Ten questions to each student
18	19195347	Krishna Sharma	Ten questions to each student
19	19195348	Kiran Waskel	Ten questions to each student
20	19195349	Koma Maheshwari	Ten questions to each student
21	19195350	Kusum Bhilala	Ten questions to each student
22	19195351	Laxmi Mori	Ten questions to each student
23	19195352	Madhu Patidar	Ten questions to each student
24	19195353	Manali Bhaswar	Ten questions to each student
25	19195354	Mayank Parihar	Ten questions to each student
26	19195355	Mohammad Shafiq	Ten questions to each student
27	19195356	Moihni Sharma	Ten questions to each student
28	19195357	Monika Patidar	Ten questions to each student
29	19195358	Monika Yadav	Ten questions to each student
30	19195359	Nidhi Umath	Ten questions to each student
31	19195360	Payal Rathore	Ten questions to each student
32	19195361	Poonam Binjhade	Ten questions to each student

33	19195362	Priyanka Dwivedi	Ten questions to each student
34	19195363	Ku. Priyanka Rathore	Ten questions to each student
35	19195364	Priyanka Tailor	Ten questions to each student
36	19195365	Rahul Chawalikar	Ten questions to each student
37	19195366	Rajni Malviya	Ten questions to each student
38	19195367	Ravina Chaudhari	Ten questions to each student
39	19195368	Reetu Patidar	Ten questions to each student
40	19195369	Rishita Jain	Ten questions to each student
41	19195370	Rohit Kumar	Ten questions to each student
42	19195371	Roshanee Vasuniya	Ten questions to each student
43	19195372	Sadhana Mandloi	Ten questions to each student
44	19195373	Sanjay Panchal	Ten questions to each student
45	19195374	Shruti Sharma	Ten questions to each student
46	19195375	Sweta Alawa	Ten questions to each student
47	19195376	Sohan Sonvaniya	Ten questions to each student
48	19195377	Sonam Saurashtry	Ten questions to each student
49	19195378	Sujata Soni	Ten questions to each student
50	19195379	Uma Gothi	Ten questions to each student
51	19195387	Vipul Dwivedi	Ten questions to each student
52	18180371	Azher Qureshi	Ten questions to each student
53		Mahima Suryawanshi	Ten questions to each student

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. III Sem. CCE 2019-20**

**Paper I**

**Comparative Anatomy of Vertebrates**

**- Dr. Seema Trivedi and Dr. Shailja Acharya**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	18180331	Aayushi Gohar	Ten questions to each student
2	18180332	Abhilasha Masaniya	Ten questions to each student
3	18180333	Amit Vyas	Ten questions to each student
4	18180334	Ankita Devda	Ten questions to each student
5	18180336	Aruna Jawariya	Ten questions to each student
6	18180338	Jayant	Ten questions to each student
7	18180339	Jayshree Patidar	Ten questions to each student
8	18180340	Jitendra	Ten questions to each student
9	18180343	Karan Parmar	Ten questions to each student
10	18180344	Kavita Dangi	Ten questions to each student
11	18180345	Khushboo Padihar	Ten questions to each student
12	18180346	Kirti Bihaniya	Ten questions to each student
13	18180352	Neha Choudhary	Ten questions to each student
14	18180354	Pooja Sisodiya	Ten questions to each student
15	18180358	Shahnawaz Khan	Ten questions to each student
16	18180359	Shayana Khan	Ten questions to each student
17	18180360	Shivani Rami	Ten questions to each student
18	18180361	Sweta Choudhary	Ten questions to each student
19	18180362	Usha Bhuriya	Ten questions to each student
20	18180371	Azhar Qureshi	Ten questions to each student
21	18180372	Kavita Sharma	Ten questions to each student
22	18180374	Reetu Bhawsar	Ten questions to each student

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. III Sem. CCE 2017-18**

**Paper I**

**Comparative Anatomy of Vertebrates**

**- Dr. Seema Trivedi and Dr. Shailja Acharya**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	16143977	Aditi Panchal	Comparative account of Jaw suspension
2	16143980	Deepika Solanki	Comparative account of Electroreception
3	16143981	Harsha Marmat	General organization of cyclostomes
4	16143985	Leena Shukla	Flight adaptation in vertebrates
5	16143988	Monika Parmar	Origin evolution general organization affinity of ostraderum
6	16143989	Neelam Tomar	Comparative account of Jaw suspension and vertebral column
7	16143990	Nirmala Parmar	Aquatic adaptation in birds and mammals
8	16143992	Prerna Shrivastav	General account of Elasmobranchii, Holocephalii
9	16143993	Priyanka Sharma	General account of Elasmobranchii and Holocephalii
10	16143994	Rajun Garwal	Comparative anatomy of Evolution of Aortic arches
11	16143995	Shraddha Mehar	Comparative account of lateral line system
12	16143996	Srashthi Jain	Blood circulation in vertebrates
13	16143997	Tabassum Mansuri	Evolution of heart
		Urmila Chouhan	Flight adaptation in vertebrates
		Rajendra Vaskel	Orgin of chordata

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. III Sem. CCE 2018-19**

**Paper I**

**Comparative Anatomy of Vertebrates**

- **Dr. Seema Trivedi and Dr. Shailja Acharya**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	17131352	Ajay Dhanak	Electroreception in vertebrates
2	17131353	Alka Sharma	Evolution of urinogenetal system of vertebrates
3	17131354	Anil Parmar	Flasmobreach, Anlocephali, Dipnoi-General account
4	17109622	Anita Mikati	Electroreception
5	17131355	Antimbala Sharma	Origin of chordata and concept of protochordata
6		Babita Patidar	Blood circulation in various vertebrates
7		Bahadur Singh Parmar	Skin (Intequment) and its derivatives
8	17131358	Devshree Chandrawat	Origin and evolution of ostracolera
9		Divya Goswami	Blood circulation in vertebrate group
10	17131361	Harsha Suryawanshi	Comparative anatomy of brain and spinal cord
11	17131362	Hemlata Saurashtriya	Comparative anatomy of brain and spinal cord
12	17131365	Kailash Nandeda	Flight adaptation in birds
13	17131366	Kalpana Kumari Patidar	Aquatic adaptation in birds and mammals
14	17131367	Kavita Chouhan	Evolution of heart
15	17131368	Ku. Saloni Baranya	Respiration physiology
16	17131369	Manisha Sinha	Peripheral and autonomous nervous system
17	17131370	Manju Panwar	Comparative account on jaw suspension and vertebral column
18	17131372	Monika Kuril	Comparative account of lateral line system
19	17131372	Narsingh	Aortic arches
20	17131373	Nena Rathore	Evolution of heart
21	17131374	Pooja Malviya	Integument and their derivatives
22	17131375	Priyanka	Respiratory system in vertebrates

		Vishwakarma	
23	17131376	Rajkumari Malviya	Comparative account of respiratory system
24	17131377	Rju Malviya	Comparative account of digestive system in vertebrates
25	17131378	Rukhama Choudhary	Evolution of Aortic arches
26	17131379	Sajan Lal Parmar	Respiratory system in vertebrates
27	17131381	Savita Rayhore	Digestive system of vertebrates (comparative)
28	17109625	Shiv Kumar Nagar	Lateral line system in vertebrates
29	17109626	Shivani Gupta	Aquatic adaptation
30	17109627	Vaishali Bali	General organization, species characters of cyclostomes
31	17131383	Vinita Kumari Patel	Flight adaptation
32	17109628	Vinod Gehlot	
33	17131384	Zuber Khan	Comparative account of olfactory organ
34	17109624	Monika Raikwar	Respiratory system of vertebrates

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. III Sem. CCE 2018-19**

**Paper II**

**Limnology**

- **Dr. Anil Pandey and Dr. Rekha Khanna**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	16143979	Ashish Sisodiya	Questions given related to syllabus and assignment returned to the students
2	17109624	Monika Raikwar	Questions given related to syllabus and assignment returned to the students
3	17109626	Shivani Gupta	Questions given related to syllabus and assignment returned to the students
4	17109627	Vaishali Bali	Questions given related to syllabus and assignment returned to the students
5	17131352	Ajay Dhanak	Questions given related to syllabus and assignment returned to the students
6	17131353	Alka Sharma	Questions given related to syllabus and assignment returned to the students
7	17131354	Anil Parmar	Questions given related to syllabus and assignment returned to the students
8	17131355	Antimbala Shah	Questions given related to syllabus and assignment returned to the students
9	17131356	Babita Paidar	Questions given related to syllabus and assignment returned to the students
10	17131357	Bahadur Singh	Questions given related to syllabus and assignment returned to the students
11	17131358	Devshree Chandel	Questions given related to syllabus and assignment returned to the students
12	17131359	Divya Goswami	Questions given related to syllabus and assignment returned to the students
13	17131361	Harsha Suryavanshi	Questions given related to syllabus and assignment returned to the students
14	17131362	Hemlata Sourashtriya	Questions given related to syllabus and assignment returned to the students
15	17131365	Kailash Nandeda	Questions given related to syllabus and assignment returned to the students
16	17131366	Kalpana Kumari Patidar	Questions given related to syllabus and assignment returned to the students
17	17131367	Kavita Chouhan	Questions given related to syllabus and

			assignment returned to the students
18	17131369	Manisha Sinha	Questions given related to syllabus and assignment returned to the students
19	17131370	Manju Panwar	Questions given related to syllabus and assignment returned to the students
20	17131371	Monika Kuril	Questions given related to syllabus and assignment returned to the students

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. III Sem. CCE 2016-17**

**Paper III**

**Ecotoxicology**

**- Dr. S. Sonche and Dr. S. Ishaque**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	14145343	Anita Ningwal	Concept of Ecosystem
2	14145347	Madanlal Solanki	Remote Sensing - Basic Concept and Application
3	14145358	Sharmila Mourya	Abiotic and Biotic Factors
4	15145594	Bablee Sisodiya	Environmental Pollution
5	15145595	Bhojraj Gujer	Important Heavy Minerals
6	15145596	Dilip Kumar Saurashtriya	Environmental Pollution and their control
7	15145598	Harsha Rajput	Remote Sensing - Basic Concept and Application
8	15145600	Jaynarayan Gurjar	Basic concept of Toxicology
9	15145601	Laxmi Vaghela	Occupation Health Hazard
10	15145602	Manisha	Noise Pollution
11	15145605	Neelam Gohil	Pesticides and their effects
12	15145606	Pintu Nagar	Public Health Hazards
13	15145608	Priya Devatwal	Concept of Ecosystem
14	15145609	Puja Pandya	Kinds of Environmental Pollution and their control
15	15145611	Rakesh Sihanam	Energy Flow in Environment
16	15145612	Ram Bharose	Vehicular Exhaust Pollution
17	15145615	Ritu Parmar	Toxicology, Basic Concepts, Principles and Various Agents
18	15145616	Shubham Rathore	Energy Flow in Ecosystem
19	15145617	Uma Dangi	Abiotic and Biotic Factors
20	15145618	Urmila Chouhan	Noise Pollution / Abiotic and Biotic
21	15145619	Vikram Panwar	Concepts of Ecosystem

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. III Sem. CCE 2018-19**

**Paper III**

**Ecotoxicology**

**- Dr. S. Sonche and Dr. S. Ishaque**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	16143979	Ashish Sisodiya	Abiotic and Biotic Factors
2	17109624	Monika Raikwar	Food toxicant and their control methods, heavy metal toxicity
3	17109626	Shivani Gupta	Productivity Production and Analysis
4	17109627	Vaishali Bali	Basic concept of Ecosystem
5	17131352	Ajay Dhanak	Public health hazards due to environmental disasters
6	17131353	Alka Sharma	Basic concepts, principles and various types of toxic agents
7	17131354	Anil Parmar	Vehicular exhaust pollution, causes and remedies
8	17131355	Antimbala Shah	Abiotic and biotic factors of Ecosystem
9	17131356	Babita Paidar	Occupational Health Hazards
10	17131357	Bahadur Singh	Abiotic and Biotic Factors of Ecosystem
11	17131358	Devshree Chandel	Remote Sensing
12	17131359	Divya Goswami	Kinds of Environmental Pollution and their control methods
13	17131361	Harsha Suryavanshi	Important Heavy Metals and their role in Environment
14	17131362	Hemlata Sourashtriya	Toxicology basic concepts and various types of toxicological agents
15	17131365	Kailash Nandeda	Toxicology basic concept
16	17131366	Kalpana Kumari Patidar	Public health hazards due to environmental disasters
17	17131367	Kavita Chouhan	Energy flow in environment
18	17131369	Manisha Sinha	Environmental indicator and their role in Environmental balance
19	17131370	Manju Panwar	Toxicology – basic concepts, principles and various types of toxicological agents
20	17131371	Monika Kuril	Remote Sensing
21	17131373	Neha Rathore	Committees of the environment, their role and significance

22	17131374	Pooja Malviya	Environmental Indicators and their role in Environmental balance
23	17131375	Priyanka Vishwakarma	Radioactive compounds and their impact on Environment
24	17131377	Raju Malviya	Noise Pollution
25	17131378	Rukhama Choudhary	Pesticides and their effects
26	17131379	Sajan Lal Parmar	Fish culture
27	17131380	Saloni Baranya	Vehicular Exhaust Pollution
28	17131381	Savita Rathore	Toxicity testing principle, hazards, risks and control
29	17131383	Vinita Kumari Patel	Food toxicant and their control method
30	17131384	Zuber Khan	Noise pollution

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. IV Sem. CCE 2018-19**

**Paper III**

**Ecotoxicology**

- **Dr. S. Souche and Dr. S. Acharya**

**Mode: Assignment and Presentation**

S.No.	Roll No.	Name of Student	Topic
1	18103331	Aayushi Gosar	Pesticides, types, nature, their effects on environment
2	18180332	Abhilasha Masaniya	Basic concepts, principles and various types of toxicating agents
3	18180333	Amit Vyas	Noise Pollution
4	18180334	Ankita Davda	Basic concepts and application of remote sensing
5	18180336	Aruna Jawariya	Pesticides, types, nature, their effects on environment
6	18180338	Jayant Chouhan	Ecological characteristics of lakes and rivers
7	18180339	Jayshree Patidar	Recycling and reuse technologies for solid and liquid works and their role in environmental conservation
8	18180340	Jitendra Rajoria	Abiotic and biotic factors
9	18180343	Karan Parmar	General principles of environmental biology with emphasis on Ecology
10	18180344	Kavita Dangi	Public health hazards due to environmental disasters
11	18180345	Khushboo Padihar	Occupational health hazards and their control
12	18180346	Kirti Bihaniya	Environmental indicator and their role in environmental balance
13	18180352	Neha Choudhary	Food toxicant
14	1810354	Pooja Sisodiya	Abiotic and biotic factors of ecosystem
15	1810358	Shahnawaz Khan	Toxicant
16	1810359	Shayana Khan	Kinds of environmental pollution and their control methods
17	1810360	Shivani Rami	Food toxicants and their control methods
18	1810361	Shweta Choudhary	Public health hazards due to environmental disasters

19	1810362	Usha Bhuriya	Vehicular exhaust pollution, causes and remedies
20	1810371	Azher Qureshi	Remote sensing
21	1810372	Kavita Sharma	Community of the environment
22	1810374	Reetu Bhawsar	Agrochemical use and misuse alternatives

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. III Sem. CCE 2017-18**

**Paper IV**

**Aquaculture**

**- Dr. S. Vaidhya and Dr. A.A. Siddiqui**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	16143977	Aditi Panchal	Transport of live fishes
2	16143980	Deepika Solanki	Frog culture
3	16143981	Harsha Marmat	Disease of carp fishes and their control
4	16143985	Leena Shukla	Fish disease and their control
5	16143988	Monika Parmar	Fisheries Economics and marketing
6	16143989	Neelam Tomar	Byproduct of fish industry
7	16143990	Nirmala Parmar	Biochemical composition of fish
8	16143992	Prernan Shrivastav	Ecological characteristics of prawn
9	16143993	Priyanka Sharma	Fisheries Economics and marketing
10	16143994	Rajun Garwal	Paddy fish culture
11	16143995	Shraddha Mehar	Marketing of fishes
12	16143996	Srashthi Jain	Induced breeding
13	16143997	Tabassum Mansuri	Bunch breeding

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. II Sem. CCE 2018-19**

**Paper II**

**Population Ecology and Environmental Physiology**

**- Dr. Anil Pandey and Dr. S. Trivedi**

**Mode: Assignment and Presentation**

S.No.	Roll No.	Name of Student	Topic
1	18180331	Aayushi Gosar	Environmental limiting factors
2	18180332	Abhilasha Masaniya	Adaptations – Levels of Adaptation
3	18180333	Amit Vyas	Ecophysiological adaptation, fresh water environment
4	18180334	Ankita Davda	Conservation management of natural resources
5	18180336	Aruna Jawariya	Sustainable development
6	18180337	Hukum Singh Rathod	Population Ecology and Environmental Physiology
7	18180338	Jayant Singh Chouhan	Predatory Prey Relationship
8	18180339	Jayshree Patidar	Predator dynamics, optimal foraging theory
9	18180340	Jitendra Rajoria	Life tables, generation time, reproductive value
10	18180343	Karan Parmar	Fresh water habitat
11	18180344	Kavita Dangi	Population Ecology and environmental physiology
12	18180345	Khushboo Padihar	Physiological response to oxygen deficient stress
13	18180346	Kirti Bihaniya	Conservation management of natural resources
14	18180352	Neha Choudhary	Environmental pollution and human health
15	18180354	Pooja Sisodiya	Meditation, yoga and their side effects
16	18180356	Ravindra Malviya	Concept of Homeostasis
17	18180357	Rekha Gundiya	Endothermy
18	18180358	Shahnawaz Khan	Population growth and regulation
19	18180359	Shayana Khan	Physiological response to body exercise
20	18180360	Shivani Rami	Population regulation
21	18180361	Shweta Choudhary	Mutualism, evolution of plant pollinator interaction
22	18180362	Usha Bhuriya	Ecophysiological adaptation to terrestrial environments
23	18180371	Azher Qureshi	Population Growth Patterns
24	18180372	Kavita Sharma	Meditation, yoga and their effects
25	18180371	Reetu Bhawsar	Physiological response to early exercise.

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. II Sem. CCE 2017-18**

**Paper III**

**Tools and Techniques**

- **Dr. R. Khanna and Dr. S. Vaidhya**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	17131352	Ajay Dhanak	Light microscopy
2	17131353	Alka Sharma	Southern blotting
3	17131354	Anil Parmar	Electrone microscopy
4	17109622	Anita Mikati	Confocal microscopy
5	17131355	Antimbala Sharma	Column chromatography
6		Babita Patidar	Microtome
7		Bahadur Singh Parmar	Freeze drying
8	17131358	Devshree Chandrawat	Microbial identification
9		Divya Goswami	Microbial identification
10	17131361	Harsha Suryawanshi	Principle and application of light microscope
11	17131362	Hemlata Saurashtriya	Microbial identification
12	17131365	Kailash Nandeda	Light microscope
13	17131366	Kalpana Kumari Patidar	Preparation of culture media
14	17131367	Kavita Chouhan	Microbial identification
15	17131368	Ku. Saloni Baranya	Histochemical demonstration
16	17131369	Manisha Sinha	Chromosomal bonding techniques
17	17131370	Manju Panwar	Autoradiography
18	17131372	Monika Kuril	Freeze drying technique
19	17131372	Narsingh	Phase contrast microscope
20	17131373	Neha Rathore	Electrophoresis
21	17131374	Pooja Malviya	Northern blotting
22	17131375	Priyanka Vishwakarma	Inoculation
23	17131376	Rajkumari Malviya	Cryo preserving
24	17131377	Raju Malviya	Immuno diffusion
25	17131378	Rukhama Choudhary	Phase contrast microscope
26	17131379	Sajan Lal Parmar	Methods of sterilization
27	17131381	Savita Rayhore	Microbial identification

28	17109625	Shiv Kumar Nagar	Histochemistry
29	17109626	Shivani Gupta	Cryo preservation
30	17109627	Vaishali Bali	Radioisotopes
31	17131383	Vinita Kumari Patel	Chromosomal bonding technique
32	17109628	Vinod Gehlot	Histochemistry
33	17131384	Zuber Khan	Process of staining
34	17109624	Monika Raikwar	Northern hybridization

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**M.Sc. (Second Semester) 2018-19**

**ZOOLOGY**

**Paper : IV**

**Molecular Biology and Genetics**

**C.C.E. – IV Paper**

**M.M. 10**

**- Dr. S. Souche and Dr. S. Acharya**

Write answer of the following questions :

1. Write functions of biomembrane.
2. Describe uniport, symport, antiport.
3. What is cell – cell signaling ?
4. What is a Gap function ?
5. Write a note on Gene therapy.
6. Full form of SCID.
7. What is Genome ?
8. Gene counseling.
9. Note on Pre-natal diagnosis.
10. Non-coding DNA.
11. What are transgenic animals ?
12. Detailed note on cytogenetic of human chromosomes.
13. Active and passive transport.
14. Dosage compensation theory of sex determination.
15. Short note on second messenger system.

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. I Sem. CCE 2017-18**

**Paper I**

**Biosystematics, Taxonomy and Evolution**

- **Dr. S. Acharya and Dr. S. Vaidhya**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	17131352	Ajay Dhanak	Taxonomic categories
2	17131353	Alka Sharma	Species concept
3	17131354	Anil Parmar	Dominance index
4	17109622	Anita Mikati	Speciation
5	17131355	Antimbala Sharma	Genetic polymorphism
6		Babita Patidar	Shanon Weiner Law
7		Bahadur Singh Parmar	Taxonomic collection
8	17131358	Devshree Chandrawat	Genetic Drift
9		Divya Goswami	Molecular taxonomy
10	17131361	Harsha Suryawanshi	Taxonomic key
11	17131362	Hemlata Saurashtriya	Subspecies
12	17131365	Kailash Nandeda	Theories of Evolution
13	17131366	Kalpana Kumari Patidar	Theories of Evolution
14	17131367	Kavita Chouhan	History of Classification
15	17131368	Ku. Saloni Baranya	Mutation
16	17131369	Manisha Sinha	Meiotic drive
17	17131370	Manju Panwar	Natural selection
18	17131372	Monika Kuril	Genetic drift
19	17131372	Narsingh	Speciation
20	17131373	Neha Rathore	Micro evolution
21	17131374	Pooja Malviya	Intraspecific categories
22	17131375	Priyanka Vishwakarma	Species concept
23	17131376	Rajkumari Malviya	Hierarchy of categories
24	17131377	Raju Malviya	Nomenclature
25	17131378	Rukhama Choudhary	Chemotaxonomy
26	17131379	Sajan Lal Parmar	Concept of Biosystematics
27	17131381	Savita Rayhore	Taxonomic characters
28	17109625	Shiv Kumar Nagar	Population genetics

29	17109626	Shivani Gupta	Genetic Drift
30	17109627	Vaishali Bali	Hardy Weiner Law
31	17131383	Vinita Kumari Patel	Taxonomic categories
32	17109628	Vinod Gehlot	Theories of biological classification
33	17131384	Zuber Khan	Classification
34	17109624	Monika Raikwar	History of Taxonomy

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. I Sem. CCE 2019-20**

**Paper I**

**Biosystematics, Taxonomy and Evolution**

- **Dr. S. Acharya and Dr. S. Vaidhya**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	19195330	Anil Bamniya	Taxonomic categories
2	19195331	Atul Singh Rajput	Theories of biological classification
3	19195332	Ayushi Bhawsar	Taxonomic hierarchy and macro and micro evolution
4	19195333	Balveer	Hierarchy categories – reproductive isolation
5	19195334	Bhawana Chauhan	Taxonomic collection and nomenclature
6	19195335	Bhavana Bhimavad	Speciation, Hierarchy of classification
7	19195336	Darshana	Taxonomic categories of taxonomy
8	19195337	Devkala	Moleculr taxonomy
9	19195338	Dilshad Mev	Cytotaxonomy
10	19195339	Divya Patidar	Concept of Biostatistics and Taxonomic characteristics
11	19195340	Garima Acharya	History of classification
12	19195341	Gulnaz Khan	Nomenclature and history of classification
13	19195342	Harshita Jain	Theories of classification
14	19195343	Jaya Pandey	Micro-macro evolution
15	19195344	Jayshri Sharma	Speciation
16	19195345	Johar Banu	Theories of classification and taxonomic characteristics
17	19195346	Jyoti Sharma	Molecular taxonomy
18	19195347	Krishna Sharma	Macro evolution and nomenclature
19	19195348	Kiran Waskel	Chemotaxonomy and history of classification
20	19195349	Komal Maheshwari	Molecular taxonomy and mass evolution
21	19195350	Kusum Bhilala	History of classification and Taxonomic collection
22	19195351	Laxmi Mori	Chemotaxonomy cytotaxonomy
23	19195352	Madhu Patidar	Biosystematics, taxonomy and evolution
24	19195353	Manali Bhawsar	Chemotaxonomy Cytotaxonomy
25	19195354	Mayank Parihar	Chemotaxonomy and collection
26	19195355	Mohammad Shafiq	Zoology nomenclature and Hierarchy

			Taxonomy
27	19195356	Mohini Sharma	Cytotaxonomy and collection
28	19195357	Monika Patidar	Speciation and hierarchy of categories
29	19195358	Monika Yadav	Biological classification – Reproductive Isolation
30	19195359	Nidhi Umath	Chemotaxonomy and history of classification
31	19195360	Payal Rathore	History of classification
32	19195361	Poonam Binjhade	Molecular Taxonomy and Nomenclature
33	19195362	Priyanka Dwivedi	History of Taxonomy
34	19195363	Priyanka Rathore	History of classification
35	19195364	Priyanka Tailor	Nomenclature and Reproductive Isolation
36	19195365	Rahul Chawalkar	Micro Evolution
37	19195366	Rajni Malviya	Hierarchy of categories – Micro evolution
38	19195367	Ravina Chaudhari	Speciation
39	19195368	Reetu Patidar	Molecular Taxonomy and Taxonomic Key
40	19195369	Rishita Jain	Molecular Taxonomy and Preservation
41	19195370	Rohit Kumar	Chemo Taxonomy and Reproductive Isolation
42	19195371	Roshanee Vasuniya	Taxonomic collection
43	19195372	Sadhana Mandloi	History of classification and reproductive isolation
44	19195373	Sanjay Panchal	Cytotaxonomy
45	19195374	Shruti Sharma	Molecular Taxonomy
46	19195375	Sweta Alawa	Cytotaxonomy and Taxonomic Key
47	19195376	Sohan Sonvaniya	Chemotaxonomy and Taxonomic characters
48	19195377	Sonam Saurashtry	Theories of classification
49	19195378	Sujata Soni	Origin of species
50	19195379	Uma Gothi	Zoological nomenclature and Hierarchy of species
51	19195387	Vipul Dwivedi	Nomenclature
52		Mahima Suryawanshi	Taxonomic key and speciation
53	18180371	Azher Qureshi	Origin of species

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**M.Sc. (First Semester) 2018-19**

**ZOOLOGY**

**Paper : II**

**Structure and Function of Invertebrates**

**C.C.E. – I Paper**

**M.M. 10**

**- Dr. S. Souche and Dr. A. A. Siddiqui**

1. Organization of coelom.
2. What are acoelomate animals ?
3. Hydrostatic movement in coelenterata.
4. Origin of Metazoa.
5. Patterns of feeding.
6. Respiratory pigment (short note).
7. Organs of respiration in invertebrates.
8. Short notes on Flame cells, Green Gland.
9. Excretion in annelida.
10. Osmoregulation in invertebrates.
11. Primitive nervous system in coelenterata.
12. Advanced nervous system in crustacea.
13. Pila nervous system (Mollusca)
14. Short notes on Rotifera, Phoronida.
15. Larval forms of trematoda.
16. Larval forms of mollusca.

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**Department of Zoology**

**M.Sc. II Sem. CCE 2019-20**

**Paper III**

**Tools and Techniques**

- **Dr. R. Khanna and Dr. S. Vaidhya**

**Mode: Assignment and Presentation**

<b>S.No.</b>	<b>Roll No.</b>	<b>Name of Student</b>	<b>Topic</b>
1	19195330	Anil Bamniya	TLC
2	19195331	Atul Singh Rajput	Electrophoresis
3	19195332	Ayushi Bhawsar	Microscopy
4	19195333	Balveer	Chromatography
5	19195334	Bhawana Chauhan	Microtomy
6	19195335	Bhavana Bhimavad	Auto radiography
7	19195336	Darshana	Paper electrophoresis
8	19195337	Devkala	Gel Electrophoresis
9	19195338	Dilshad Mev	Spectrophotometre
10	19195339	Divya Patidar	Thin layer chromatography
11	19195340	Garima Aacharya	Flame photometre
12	19195341	Gulnaz Khan	Light microscopy
13	19195342	Harshita Jain	Microscopy
14	19195343	Jaya Pandey	PCR
15	19195344	Jayshri Sharma	Theories of biological classification
16	19195345	Johar Banu	Gel Electrophoresis
17	19195346	Jyoti Sharma	Flame photometre
18	19195347	Krishna Sharma	Flame photometre
19	19195348	Kiran Waskel	Principles of light microscope
20	19195349	Komal Maheshwari	Light microscopy
21	19195350	Kusum Bhilala	Gel Electrophoresis
22	19195351	Laxmi Mori	Flame photometre
23	19195352	Madhu Patidar	Electrophoresis
24	19195353	Manali Bhawsar	Chromatography
25	19195354	Mayank Parihar	Gel Electrophoresis
26	19195355	Mohammad Shafiq	Flame photometre
27	19195356	Mohini Sharma	Microtomy
28	19195357	Monika Patidar	Microtomy
29	19195358	Monika Yadav	Chromatography
30	19195359	Nidhi Umath	Electrophoresis
31	19195360	Payal Rathore	Electrophoresis
32	19195361	Poonam Binjhade	Chromatography

33	19195362	Priyanka Dwivedi	Chromatography
34	19195363	Priyanka Rathore	Chromatography
35	19195364	Priyanka Tailor	Chromatography
36	19195365	Rahul Chawalkar	Gel Electrophoresis
37	19195366	Rajni Malviya	Gel Electrophoresis
38	19195367	Ravina Chaudhari	Auto radiography
39	19195368	Reetu Patidar	Chromatography
40	19195369	Rishita Jain	Auto radiography
41	19195370	Rohit Kumar	Microscopy
42	19195371	Roshanee Vasuniya	Microscopy
43	19195372	Sadhana Mandloi	PCR
44	19195373	Sanjay Panchal	PCR
45	19195374	Shruti Sharma	Auto radiography
46	19195375	Sweta Alawa	Auto radiography
47	19195376	Sohan Sonvaniya	Application of light microscope
48	19195377	Sonam Saurashtry	Microscopy
49	19195378	Sujata Soni	PCR
50	19195379	Uma Gothi	Chromatography
51	19195387	Vipul Dwivedi	Microscopy
52	18180371	Azher Qureshi	Chromatography
53		Mahima Suryawanshi	Auto radiography

**Govt. Madhav Science P.G. College, Ujjain (M.P.)**

**M.Sc. (First Semester) 2019-2020**

**ZOOLOGY**

**Paper : II**

**Structure and Function of Invertebrates**

**C.C.E. – I Paper**

**M.M. 10**

**- Dr. S. Souche and Dr. A. A. Siddiqui**

Note : Attempt all the questions. Each question carry half mark. Tick (✓) the correct answer only.

सभी प्रश्न करना है । प्रत्येक प्रश्न आधा अंक का है । केवल सही उत्तर पर सही (✓) का निशान अंकित करें ।

Q.1 In which Arthropod's antennary gland white medullary canal is found in between labyrinth and bladder ?

किस आर्थोपोड की एन्टीनरी ग्रंथी में ब्लेडर एवं लेब्रिन्थ के बीच सफेद मेड्यूलरी नलिका पाई जाती है ?

(a) Prawn प्रान (b) Carcinus कार्सिनस (c) Astacus एस्टेका (d) Scorpion बिच्छु

Q.2 Uricotelism is adaptation for which habitat ?

किस आवास के लिए यूरिकोटेलिस्म एक अनुकूलन है ?

(a) Fresh water habitat स्वच्छ जलीय आवास

(b) Massive water habitat समुद्रीय जलीय आवास

(c) Eustarine water habitat

(d) Dry and desert condition शुष्क एवं मरुस्थलीय परिस्थितियाँ

Q.3 Contractile vacuole in excretory and osmoregulatory organ in spirostomum. This animal belongs to which phylum ?

संकुचन शील यानी स्पाइरोस्टोमिय में एक उत्सर्जी एवं परासरण अंग है । यह जंतु किस फायलस से संबंधित है ?

(a) Porifera (b) Protozoa (c) Coelenterata (d) Platyhelminthes

Q.4 How many free thoracic ganglia are found in Squilla ?

स्कवीला में कितने स्वतंत्र वक्षीय गैंगलिया पाये जाते हैं ?

(a) 3 (b) 5 (c) 7 (d) Not anyone एक भी नहीं

Q.5 When one or more pair of spiracles remain closed, the tracheal system is called?

जब एक या अधिक स्पाइरेकल्स बंद रहते हैं तो ट्रेचियल तंत्र कहलाता है ?

(a) Holopneustic होलोपन्यूस्टिक (b) Apneustic अपन्यूस्टिक

(c) Hemipneustic हेमीपन्यूस्टिक (d) Mesopneustic मीसोप्यन्यूस्टिक

Q.6 Dermal branchiae (Papulae) are simplest form of gills found in

सबसे सरलतम क्लोम उर्मल ब्रान्की (पेपुली) होते हैं, ये पाये जाते हैं ?

(a) in Gastropods (b) in Cephalopods (c) in Crustaceans (d) in Echinoderms

Q.7 In spiders, respiratory organs are :

स्पाइडर्स में श्वसन अंग होते हैं ?

(a) Gills (b) Book lungs (c) Trachae and Book Lungs (d) Tracheae

Q.8 In nematode parasitic forms excretory canals look like capital letter

नीमेटोड परजीवी में उत्सर्जी नलिकाएँ केपीटल अक्षर के समान दिखाई देती हैं –

(a) N (b) H (c) P (d) E

Q.9 Coxal glands are excretory organs of :

कोएक्सल ग्रन्थियों –

(a) Macrobrachium (b) Penaeus (c) Scorpion (d) Unio

Q.10 Neurite means

न्यूराइट का अर्थ होता है –

(a) Nerve cell तंत्रिका कोशिका (b) Cyton साइटॉन

(c) Perikaryon पेरिकेरियान (d) Nerve processes तंत्रिका प्रवर्ध

Q.11 In which annelid brain is bilobed ?

किस एनीलीड में मस्तिष्क दो पाली में बना होता है ?

- (a) Pheretima फेरिटेमा (b) Nereis नीरोज  
(c) Hir हिसडिकेरिया (d) Sipunculus साइपनकुलस

Q.12 Osmoregulatory organ of mosquito larvae are :

मच्छरों के लार्वियों में परासरणीय अंग होते हैं –

- (a) Gills गिल्स (b) Nephridia नेफ्रीडिया (c) Anal papillae एनल पेपीलो  
(d) None of above उपरोक्त में से कोई नहीं

Q.13 In Haemocyanin respiratory pigment associated metallic ion in :

हीमोसाएनीन श्वसन वाक्रे में मेटेलिक आयन होता है –

- (a) Iron (b) Copper (c) Manganese (d) Magnesium

Q.14 This is euryhaline crab

यह एक युरिहेलाइन क्रेब है –

- (a) Limulus (b) Hermit crab (c) Maiq (Spider crab) (d) Carcinus

Q.15 Filter Feeding mechanism is found in Annelids :

फिल्टर अशन विधि एनीलिड्स में पाई जाती है –

- (a) Oligochaetes (b) Polychaetes (c) Hirundinea (d) None of the above

Q.16 Excretory organs of flat worms are :

चपेट कृमी के उत्सर्जन अंग हैं –

- (a) Metanephridia (b) Meganephridia (c) Protonephridia  
(d) Malpighian tubules.

Q.17 How many molecules of oxygen carried by single molecule of haemoglobin ?

हीमोग्लोबिन के एक अणु के द्वारा ऑक्सीजन के कितने अणु ले जाए जाते हैं ?

- (a) 1 (b) 4 (c) 2 (d) 3

Q.18 Monopectinate gills (comb like) gills are found in :

- (a) Gastropods (b) Cephalopods (c) Bivalved (d) Crustocay.

Q.19 Who has written the book “Invertebrate Zoology III Edition” published by W.B. Saunders Co. Philadelphia .

डब्ल्यू. बी. सॉन्डर्स कम्पनी फिलाडेल्फिया के द्वारा प्रकाशित किताब 'इन्वर्टीब्रेट जूलॉजी तृतीय एडिशन' किसके द्वारा लिखी गई है ?

(a) Russel Hunter, W.D. (b) Hyman, L.H. (c) Barners, R.D. (d) Read, C.P.

Q.20 How many Professors teach you in Zoology department ?

जूलॉजी डिपार्टमेन्ट में कितने प्रोफेसर आपको पढ़ाते हैं ?

(a) 6 (b) 5 (c) 8 (d) 7

# CS

## CCE

### Computer Science

S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Sem	2015-16	CS & CA	MCQ
2.	B.Sc. 2 <sup>nd</sup> Sem	2015-16	CS & CA	MCQ
3.	B.Sc. 3 <sup>rd</sup> Sem	2015-16	CS & CA	Charts
4.	B.Sc. 4 <sup>th</sup> Sem	2015-16	CS & CA	Charts
5.	B.Sc. 5 <sup>th</sup> Sem	2015-16	CS & CA	Assignments
6.	B.Sc. 6 <sup>th</sup> Sem	2015-16	CS & CA	MCQ

S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Sem	2016-17	CS & CA	MCQ
2.	B.Sc. 2 <sup>nd</sup> Sem	2016-17	CS & CA	MCQ
3.	B.Sc. 3 <sup>rd</sup> Sem	2016-17	CS & CA	MCQ
4.	B.Sc. 4 <sup>th</sup> Sem	2016-17	CS & CA	Assignments
5.	B.Sc. 5 <sup>th</sup> Sem	2016-17	CS & CA	Assignments
6.	B.Sc. 6 <sup>th</sup> Sem	2016-17	CS & CA	Assignments

S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Year	2017-18	CS & CA	MCQ
2.	B.Sc. 3 <sup>rd</sup> Sem	2017-18	CS & CA	Assignments
3.	B.Sc. 4 <sup>th</sup> Sem	2017-18	CS & CA	Assignments
4.	B.Sc. 5 <sup>th</sup> Sem	2017-18	CS & CA	PPT
5.	B.Sc. 6 <sup>th</sup> Sem	2017-18	CS & CA	PPT

S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Year	2018-19	CS & CA	Assignments
2.	B.Sc. 2 <sup>nd</sup> Year	2018-19	CS & CA	Assignments
3.	B.Sc. 5 <sup>th</sup> Sem	2018-19	CS & CA	PPT
4.	B.Sc. 6 <sup>th</sup> Sem	2018-19	CS & CA	PPT

S. No.	Class	Session	Paper name	Mode
1.	B.Sc. 1 <sup>st</sup> Year	2019-20	CS & CA	Assignments
2.	B.Sc. 2 <sup>nd</sup> Year	2019-20	CS & CA	Assignments
3.	B.Sc. 3 <sup>rd</sup> Year	2019-20	CS & CA	Assignments

Supportive file 2015-16

1<sup>st</sup> Sample MCQ Answer sheet

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Science 1<sup>st</sup> Semester  
Session 2015-16  
Subject – Fundamentals of Computers  
Max. Marks- 15

Time- 20 Min.  
Name: Sunil

- Q.1 CPU stands for:  
 (a) Central Processing Unit  
 (b) Central Preparation Unit  
 (c) Control Processing Unit  
 (d) Centralized Processing unit
- Q.2 PDA Stands for:  
 (a) Personal Digital Assistance  
 (b) Central Preparation Unit  
 (c) Control Processing Unit  
 (d) Centralized Processing unit
- Q.3 Which of the following is not a type of memory:  
 (a) RAM  
 (b) ROM  
 (c) Cache  
 (d) CMOS
- Q.4 The types of Primary memory are:  
 (a) RAM  
 (b) ROM  
 (c) Both a and b  
 (d) None of these
- Q.5 The memory Used for Temporary storage:  
 (a) ROM  
 (b) PROM  
 (c) EEPROM  
 (d) RAM
- Q.6 Central Processing unit is consist of:  
 (a) Control Unit, Memory unit & Arithlogical unit  
 (b) Central Unit, Memory unit & Arithmetic-logic unit  
 (c) Control Unit, Memory unit & Arithmetic logic unit  
 (d) Control Unit, Master Unit & Arithmetic unit
- Q.7 RAM is-  
 (a) Round access memory  
 (b) Regular auxiliary memory  
 (c) Random advanced memory  
 (d) Random access memory

13/15

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Science 1<sup>st</sup> Semester  
Session 2015-16  
Subject – Fundamentals of Computers  
Max. Marks- 15

Time- 20 Min.  
Name: अमित मेहता

- Q.1 CPU stands for:  
 (a) Central Processing Unit  
 (b) Central Preparation Unit  
 (c) Control Processing Unit  
 (d) Centralized Processing unit
- Q.2 PDA Stands for:  
 (a) Personal Digital Assistance  
 (b) Central Preparation Unit  
 (c) Control Processing Unit  
 (d) Centralized Processing unit
- Q.3 Which of the following is not a type of memory:  
 (a) RAM  
 (b) ROM  
 (c) Cache  
 (d) CMOS
- Q.4 The types of Primary memory are:  
 (a) RAM  
 (b) ROM  
 (c) Both a and b  
 (d) None of these
- Q.5 The memory Used for Temporary storage:  
 (a) ROM  
 (b) PROM  
 (c) EEPROM  
 (d) RAM
- Q.6 Central Processing unit is consist of:  
 (a) Control Unit, Memory unit & Arithlogical unit  
 (b) Central Unit, Memory unit & Arithmetic-logic unit  
 (c) Control Unit, Memory unit & Arithmetic logic unit  
 (d) Control Unit, Master Unit & Arithmetic unit
- Q.7 RAM is-  
 (a) Round access memory  
 (b) Regular auxiliary memory  
 (c) Random advanced memory  
 (d) Random access memory

12/15

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Application 1<sup>st</sup> Semester  
Session 2015-16  
Subject – Fundamentals of Computers  
Max. Marks- 15

Time- 20 Min.  
Name: अमित मेहता

- Q.1 CPU stands for:  
 (a) Central Processing Unit  
 (b) Central Preparation Unit  
 (c) Control Processing Unit  
 (d) Centralized Processing unit
- Q.2 PDA Stands for:  
 (a) Personal Digital Assistance  
 (b) Central Preparation Unit  
 (c) Control Processing Unit  
 (d) Centralized Processing unit
- Q.3 Which of the following is not a type of memory:  
 (a) RAM  
 (b) ROM  
 (c) CACHE  
 (d) CMOS
- Q.4 The types of Primary memory are:  
 (a) RAM  
 (b) ROM  
 (c) Both a and b  
 (d) None of these
- Q.5 The memory Used for Temporary storage:  
 (a) ROM  
 (b) PROM  
 (c) EEPROM  
 (d) RAM
- Q.6 Central Processing unit is consist of:  
 (a) Control Unit, Memory unit & Arithlogical unit  
 (b) Central Unit, Memory unit & Arithmetic-logic unit  
 (c) Control Unit, Memory unit & Arithmetic logic unit  
 (d) Control Unit, Master Unit & Arithmetic unit
- Q.7 RAM is-  
 (a) Round access memory  
 (b) Regular auxiliary memory  
 (c) Random advanced memory  
 (d) Random access memory

13/15

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Application 1<sup>st</sup> Semester  
Session 2015-16  
Subject – Fundamentals of Computers  
Max. Marks- 15

Time- 20 Min.  
Name: अमित मेहता

- Q.1 CPU stands for:  
 (a) Central Processing Unit  
 (b) Central Preparation Unit  
 (c) Control Processing Unit  
 (d) Centralized Processing unit
- Q.2 PDA Stands for:  
 (a) Personal Digital Assistance  
 (b) Central Preparation Unit  
 (c) Control Processing Unit  
 (d) Centralized Processing unit
- Q.3 Which of the following is not a type of memory:  
 (a) RAM  
 (b) ROM  
 (c) CACHE  
 (d) CMOS
- Q.4 The types of Primary memory are:  
 (a) RAM  
 (b) ROM  
 (c) Both a and b  
 (d) None of these
- Q.5 The memory Used for Temporary storage:  
 (a) ROM  
 (b) PROM  
 (c) EEPROM  
 (d) RAM
- Q.6 Central Processing unit is consist of:  
 (a) Control Unit, Memory unit & Arithlogical unit  
 (b) Central Unit, Memory unit & Arithmetic-logic unit  
 (c) Control Unit, Memory unit & Arithmetic logic unit  
 (d) Control Unit, Master Unit & Arithmetic unit
- Q.7 RAM is-  
 (a) Round access memory  
 (b) Regular auxiliary memory  
 (c) Random advanced memory  
 (d) Random access memory

12/15

## 2<sup>nd</sup> Sem Sample MCQ

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Science II Semester  
Session 2015-16  
Subject - Programming in C

Max. Marks- 15

Time- 20 Min.

Name: Nitesh Gupta

Q.1 Who is father of c language  
(a) Martine Richard (b) Ken Thompson (c) Dennis Ritchie (d) Charles Babbage

Q.2 C is a:  
(a) Structured Language (b) Middle level language  
(c) Both a and b (d) None of these

Q.3 How many memory is required to store a value of type integer:  
(a) 1 byte (b) 2 byte (c) 4 byte (d) 8 byte

Q.4 Which of the following is a relational operator:  
(a) + (b) > (c) && (d) XOR

Q.5 Which operator in c is called conditional operator:  
(a) && (b) ++ (c) << (d) (?)

Q.6 Which operator works on Boolean value:  
(a) Arithmetic Operator (b) Conditional Operator  
(c) Bitwise Operator (d) Logical Operator

Q.7 Which among the following is an unformatted string input function ?  
(a) put() function (b) getch() function  
(c) getch() function (d) gets() function

Q.8 Which function is used to terminate the current iteration?  
(a) break (b) goto (c) return (d) switch

Q.9 how many basic loop statements are there in C language?  
(a) 2 (b) 3 (c) 4 (d) 5

13/15

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Science II Semester  
Session 2015-16  
Subject - Programming in C

Max. Marks- 15

Time- 20 Min.

Name: ADARSH JAIN

Q.1 Who is father of c language  
(a) Martine Richard (b) Ken Thompson (c) Dennis Ritchie (d) Charles Babbage

Q.2 C is a:  
(a) Structured Language (b) Middle level language  
(c) Both a and b (d) None of these

Q.3 How many memory is required to store a value of type integer:  
(a) 1 byte (b) 2 byte (c) 4 byte (d) 8 byte

Q.4 Which of the following is a relational operator:  
(a) + (b) > (c) && (d) XOR

Q.5 Which operator in c is called conditional operator:  
(a) && (b) ++ (c) << (d) (?)

Q.6 Which operator works on Boolean value:  
(a) Arithmetic Operator (b) Conditional Operator  
(c) Bitwise Operator (d) Logical Operator

Q.7 Which among the following is an unformatted string input function ?  
(a) put() function (b) getch() function  
(c) getch() function (d) gets() function

Q.8 Which function is used to terminate the current iteration?  
(a) break (b) goto (c) return (d) switch

Q.9 how many basic loop statements are there in C language?  
(a) 2 (b) 3 (c) 4 (d) 5

11/15

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Application II Semester  
Session 2015-16  
Subject - Programming in C

Max. Marks- 15

Time- 20 Min.

Name: PARAS ANARE

Q.1 Who is father of c language  
(a) Martine Richard (b) Ken Thompson (c) Dennis Ritchie (d) Charles Babbage

Q.2 C is a:  
(a) Structured Language (b) Middle level language  
(c) Both a and b (d) None of these

Q.3 How many memory is required to store a value of type integer:  
(a) 1 byte (b) 2 byte (c) 4 byte (d) 8 byte

Q.4 Which of the following is a relational operator:  
(a) + (b) > (c) && (d) XOR

Q.5 Which operator in c is called conditional operator:  
(a) && (b) ++ (c) << (d) (?)

Q.6 Which operator works on Boolean value:  
(a) Arithmetic Operator (b) Conditional Operator  
(c) Bitwise Operator (d) Logical Operator

Q.7 Which among the following is an unformatted string input function ?  
(a) put() function (b) getch() function  
(c) getch() function (d) gets() function

Q.8 Which function is used to terminate the current iteration?  
(a) break (b) goto (c) return (d) switch

Q.9 how many basic loop statements are there in C language?  
(a) 2 (b) 3 (c) 4 (d) 5

12/15

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Application II Semester  
Session 2015-16  
Subject - Programming in C

Max. Marks- 15

Time- 20 Min.

Name: Anshyala

Q.1 Who is father of c language  
(a) Martine Richard (b) Ken Thompson (c) Dennis Ritchie (d) Charles Babbage

Q.2 C is a:  
(a) Structured Language (b) Middle level language  
(c) Both a and b (d) None of these

Q.3 How many memory is required to store a value of type integer:  
(a) 1 byte (b) 2 byte (c) 4 byte (d) 8 byte

Q.4 Which of the following is a relational operator:  
(a) + (b) > (c) && (d) XOR

Q.5 Which operator in c is called conditional operator:  
(a) && (b) ++ (c) << (d) (?)

Q.6 Which operator works on Boolean value:  
(a) Arithmetic Operator (b) Conditional Operator  
(c) Bitwise Operator (d) Logical Operator

Q.7 Which among the following is an unformatted string input function ?  
(a) put() function (b) getch() function  
(c) getch() function (d) gets() function

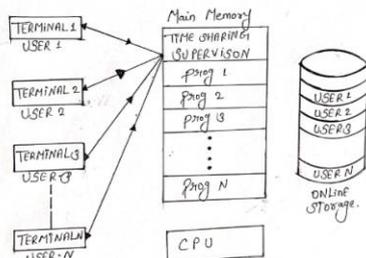
Q.8 Which function is used to terminate the current iteration?  
(a) break (b) goto (c) return (d) switch

Q.9 how many basic loop statements are there in C language?  
(a) 2 (b) 3 (c) 4 (d) 5

13/15

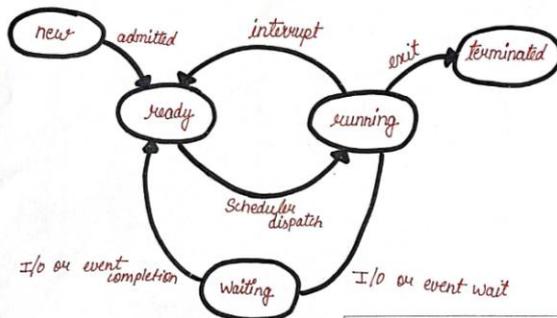
### 3rd Sem Sample Chart

#### Concept of a timesharing system



Name → Koushal Pansras  
 Class → B.Sc. III Sem (CS)  
 Subject → Operating system  
 Session → 2015-16 CCE

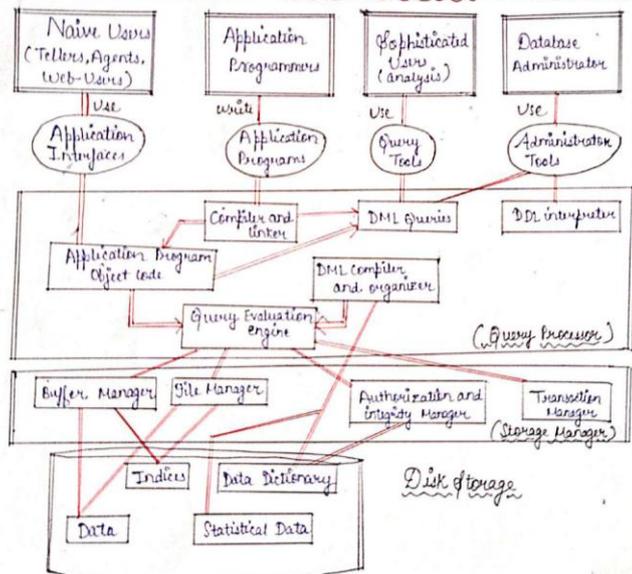
#### DIAGRAM OF PROCESS STATE



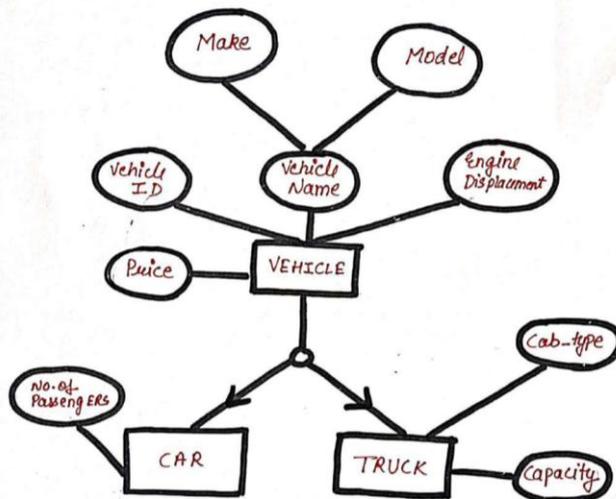
NAME — Sowrabh Upadhyay  
 CLASS — Bsc III sem (CS)  
 SUBJECT — Operating System  
 SESSION — 2015-16 CCE

Name := Shauad Thakur      Subject := DBMS  
 Class := B.Sc III Sem (CA)      Session := 2015-16 (CCE)

## DATABASE SYSTEM STRUCTURE



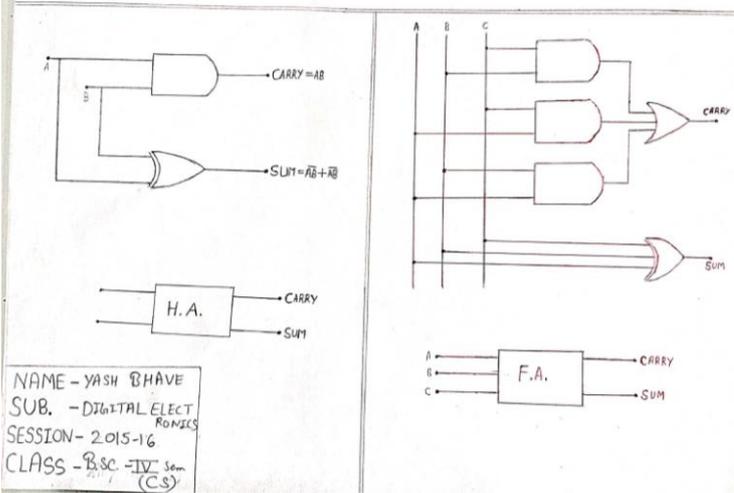
#### EXAMPLE OF GENERALIZATION



Name — PRIYANKA AGRAWAL  
 Class — B.Sc. III<sup>rd</sup> Sem CCA  
 Subject — DBMS  
 Session — 2015-16 (CCE)

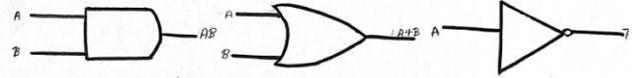
# 4<sup>th</sup> Sem Sample Charts

## Half and Full Adder



## BASIC LOGIC GATES

Name - GANESH DUBEY  
Class - B.Sc 4<sup>th</sup> sem (CS)  
Subject - DIGITAL ELECTRONICS  
Session - 2015-2016 (CC)



A	B	Output (C)
0	0	0
0	1	0
1	0	0
1	1	1

$$C = A \cdot B$$

A	B	Output (C)
0	0	0
0	1	1
1	0	1
1	1	1

$$C = A + B$$

A	Output (B)
1	0
0	1

$$B = \bar{A}$$

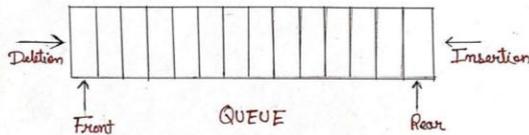
Name := SURBHI CHOUHAN

Class := B.Sc - 4<sup>th</sup> sem (CA)

Subject := Data Structure

Session := 2015-2016 (CC)

## Algorithm of Queue



### INSERTION IN A QUEUE ALGORITHM

- To insert an element in a queue
- Step 1: [Check overflow condition]  
If rear  $\geq$  size  
Output "overflow" and return
  - Step 2: [Increment rear pointer]  
rear = rear + 1
  - Step 3: [Insert an element]  
A[rear] = value
  - Step 4: [Set the front pointer]  
If front = 0  
front = 1

### DELETION IN A QUEUE ALGORITHM

- Step 1: [Check underflow condition]  
If front = 0  
output "Underflow" and return
- Step 2: [Remove an element]  
value = A[Front]
- Step 3: [Check for empty queue]  
If front = rear  
front = 0  
rear = 0  
else  
front = front + 1
- Step 4: Return (value)

Name := Arun Upadhyay

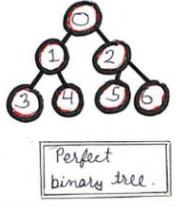
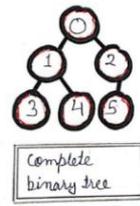
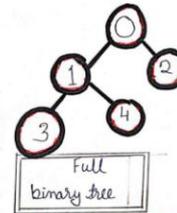
Class := B.Sc III<sup>rd</sup> sem (CA)

Subject := Data Structure

Session := 2015-16 (CC)

## Types of Binary Tree

- ★ Strictly / Full / Proper Binary Tree
- ★ Complete / Perfect Binary Tree
- ★ Extended Binary Tree



5th Sem sample Assignments

NAME :- Mukesh Anand  
 Class :- B.Sc II sem (cs)  
 Subject :- graphics  
 Session :- 2015-2016

Q1 What is scanner? Explain its type.  
 => Scanner is a device that capture images from photographic prints, posters, magazine pages and similar from computer editing & display.

Types of Scanner

Flatbed scanner - Flatbed scanners will take up some desktop space but provide a lot of bang for the buck. They look like miniature printers with a flip up cover protecting the glass plate. Flatbed scanners are some of the most commonly used scanners as it has both home and office function.

Govt. Madhav Science P.G. College, Ujjain

Signature of Principal

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : Ajendra Singh

Father's Name : \_\_\_\_\_

Class : B.Sc IV Sem. (CA)

Section : \_\_\_\_\_

Subject : VB (Visual Basic)

Date of Examination : 2015-16

Signature of Invigilator : \_\_\_\_\_

Signature of Valuer : 12/15

Govt. Madhav Science P.G. College, Ujjain

Signature of Principal

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : Shivani Mahapatra

Father's Name : \_\_\_\_\_

Class : B.Sc IV Sem

Section : (CA)

Subject : Visual Basic

Date of Examination : 2015-16

Signature of Invigilator : \_\_\_\_\_

Signature of Valuer : 13/15



Govt. Madhav Science P.G. College, Ujjain

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Signature of Principal \_\_\_\_\_

Name : Nisha Dangi

Father's Name : \_\_\_\_\_

Class : B.Sc (VI<sup>th</sup> Sem)

Section : \_\_\_\_\_

Subject : Java

Date of Examination : 2015-16

Signature of Invigilator : \_\_\_\_\_

Signature of Valuer \_\_\_\_\_

13/15

Q1) What is JVM?

Ans) A Java virtual machine (JVM) is a virtual machine that enables a computer to run Java programs as well as programs written in another language that are compiled to Java bytecode. The JVM is detailed by a specification that formally describes what is required in a JVM implementation. Having a specification ensures interoperability so that programs authors using the Java development kit (JDK) need not worry about idiosyncrasies of the underlying hardware platform.

Q2) What is class Java?

Ans) Java is an objects-oriented programming language. Everything in Java is associated with classes and objects. An example in real life, a car is an object. The car has attributes

Date: / / Page no:

Name - Dilip Limbediya  
 class - B.Sc VI Sem. (CA)  
 sub - JAVA  
 2015-16

13/15

Date: / / Page no:

Que - What is the Constructor?

Ans - In class-based object-oriented programming a constructor is a special type of subroutine called to create an object. It prepares the new object for use, often accepting arguments that the constructor uses to set required member variables. A constructor resembles an instance method but it differs from a method in that it has no explicit return type. It is not implicitly inherited and it usually has different rules for scope modifiers. Constructors often have the same name as the declaring class. They have the tasks of initializing the object's data members and of establishing the

## Supportive file 2016-17 1st sem Sample MCQ

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Application 1<sup>st</sup> Semester  
Session 2016-17  
Subject – Fundamentals of Computers

Time- 20 Min.

Max. Marks- 15

Name: Pooja Gupta

- Q.1 Input of images is provided to the computer through:  
 (a) OMR     (b) OCR     (c) MICR     (d) Scanner
- Q.2 In Multiple choice examinations following can be used to process results quickly:  
 (a) OCR     (b) OMR     (c) Barcode Reader     (d) Scanner
- Q.3 For verification of legal & bank documents, following technique is used:  
 (a) OCR     (b) MICR     (c) OMR     (d) Barcode
- Q.4 In shopping malls following device is used to input items at billing counters:  
 (a) OCR     (b) MICR     (c) OMR     (d) Barcode Reader
- Q.5 In which type of mouse a LED(Light Emitting Diode) and a photo sensor is used to sense the motion  
 (a) Optical     (b) Mechanical     (c) Air     (d) None of the above
- Q.6 \_\_\_\_\_ are also very popular on PDAs and ATMs.  
 (a) Barcode     (b) Joystick     (c) Trackball     (d) Touch screen
- Q.7 Which of the following can be used for both input & output:  
 (a) Monitor     (b) Laser Printer     (c) Touch Screen     (d) Joystick
- Q.8 \_\_\_\_\_ Scanner is a type of Scanner on which original Document is Attached to the outside of a spinning glass drum.  
 (a) Drum     (b) Flatbed     (c) Handheld     (d) Circular
- Q.9 OCR Stands For:  
 (a) Optical Character Reader     (b) Optical Character Recognition  
 (c) Original Character Recognition     (d) None of the above

12  
15

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Application 1<sup>st</sup> Semester  
Session 2016-17  
Subject – Fundamentals of Computers

Time- 20 Min.

Max. Marks- 15

Name: Pooja Gupta

- Q.1 Input of images is provided to the computer through:  
 (a) OMR     (b) OCR     (c) MICR     (d) Scanner
- Q.2 In Multiple choice examinations following can be used to process results quickly:  
 (a) OCR     (b) OMR     (c) Barcode Reader     (d) Scanner
- Q.3 For verification of legal & bank documents, following technique is used:  
 (a) OCR     (b) MICR     (c) OMR     (d) Barcode
- Q.4 In shopping malls following device is used to input items at billing counters:  
 (a) OCR     (b) MICR     (c) OMR     (d) Barcode Reader
- Q.5 In which type of mouse a LED(Light Emitting Diode) and a photo sensor is used to sense the motion  
 (a) Optical     (b) Mechanical     (c) Air     (d) None of the above
- Q.6 \_\_\_\_\_ are also very popular on PDAs and ATMs.  
 (a) Barcode     (b) Joystick     (c) Trackball     (d) Touch screen
- Q.7 Which of the following can be used for both input & output:  
 (a) Monitor     (b) Laser Printer     (c) Touch Screen     (d) Joystick
- Q.8 \_\_\_\_\_ Scanner is a type of Scanner on which original Document is Attached to the outside of a spinning glass drum.  
 (a) Drum     (b) Flatbed     (c) Handheld     (d) Circular
- Q.9 OCR Stands For:  
 (a) Optical Character Reader     (b) Optical Character Recognition  
 (c) Original Character Recognition     (d) None of the above

13  
15

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Science 1<sup>st</sup> Semester  
Session 2016-17  
Subject – Fundamentals of Computers

Time- 20 Min.

Max. Marks- 15

Name: Achal Jain

- Q.1 Input of images is provided to the computer through:  
 (a) OMR     (b) OCR     (c) MICR     (d) Scanner
- Q.2 In Multiple choice examinations following can be used to process results quickly:  
 (a) OCR     (b) OMR     (c) Barcode Reader     (d) Scanner
- Q.3 For verification of legal & bank documents, following technique is used:  
 (a) OCR     (b) MICR     (c) OMR     (d) Barcode
- Q.4 In shopping malls following device is used to input items at billing counters:  
 (a) OCR     (b) MICR     (c) OMR     (d) Barcode Reader
- Q.5 In which type of mouse a LED(Light Emitting Diode) and a photo sensor is used to sense the motion  
 (a) Optical     (b) Mechanical     (c) Air     (d) None of the above
- Q.6 \_\_\_\_\_ are also very popular on PDAs and ATMs.  
 (a) Barcode     (b) Joystick     (c) Trackball     (d) Touch screen
- Q.7 Which of the following can be used for both input & output:  
 (a) Monitor     (b) Laser Printer     (c) Touch Screen     (d) Joystick
- Q.8 \_\_\_\_\_ Scanner is a type of Scanner on which original Document is Attached to the outside of a spinning glass drum.  
 (a) Drum     (b) Flatbed     (c) Handheld     (d) Circular
- Q.9 OCR Stands For:  
 (a) Optical Character Reader     (b) Optical Character Recognition  
 (c) Original Character Recognition     (d) None of the above

12  
15

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Science 1<sup>st</sup> Semester  
Session 2016-17  
Subject – Fundamentals of Computers

Time- 20 Min.

Max. Marks- 15

Name: Rohit Joshi

- Q.1 Input of images is provided to the computer through:  
 (a) OMR     (b) OCR     (c) MICR     (d) Scanner
- Q.2 In Multiple choice examinations following can be used to process results quickly:  
 (a) OCR     (b) OMR     (c) Barcode Reader     (d) Scanner
- Q.3 For verification of legal & bank documents, following technique is used:  
 (a) OCR     (b) MICR     (c) OMR     (d) Barcode
- Q.4 In shopping malls following device is used to input items at billing counters:  
 (a) OCR     (b) MICR     (c) OMR     (d) Barcode Reader
- Q.5 In which type of mouse a LED(Light Emitting Diode) and a photo sensor is used to sense the motion  
 (a) Optical     (b) Mechanical     (c) Air     (d) None of the above
- Q.6 \_\_\_\_\_ are also very popular on PDAs and ATMs.  
 (a) Barcode     (b) Joystick     (c) Trackball     (d) Touch screen
- Q.7 Which of the following can be used for both input & output:  
 (a) Monitor     (b) Laser Printer     (c) Touch Screen     (d) Joystick
- Q.8 \_\_\_\_\_ Scanner is a type of Scanner on which original Document is Attached to the outside of a spinning glass drum.  
 (a) Drum     (b) Flatbed     (c) Handheld     (d) Circular
- Q.9 OCR Stands For:  
 (a) Optical Character Reader     (b) Optical Character Recognition  
 (c) Original Character Recognition     (d) None of the above

11  
15

Time- 20 Min.

Max. Marks- 15

Name: Sum bh, Dabhadre

- Q.1 Which of the following is not a valid identifier in C language?  
(a)EMP\_CODE (b) rolno123 (c)a1b2c3d4 (d)3a2b1c
- Q.2 Which of the Following is not a valid data type in C language?  
(a)char (b)float (c)list (d) double
- Q.3 Which of the Following Declaration is not correct?  
(a)float a; (b)int b=4; (c)char c; (d) unsigned float d;
- Q.4 A variable of type int in C can take a value in range  
(a)0 to 32767 (b)0 to 65535 (c)-32768 to -32767 (d)-32767 to +32768
- Q.5 Which of the following is not a reserved word in C language?  
(a)for (b)goto (c)then (d)switch
- Q.6 How much memory is required to store a value of double  
(a) 4 bytes (b)6bytes (c)8bytes (d)10bytes
- Q.7 Which statement is used to transfer the control from current location to anywhere in the program  
(a)break (b)Switch (c) continue (d)goto
- Q.8 Which of the following is not a control statement in C language  
(a)for statement (b)repeat-until statement  
(c) switch statement (d) goto statement
- Q.9 The Continue Statement cannot be used with:  
(a)for (b)Switch (c) do (d)while

13/10

Time- 20 Min.

Max. Marks- 15

Name: Paawan

- Q.1 Which of the following is not a valid identifier in C language?  
(a)EMP\_CODE (b) rolno123 (c)a1b2c3d4 (d)3a2b1c
- Q.2 Which of the Following is not a valid data type in C language?  
(a)char (b)float (c)list (d) double
- Q.3 Which of the Following Declaration is not correct?  
(a)float a; (b)int b=4; (c)char c; (d) unsigned float d;
- Q.4 A variable of type int in C can take a value in range  
(a)0 to 32767 (b)0 to 65535 (c)-32768 to +32767 (d)-32767 to +32768
- Q.5 Which of the following is not a reserved word in C language?  
(a)for (b)goto (c)then (d)switch
- Q.6 How much memory is required to store a value of double  
(a) 4 bytes (b)6bytes (c)8bytes (d)10bytes
- Q.7 Which statement is used to transfer the control from current location to anywhere in the program  
(a)break (b)Switch (c) continue (d)goto
- Q.8 Which of the following is not a control statement in C language  
(a)for statement (b)repeat-until statement  
(c) switch statement (d) goto statement
- Q.9 The Continue Statement cannot be used with:  
(a)for (b)Switch (c) do (d)while

11/15

Time- 20 Min.

Max. Marks- 15

Name: Sumabh Bhat

- Q.1 Which of the following is not a valid identifier in C language?  
(a)EMP\_CODE (b) rolno123 (c)a1b2c3d4 (d)3a2b1c
- Q.2 Which of the Following is not a valid data type in C language?  
(a)char (b)float (c)list (d) double
- Q.3 Which of the Following Declaration is not correct?  
(a)float a; (b)int b=4; (c)char c; (d) unsigned float d;
- Q.4 A variable of type int in C can take a value in range  
(a)0 to 32767 (b)0 to 65535 (c)-32768 to +32767 (d)-32767 to +32768
- Q.5 Which of the following is not a reserved word in C language?  
(a)for (b)goto (c)then (d)switch
- Q.6 How much memory is required to store a value of double  
(a) 4 bytes (b)6bytes (c)8bytes (d)10bytes
- Q.7 Which statement is used to transfer the control from current location to anywhere in the program  
(a)break (b)Switch (c) continue (d)goto
- Q.8 Which of the following is not a control statement in C language  
(a)for statement (b)repeat-until statement  
(c) switch statement (d) goto statement
- Q.9 The Continue Statement cannot be used with:  
(a)for (b)Switch (c) do (d)while

10/15

Time- 20 Min.

Max. Marks- 15

Name: Saumabh Bhat

- Q.1 Which of the following is not a valid identifier in C language?  
(a)EMP\_CODE (b) rolno123 (c)a1b2c3d4 (d)3a2b1c
- Q.2 Which of the Following is not a valid data type in C language?  
(a)char (b)float (c)list (d) double
- Q.3 Which of the Following Declaration is not correct?  
(a)float a; (b)int b=4; (c)char c; (d) unsigned float d;
- Q.4 A variable of type int in C can take a value in range  
(a)0 to 32767 (b)0 to 65535 (c)-32768 to +32767 (d)-32767 to +32768
- Q.5 Which of the following is not a reserved word in C language?  
(a)for (b)goto (c)then (d)switch
- Q.6 How much memory is required to store a value of double  
(a) 4 bytes (b)6bytes (c)8bytes (d)10bytes
- Q.7 Which statement is used to transfer the control from current location to anywhere in the program  
(a)break (b)Switch (c) continue (d)goto
- Q.8 Which of the following is not a control statement in C language  
(a)for statement (b)repeat-until statement  
(c) switch statement (d) goto statement
- Q.9 The Continue Statement cannot be used with:  
(a)for (b) Switch (c) do (d)while

07/15

Session - 2016-17

Session - 2016-17



Govt. Madhav Science P.G. College, Ujjain

COORDINATOR  
Department of Comp. Sc. & Appl.  
Govt. Madhav Vidyam Mahavidyalaya  
UJJAIN

Signature of Principal

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : Ayushi Nagan  
 Father's Name : \_\_\_\_\_  
 Class : \_\_\_\_\_  
 Section : B.S.C 3<sup>rd</sup> Sem. (CA)  
 Subject : DGMS  
 Date of Examination : \_\_\_\_\_  
 Signature of Invigilator : \_\_\_\_\_

Signature of Valuer

11/15



Govt. Madhav Science P.G. College, Ujjain

COORDINATOR  
Department of Comp. Sc. & Appl.  
Govt. Madhav Vidyam Mahavidyalaya  
UJJAIN

Signature of Principal

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : Ayushi Nagan  
 Father's Name : \_\_\_\_\_  
 Class : \_\_\_\_\_  
 Section : B.S.C 3<sup>rd</sup> Sem. (CA)  
 Subject : DGMS  
 Date of Examination : \_\_\_\_\_  
 Signature of Invigilator : \_\_\_\_\_

Signature of Valuer

11/15



Govt. Madhav Science P.G. College, Ujjain

Signature of Principal

Signature of Principal

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : MADHVI SHARMA  
 Father's Name : \_\_\_\_\_  
 Class : B.Sc III SEM. (CS)  
 Section : 2016-17  
 Subject : OPERATING SYSTEM  
 Date of Examination : \_\_\_\_\_  
 Signature of Invigilator : \_\_\_\_\_

Signature of Valuer

11/15



Govt. Madhav Science P.G. College, Ujjain

Signature of Principal

Signature of Principal

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : MADHVI SHARMA  
 Father's Name : \_\_\_\_\_  
 Class : B.Sc III SEM. (CS)  
 Section : 2016-17  
 Subject : OPERATING SYSTEM  
 Date of Examination : \_\_\_\_\_  
 Signature of Invigilator : \_\_\_\_\_

Signature of Valuer

11/15

DATE \_\_\_\_\_  
PAGE \_\_\_\_\_

Name — AEvind Dangi

Class — B. Sc. IV Semester (C.S.)

Subject — DCO

Session — 2016-17

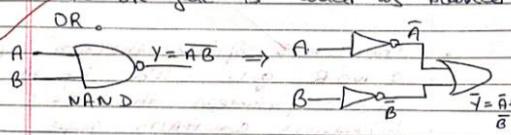
13/15

DATE \_\_\_\_\_  
PAGE \_\_\_\_\_

Q.3 State and prove demorgan's theorem.  
Ans De Morgan has suggested two theorems which are extremely useful in Boolean Algebra. The two theorems are discussed below.

Theorem 1  
 $A \cdot B = \overline{\overline{A} + \overline{B}}$   
 NAND = Bubbled OR

- The left hand side (LHS) of this theorem represents a NAND gate with inputs A and B, whereas the right hand side (RHS) of the theorem represents an OR gate with inverted inputs.
- This OR gate is called as Bubbled OR.



NAND  $\equiv$  Bubbled OR

PAGE \_\_\_\_\_  
DATE \_\_\_\_\_

Name :- Hemant Chauhan.

Class :- B. Sc. 4<sup>th</sup> Sem

Subject :- Data Structure

Session - 2016-17

10/15

PAGE \_\_\_\_\_  
DATE \_\_\_\_\_

Ans: Estate, Information Technology term for a set of computers and other technology infrastructure, generally the total set owned by a corporation, as in 'Estate Management' see ITIL and other standards. In drugs, Estate is the name of ethereal valerate & also for Alonitatin.

(4) Algorithm :-  
To PUSH information in the stack.

Step 1 :- (check for stack overflow)

If TOS  $\geq$  Size  
Output "stack overflow" and exit

(VB)

2016-17  
 परीक्षा  
 B. SC 5<sup>th</sup> Sem. (CA)

12/15

Q. What is the command button & Label?  
 Ans. In the previous chapter, we understood how to write a simple program in Visual Basic. In this chapter, we will understand how to use elementary controls text box, label and command button. Nothing compares to hands on experience. So we learn by doing it. Each chapter in this book contains one or more sample applications to explain how to use the topic that is discussed in the chapter. In this chapter, we will develop a simple application that illustrates how to use text box, label and command button controls.

Text box is used to take input from user. user can key in the data into a text box with all editing facilities.

Q. What is check box?

Ans. A checkbox is a GUI widget that permits the user make a binary choice i.e. a choice between one of two possible mutually exclusive option. For enable, the user may have to answer 'yes' (checked) or 'no' (not

Name - palkesh soni  
 subject - computer graphics  
 session - 2016-17  
 class - B.S.C 5<sup>th</sup> sem

11/15

Q.1 Explain application of computer graphics?

Ans. Application of computer graphics. Computer graphics deals with creation manipulation and storage of different type of images and objects. some of the applications of different type of images and objects.

1. computer Art:

using computer graphics we can create fine and commercial art which include animation packages, paint packages. These packages provide facilities for designing object shapes and specifying object motion. cartoon drawing, painting, logo design can also be done.

2. computer Aided Drawing:

Designing of buildings, automobile aircraft is done with the help of computer aided drawing this helps in providing minute

Q.2 what is DDA Explain DDA algorithm?

Ans. DDA :- In computer graphics, a digital differential analyzer (DDA) is hardware or software used for interpolation of variables over an interval between start and end point. DDA are used for rasterization of lines, triangles and polygons.

Algorithm:-

A linear DDA starts by calculation the smaller of  $b_x dy$  or  $b_y dx$  for a unit increment of the other. A line is then sampled at unit intervals in one coordinate and

considering a line with positive slope, if the slope is less than or equal to 1 we sample at unit  $x$  intervals ( $dx=1$ ) and compute successive  $y$  values as

B.sc VI Semester

(CS)

2016-17

Jay Summar

$\frac{11}{15}$  ✓

Q.2. What is the package?  
 Ans. A Java package organizes Java classes into modules providing a unique namespace for each type. It contains classes in the same package - private and protected - can contain the following kind of types: classes, interfaces, enumeration and annotation type.

A package allows a developer to group classes and interfaces, together these classes will all be related in some way. They might all have to do with a specific set of tasks. Programmers also typically use packages to organize classes belonging to the same category or providing similar functionality.

2016-17

B.sc VI Sem.

(CA)

GOVIND YADAV

$\frac{12}{15}$  ✓

Q.1. What is a Constructor?

Ans. When a class or object is created its constructor is called. Constructors have the same name as the class or object, and they usually initialize the data members of the new object. In the following example, a class named Taxi is defined by using a simple constructor. This class is then instantiated with the new operator. The Taxi constructor is invoked by the new operator. Memory is allocated for the new object.

Q. What is in class a

2017-18  
1<sup>st</sup> Year

GOVT. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Application 1<sup>st</sup> Year  
Session 2017-18

Paper 1 – Fundamentals of Computer and PC Software  
Time- 15 Min. Max. Marks- 10

Name: अक्षय चौधरी

08/10

- Q.1 Input of images is provided to the computer through:  
(a)OMR (b)OCR (c)MICR (d)Scanner
- Q.2 The memory Used for Temporary storage:  
(a)ROM (b)PROM (c)EEPROM (d)RAM
- Q.3 Memory that assist CPU to increase processing speed-  
(a)RAM (b)Cache (c)ROM (d) Hard disk
- Q.4 CPU stands for:  
(a)Central Processing Unit (b)Central Preparation Unit  
(c)Control Processing Unit (d) Centralized Processing unit
- Q.5 Which of the following is not a Pointing Device  
(a)Mouse (b)Trackball (c)Joystick (d)Scanner
- Q.6 Which of the following is not a characteristic of computer  
(a)Speed (b)Accuracy (c)Memory (d)Purity
- Q.7 In shopping malls following device is used to input items at billing counters:  
(a)OCR (b)MICR (c)OMR (d)Barcode Reader
- Q.8 In which type of mouse a LED (Light Emitting Diode)and a photo sensor is used to sense the motion:  
(a)Optical (b)Mechanical (c)Air (d)None of the above
- Q.10 Full form of CRT is:  
(a)Cathode ray tube (b)Cathode ray table  
(c)Crystal ray tube (d)None of these

GOVT. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Application 1<sup>st</sup> Year  
Session 2017-18

Paper 1 – Fundamentals of Computer and PC Software  
Time- 15 Min. Max. Marks- 10

Name: अक्षय

07/10

- Q.1 Input of images is provided to the computer through:  
(a)OMR (b)OCR (c)MICR (d)Scanner
- Q.2 The memory Used for Temporary storage:  
(a)ROM (b)PROM (c)EEPROM (d)RAM
- Q.3 Memory that assist CPU to increase processing speed-  
(a)RAM (b)Cache (c)ROM (d) Hard disk
- Q.4 CPU stands for:  
(a)Central Processing Unit (b)Central Preparation Unit  
(c)Control Processing Unit (d) Centralized Processing unit
- Q.5 Which of the following is not a Pointing Device  
(a)Mouse (b)Trackball (c)Joystick (d)Scanner
- Q.6 Which of the following is not a characteristic of computer  
(a)Speed (b)Accuracy (c)Memory (d)Purity
- Q.7 In shopping malls following device is used to input items at billing counters:  
(a)OCR (b)MICR (c)OMR (d)Barcode Reader
- Q.8 In which type of mouse a LED (Light Emitting Diode)and a photo sensor is used to sense the motion:  
(a)Optical (b)Mechanical (c)Air (d)None of the above
- Q.10 Full form of CRT is:  
(a)Cathode ray tube (b)Cathode ray table  
(c)Crystal ray tube (d)None of these

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Science 1<sup>st</sup> Year  
Session 2017-18

Paper 1 – Fundamentals of Computers  
Time- 15 Min. Max. Marks- 10

Name: अक्षय

08/10

- Q.1 Input of images is provided to the computer through:  
(a)OMR (b)OCR (c)MICR (d)Scanner
- Q.2 In which type of mouse a LED and a photo sensor is used to sense the motion  
(a)Optical (b)Mechanical (c)Air (d)None of the above
- Q.3 RAM is-  
(a)Round access memory (b)Regular auxiliary memory  
(c)Random advanced memory (d)Random access memory
- Q.4 Primary memory is:  
(a)Volatile (b)Non-Volatile (c)Both (d) None
- Q.5 In PROM data is written on chip using:  
(a)Heating (b)UV rays (c)Chemical process (d)High voltage current
- Q.6 EPROM stands for-  
(a)Electronic programmable read only memory  
(b) Electric programmable read only memory  
(c) Erasable programmable read only memory  
(d) None of above
- Q.7 Which of the following is not a characteristic of computer  
(a)Speed (b)Accuracy (c)Memory (d)Purity
- Q.8 All the Physical Components of a computer system is called as:  
(a)Software (b)Hardware (c)Firmware (d)None of these
- Q.9. What is the base of hexadecimal notation of a number:  
(a)2 (b)8 (c)10 (d)16
- Q.10 What is the value of  $(11001010)_2$  in decimal :  
(a) 200 (b)201 (c)202 (d)203

Govt. Madhav Science College Ujjain  
Department of Computer Science & Applications  
B.Sc. Computer Science 1<sup>st</sup> Year  
Session 2017-18

Paper 1 – Fundamentals of Computers  
Time- 15 Min. Max. Marks- 10

Name: अक्षय चौधरी

10/10

- Q.1 Input of images is provided to the computer through:  
(a)OMR (b)OCR (c)MICR (d)Scanner
- Q.2 In which type of mouse a LED and a photo sensor is used to sense the motion  
(a)Optical (b)Mechanical (c)Air (d)None of the above
- Q.3 RAM is-  
(a)Round access memory (b)Regular auxiliary memory  
(c)Random advanced memory (d)Random access memory
- Q.4 Primary memory is:  
(a)Volatile (b)Non-Volatile (c)Both (d) None
- Q.5 In PROM data is written on chip using:  
(a)Heating (b)UV rays (c)Chemical process (d)High voltage current
- Q.6 EPROM stands for-  
(a)Electronic programmable read only memory  
(b) Electric programmable read only memory  
(c) Erasable programmable read only memory  
(d) None of above
- Q.7 Which of the following is not a characteristic of computer  
(a)Speed (b)Accuracy (c)Memory (d)Purity
- Q.8 All the Physical Components of a computer system is called as:  
(a)Software (b)Hardware (c)Firmware (d)None of these
- Q.9. What is the base of hexadecimal notation of a number:  
(a)2 (b)8 (c)10 (d)16
- Q.10 What is the value of  $(11001010)_2$  in decimal :  
(a) 200 (b)201 (c)202 (d)203

Date: / / Page no:

Name - JITENDRA SALITRA.

Subject - D.B.M.S

Class - B.Sc III Sem. (CA)

Session - 2017-18.

14  
15

✓

Date: / / Page no:

Q1 Explain Traditional file System Vs DBMS?

Ans ⇒ (1) DBMS is very Expensive but the traditional file System is Cheap.

(2) DBMS is good for the Large System, but the traditional file System is good for a Small System having a Small No: of Item.

(3) DBMS required lots of Effort for designing but traditional file System is very low design Effort.

(4) DBMS is highly Secured but the traditional file System is NOT Secured.

Date: / / Page no:

Name - Ankit Dahi

Subject - operating System

Class - B.Sc III Sem (CS)

Session - 2017-18

12  
15

✓

Q.1 what is operating system?  
Explain function of operating system?

Ans 1. Operating system:-

An operating system (OS) is system software that manage computer hardware, software resources and provides common services for computer programs. An operating system is a software that acts as a interface between computer hardware components & the user. Every computer system must have atleast one operating system to run other programs. Applications like browser, notepad & M.S. Office, games etc. need some environment to run & perform its tasks.

The OS helps you to

Date: / / Page no: \_\_\_\_\_

Name: Subham

Class: B.Sc III CA

Subject: Data Structure

Session: 2017-2018

$\frac{11}{15}$  A

Date: / / Page no: \_\_\_\_\_

Ques: What is Queue? Write the algorithm for insert and delete.

Ans: In computer science, a queue is a collection of entities that are maintained in a sequence and can be modified by the addition of entities at one end of the sequence and the removal of entities from the other end of the sequence.

Algorithm of Queue

(4)

~~Insertion in a Queue Algorithm~~

To insert an element in a queue

Step 1: [ Check overflow condition ]  
if  $rear \geq size$   
Output "overflow" and return

Step 2: [ Increment rear pointer ]  
 $rear = rear + 1$

Date: / / Page: \_\_\_\_\_

Name: Manisha Joni

Class: B.Sc III Sem. (CS)

Subject: Digital Electronics

2017-18

$\frac{13}{15}$  A

Date: / / Page: \_\_\_\_\_

Write short note

1. ASCII  $\Rightarrow$  ASCII का पूरा नाम अमेरिकन स्टैंडर्ड Code for information interchange है। आर.पी.कॉम्प्यूटर में डेटा का प्रतिनिधित्व करने के लिए 7 बिट बाइनरी कोड का उपयोग करता है। आज जो हम कॉम्प्यूटर पर लिखते हैं। वह (ASCII) में लिखा जाता है। (ASCII) कोड कॉम्प्यूटर में सहे गए अक्षर उपकरणों और टैबल का उपयोग करने वाले अन्य उपकरणों का प्रतिनिधित्व करते हैं। कॉम्प्यूटर पर इस्तेमाल किया जाने वाला सबसे सामान्य टेबल फॉन्ट फॉर्मेट होती है।

2. EBCDIC  $\Rightarrow$  EBCDIC का पूरा नाम (Extended binary coded decimal).

# Govt. Madhav Science College



Session:-2017-18  
Subject :- Visual Basic

Guided By:-  
Miss.Anshu Joshi

Submitted By:-  
Hardik Singh Sikarwar  
B.Sc 5<sup>th</sup> sem CA

# Govt. Madhav Science College



Session:-2017-18  
Subject :- Visual Basic

Guided By:-  
Miss.Anshu Joshi

Submitted By:-  
Kaluram Parjapat  
B.Sc 5<sup>th</sup> sem CA

GOVT.MADHAV SCIENCE COLLEGE , UJJAIN (M.P.)



SESSION -2017

PRESENTATION ON

LED LIGHTS

SUBMITTED BY

SHIVANU MAKWANA

GUIDED BY

SHIKHA SHIVALIYA

# Govt. Madhav Science College, Ujjain

## B.Sc.(C.S.) - V<sup>th</sup> sem.

### Presentation on File Format

# Govt. Madhav Science College



Session:-2017-18

Subject :- Programming with JAVA

Guided By:-  
Mrs.Chanchala Joshi

Submitted By:-  
Ashwini Muneshwar  
B.Sc 6<sup>th</sup> sem CS

# Govt. Madhav Science College



Session:-2017-18

Subject :- Programming with JAVA

Guided By:-  
Mrs.Chanchala Joshi

Submitted By:-  
Gopika Pawar  
B.Sc 6<sup>th</sup> sem CS

# Govt. Madhav Science College



Session:-2017-18

Subject :- Programming with JAVA

Guided By:-  
Mr.Anil Prajapati

Submitted By:-  
Sachin Choudhary  
B.Sc 6<sup>th</sup> sem CA

# Govt. Madhav Science College



Session:-2017-18

Subject :- Programming with JAVA

Guided By:-  
Mr.Anil Prajapati

Submitted By:-  
Manish Anjana  
B.Sc 6<sup>th</sup> sem CA



14



Govt. Madhav Science P.G. College, Ujjain

COORDINATOR  
Department of Comp. Sc. & Appl.  
Govt. Madhav Vigyan Mahavidyalaya  
UJJAIN

*[Signature]*  
Signature of Principal

Question No.	Marks Obtained
1	3
2	6
3	12
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : Rishabh Sagar Gupta  
 Father's Name : Jitendra Kumar Gupta  
 Class : B.Sc. II<sup>nd</sup> year  
 Section : C<sub>2</sub>  
 Subject : Computer Application  
 Date of Examination : 02-02-19  
 Signature of Invigilator : *[Signature]*

*[Signature]*  
Signature of Valuer

21/40

Section - B

6) What is Search engine ?

Ans -> Search engine is a site to search all the information related to a given keywords. It easily search the word and open all the information related to this keyword, most of the common search engines are Yahoo, Google, etc. It is called search engine.

7) Define leased line ?

Ans -> Leased line is a private bidirectional network over the internet. It is used in networked telephone, internet and other data services. Its speed is 64 kbps/s. Its speed is faster as compare to broadband. It is always active. It is digital in 1970's. It is better as compare to broadband.

Section - A

(\*) Very short answer type questions.

Ans-1. Recursion is a ~~function~~ that in which a function calls ~~itself~~ to itself in which it present.

Ans-2. In ~~for~~ POP for a given problem an identifies is constructed with the variable in such a way ~~the~~ the require result is produced.

Ans-3. Destructor => Destructor is a type of member function which deinitialize ~~the~~ object before it goes out of the scope.

Ans-4. ADT => The standard form of ADT is abstract data type. Abstract data types in the art of representing data without including back ground



Govt. Madhav Science P.G. College, Ujjain

Seat no. 40

COORDINATOR  
Department of Comp. Sc. & Appl.  
Govt. Madhav Vigyan Mahavidyalaya  
UJJAIN

*[Signature]*  
Signature of Principal

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : Mr. Sagar Gupta  
 Father's Name : Mr. Lalaram Singh Gupta  
 Class : B.Sc. II<sup>nd</sup> year  
 Section : C<sub>1</sub> Computer science  
 Subject : Computer Science  
 Date of Examination : 02-02-19  
 Signature of Invigilator : *[Signature]*

*[Signature]*  
Signature of Valuer

34/40

**Govt. Madhav Science College**



Session:-2018-19  
Subject :- Visual Basic

Guided By:-  
Mr.Anil Prajapati

Submitted By:-  
Ajay Diwedi  
B.Sc 5<sup>th</sup> sem CA

**Govt. Madhav Science College**



Session:-2018-19  
Subject :- Visual Basic

Guided By:-  
Mr.Anil Prajapati

Submitted By:-  
Arjun Yadav  
B.Sc 5<sup>th</sup> sem CA

**GOVT. MADHAV SCIENCE P. G. UJJAIN**



**SESSION 2018-19**  
**BSc – 5<sup>TH</sup> SEM**

Guided By :-  
Miss Shikha Shivaliya

Submitted By :-  
> MADHUSUDANPATIDAR

**Govt. Madhav Science College**

**Ujjain**

SESSION 2018-19  
V SEM  
COMPUTER GRAPHICS & MULTIMEDIA

GUIDED BY  
MISS-SHIKHASHIVALIYA

SUBMITTED BY  
NAME:- PRATHAM GOSWAMI

SUB. :- Computer Science

## Govt. Madhav Science College



Session:-2017-18

Subject :- Programming with JAVA

Guided By:-  
Mr.Anil Prajapati

Submitted By:-  
Mayank Sunhere  
B.Sc 6<sup>th</sup> sem CS

## Govt. Madhav Science College



Session:-2018-19

Subject :- Programming with JAVA

Guided By:-  
Mr.Anil Prajapati

Submitted By:-  
Nidhi Singh Chouhan  
B.Sc 6<sup>th</sup> sem CS

## Govt. Madhav Science College



Session:-2018-19

Subject :- Programming with JAVA

Guided By:-  
Miss.Anshu Joshi

Submitted By:-  
Sourabh Bhati  
B.Sc. 6<sup>th</sup> sem CA

## Govt. Madhav Science College



Session:-2018-19

Subject :- Programming with JAVA

Guided By:-  
Miss.Anshu Joshi

Submitted By:-  
Shivani Chandel  
B.Sc 6<sup>th</sup> sem CA

2019-20

1<sup>st</sup> Year



Govt. Madhav Science P.G. College, Ujjain

(47)

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Signature of Principal

Name: REUJHAW Ved

Father's Name: Pshahad Ved

Class: B.Sc. 1<sup>st</sup> Year (C.S.)

Section: CL

Subject: Computer science [C Programming]

Date of Examination: 04-10-2020

Signature of Invigilator: \_\_\_\_\_

Signature of Valuer: \_\_\_\_\_

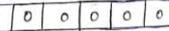
Question no - 1

ARRAY -

It is a type of program in which the statement will execute when the same data is evaluated. In which the statement will be executed with the help of ARRAY. It is the type of program in which we give data type of size of the student or other; in which we reserved a data type of variable to classify the array. In the way of program the array is produced some data type is execute if some data type is not there if different data type will be found this is not an array statement or it will not execute.

Example of Array :-

Syntax :- Data type & Variable [size];  
 int student [5];



Govt. Madhav Science P.G. College, Ujjain

(2)

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Signature of Principal

Name: Lakeshi kumar Dhangar

Father's Name: Ramratan Ji

Class: B.Sc I year

Section: C2

Subject: Computer Application

Date of Examination: 19 November 2019

Signature of Invigilator: \_\_\_\_\_

Signature of Valuer: \_\_\_\_\_

(9)

Section - A

Q.01

Ans.

Software is a set of programs which is interface between the user and hardware. and a program is a set of instruction by which we have to instruct a computer to what to do?

There is two type of software

- (i) system software
- (ii) application software.

(i)

system software: It is software which basically for the system run. in the absence of system software the computer is not working properly.

(ii)

Application software: It is software which is basically for the specific software. This software is used in various field. This software is of two type.

- (i) commercial software
- (ii) non-commercial software.

Q.02

Ans.

Output devices is device which give output in human understandable form after processing. output devices are many type or in different way they have to give a output.

(09/10)



Govt. Madhav Science P.G. College, Ujjain

22

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : Mayank Tripathi  
 Father's Name : Vishwendra Tripathi  
 Class : B.Sc II<sup>nd</sup> year  
 Section : C2 (Computer application-Maths-Physics)  
 Subject : Computer Application (CCE → I)  
 Date of Examination : 19-11-2019  
 Signature of Invigilator : [Signature]

Signature of Principal

Signature of Valuer

07 10

Question) Explain Search Engine?

Ans. 1) It will not be exaggerated if we call internet is a ocean of information. If we want toathom this ocean then it is impossible, So to overcome this problem some software/programmes are designed to find information and directories on the internet this type of software are known as search engine. Search engine enables us to find a specific web page, file, image, document, graphics, games, music etc. on internet.

In other words search engine's are software that locates us the web page whose address we not know through specific sentences, phrases and questions.

These are several types of search engine's in the market which are following:-

(1) LYCOS :- Its URL is <http://www.lycos.com/>. It is a search american search engine with e-mail.



Govt. Madhav Science P.G. College, Ujjain

27

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Name : Hanshika Nagwanshi  
 Father's Name : Mr. Ravindra Nagwanshi  
 Class : B.Sc II<sup>nd</sup> year  
 Section : G (Computer Science-Physics, Maths)  
 Subject : Computer Science  
 Date of Examination : 18/11/19  
 Signature of Invigilator : [Signature]

Signature of Principal

Signature of Valuer

8/10

Ques) Explain keywords (or) Explain Data types.

Ques) Explain object and class (or) what is encapsulation.

Ques) Explain for-loop with an example (or) Explain if else-statement with an example.

Ques) Explain formatted and unformatted input/output operations. (or) Explain predefined streams in C++.

Ques) Explain operators and its types (or) Explain advantages of OOPS.

Ques) Explain Data types?

Ans. Data types usually defined a type of data a variable can hold. It holds the information about what type of data it has during a program. Data types usually are of three types:-

- 1) Derived data-type.
- 2) Built-in data type.
- 3) User defined data type.

1) Derived data type - A derived data-type is a data-type.



Govt. Madhav Science P.G. College, Ujjain

(6)

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Signature of Principal

Name : Grawant Jaiswa

Father's Name : Mansy Jaiswa

Class : B.Sc. III<sup>rd</sup> year

Section : C2

Subject : CA

Date of Examination : 12 Feb

Signature of Invigilator : \_\_\_\_\_

Signature of Valuer

08/10

Q3.

Google Analytics

Google Analytics is a powerful free website traffic offered by Google. This is very useful in Digital marketing. Google Analytics is used to see traffic in websites. Google Analytics is useful for marketing because the shop owner can see the traffic that how many people has visited the websites.

Q4.

Social Networking :- Social Networking is done by Internet. Social Networking sites are used in many ways like chatting, marketing, and many useful thing through social networking all people are connected to each other. The person can chats with



Govt. Madhav Science P.G. College, Ujjain

(30)

Question No.	Marks Obtained
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total	
Out of	

Signature of Principal

Name : Nandini Patidar

Father's Name : Gopal Patidar

Class : B.Sc. III<sup>rd</sup> year

Section : C1

Subject : Computer Science

Date of Examination : 20/11/19

Signature of Invigilator : \_\_\_\_\_

Signature of Valuer

10/10

Ques- (or) write the advantages and application of DBMS?

- Ans- Advantage of DBMS:-
- 1) DBMS Database reduces the data redundancy (Duplication of data)
  - 2) Sharing of data
  - 3) Independence of data
  - 4) Integrity can be easily maintained through database
  - 5) Conflicting requirement balanced through database.
  - 6) Ease of data access.
  - 7) Ease of recovery

Application of DBMS:-

- Application of DBMS in Organization:-
- 1) Marketing professional to analyze sale data.
  - 2) Accounts
  - 3) Operation manager to track and improve quantity.
  - 4) Human resource manager to evaluate employee.
  - 5) Finance analyst to analyze firm's performance.

# Mathematics

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	M.Sc.	2015-16	Mathematics	Assignment
2.	M.Sc.	2015-16	Mathematics	Assignment
3.	M.Sc.	2015-16	Mathematics	Assignment
4.	M.Sc.	2015-16	Mathematics	Assignment

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	M.Sc.	2016-17	Mathematics	Assignment
2.	M.Sc.	2016-17	Mathematics	Assignment
3.	M.Sc.	2016-17	Mathematics	Assignment
4.	M.Sc.	2016-17	Mathematics	Assignment

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	M.Sc.	2017-18	Mathematics	Assignment
2.	M.Sc.	2017-18	Mathematics	Assignment
3.	M.Sc.	2017-18	Mathematics	Assignment
4.	M.Sc.	2017-18	Mathematics	Assignment

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	M.Sc.	2018-19	Mathematics	Assignment
2.	M.Sc.	2018-19	Mathematics	Assignment
3.	M.Sc.	2018-19	Mathematics	Assignment
4.	M.Sc.	2018-19	Mathematics	Assignment

<b>S. No.</b>	<b>Class</b>	<b>Session</b>	<b>Paper name</b>	<b>Mode</b>
1.	M.Sc.	2019-20	Mathematics	Assignment
2.	M.Sc.	2019-20	Mathematics	Assignment
3.	M.Sc.	2019-20	Mathematics	Assignment
4.	M.Sc.	2019-20	Mathematics	Assignment

# Economics

## CCE Economics

Sr. No.	Classes	Session	CCE Mode
1	B.Sc. I sem.	2015-16	ASSIGNMENT
2	B.Sc. III sem.		ASSIGNMENT
3	<b>B.Sc. V sem.</b>		ASSIGNMENT
4	<b>B.Sc. II sem.</b>		ASSIGNMENT
5	<b>B.Sc. IV sem.</b>		ASSIGNMENT
6	<b>B.Sc. VI sem.</b>		ASSIGNMENT

Sr. No.	Classes	Session	CCE Mode
1	<b>B.Sc. II sem.</b>	2016-17	<b>Subjective long test</b>
2	<b>B.Sc. IV sem.</b>		ASSIGNMENT

Sr. No.	Classes	Session	CCE Mode
1	<b>B.Sc. I YEAR.</b>	2017-18	ASSIGNMENT

Sr. No.	Classes	Session	CCE Mode
1	<b>B.Sc. I YEAR.</b>	2018-19	ASSIGNMENT

Sr. No.	Classes	Session	CCE Mode
1	<b>B.Sc. I YEAR.</b>	2019-20	ASSIGNMENT
2	<b>B.Sc. II YEAR</b>		ASSIGNMENT
3	<b>B.Sc. III YEAR</b>		ASSIGNMENT

# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



**B.Sc. I sem.**  
**Mode: ASSIGNMENT**  
**Session: 2015-16**

Demand ≠ Supply  
माँग और पूर्ति

**\* माँग**

- अर्थ तथा परिभाषा
- माँग रेखा
- माँग के प्रकार
- माँग को प्रभावित करने वाले तत्व

**\* पूर्ति**

- अर्थ तथा परिभाषा
- पूर्ति रेखा
- पूर्ति को प्रभावित करने वाले तत्व

Value and price

- मूल्य एवं कीमत

Meaning of demand  
माँग का अर्थ तथा परिभाषा

अर्थशास्त्र में माँग तथा पूर्ति (Demand and supply) शब्दों का महत्वपूर्ण स्थान है। यह कहा जाता है, "यदि किसी चीज का अर्थशास्त्र के प्रत्येक प्रश्न के उत्तर में माँग तथा पूर्ति शब्दों को ही रखा दिया जाए तो वह एक अच्छा अर्थशास्त्री बन सकता है।"

वस्तुतः अर्थशास्त्र की समस्याओं को विश्लेषण में माँग तथा पूर्ति शब्दों का अर्थ अतीव महत्त्वपूर्ण अर्थ में आवश्यक है। अर्थशास्त्र में 'माँग' शब्द को अर्थशास्त्रियों ने बहुत-बहुत अर्थों में परिभाषित किया है। अध्ययन को सुविधा की दृष्टि से 'माँग' शब्द को दो विभिन्न परिभाषाओं को निम्न तीन आधारों पर वर्गीकृत किया जा सकता है -

1. प्रभावपूर्ण इच्छा का आधार,
2. मूल्य का आधार एवं
3. मूल्य और समय का आधार

Topic: \_\_\_\_\_ Date: \_\_\_\_\_ Page: 2

प्रथम वर्ग में इन परिभाषाओं को सम्मिलित किया जाता है। जो माँग को प्रभावपूर्ण इच्छा का परिभाषाची प्रतीक करती है।

**प्रो. वेनरम के अनुसार:** "माँग केवल एक पूर्णवर्ण इच्छा होती है (1) किसी वस्तु को प्राप्त करने की इच्छा (2) उमरवस्तु को खरीदने के लिए शक्ति (3) सहजता से वस्तु को खरीदने की तैयारी"।

इस प्रकार वेनरम की इस परिभाषा के अनुसार माँग के इस अर्थ में माँग और आवश्यकता के अर्थ हैं जो पूरी की जाती है। इसके अतिरिक्त माँग को मूल्य और समय के अर्थों में भी व्यक्त किया जाता है।

**द्वितीय वर्ग में इन परिभाषाओं को सम्मिलित किया जाता है -**

जिनमें माँग की परिभाषा मूल्य के आधार पर की गई है -

**प्रो. मिलर का कथन है:** "माँग का अभिप्राय वस्तु की उस मात्रा से है जो कि एक निश्चित मूल्य पर खरीदी जाए और यह कि निश्चित मात्रा नहीं खरीदना चाहते। यह मूल्य के अनुसार बदलती रहती है।"

**प्रो. वादा के शब्दों में:** "किसी वस्तु की माँग उसके मूल्य तथा उस मात्रा से सम्बन्धित

Topic: \_\_\_\_\_ Date: \_\_\_\_\_ Page: 3

होती है जो किसी विशेष मूल्य पर खरीदी जा सकती है।"

**3** तीसरे वर्ग में इन परिभाषाओं को सम्मिलित किया जाता है जो माँग को मूल्य तथा समय से सम्बन्धित करती है -

**प्रो. वेनरम के अनुसार:** "किसी वस्तु का मूल्य पर किसी वस्तु की माँग उसकी वह मात्रा है जो उस मूल्य पर एक निश्चित समय से खरीदी जाती है।"

**प्रो. मेघर्स के शब्दों में:** "किसी वस्तु की माँग उन मात्राओं की अभिव्यक्ति है जिसे एक फेरा खरीदना सम्भव मूल्य पर एक समय-विशेष में खरीदने को तैयार रहता है।"

Demand is effective desire ... Demand implies sure things

(i) desire to possess a thing.  
(ii) means for purchasing it, and  
(iii) willingness to use these means for purchasing it."

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.**

**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



**B.Sc. IV sem.  
Mode: ASSIGNMENT  
Session: 2016-17**

2] सरल, आंशिक अथवा बहुगुणी सहसम्बन्ध :-  
स्वतन्त्र तथा आश्रित चर-  
सूत्रों की संख्या के आधार पर सहसम्बन्ध सरल,  
आंशिक या बहुगुणी हो सकता है। दो चर-सूत्रों  
के अन्तर्गत सहसम्बन्ध कहते हैं। आंशिक सहसम्बन्ध  
के अन्तर्गत दो से अधिक चर-सूत्रों का अध्ययन  
किया जाता है। परन्तु अन्य चर-सूत्रों के प्रभाव  
को स्थिर रखकर केवल दो चर-सूत्रों का  
पारस्परिक सम्बन्ध निकाला जाता है। दो या अधिक  
स्वतन्त्र चर-सूत्रों के एक आश्रित चर-सूत्र पर  
संयोजित प्रभाव का अध्ययन, बहुगुणी सहसम्बन्ध  
कहलाता है।

3] रेखीय एवं वक्ररेखीय सहसम्बन्ध :-  
यदि दो चर-सूत्रों  
में परिवर्तन का अनुपात स्थायी रूप से एक समान  
हो तो उनमें रेखीय सहसम्बन्ध होता है। इसके  
विपरीत जब दो चर-सूत्रों में परिवर्तन के लिए  
सूत्रों की मात्रा में 10% की कमी करने पर  
कभी 20%, कभी 40%, या कभी 60% सूत्र  
बढ़ जाते हैं तो इसे वक्ररेखीय सहसम्बन्ध  
कहते हैं।

किंवा - "सहसम्बन्ध दो आश्रय दो प्रमाणों या  
समूहों के समूहों के मध्य कार्यकारण सम्बन्ध  
होने से है।"  
पौ. श. आर. कौन्स - " यदि दो या अधिक सूत्रों  
अनुपात में उस प्रकार परिवर्तित होती हैं कि  
उनमें से एक में होने वाले परिवर्तनों के  
फलस्वरूप दूसरी शर्तों में भी परिवर्तन होने  
की प्रवृत्ति पायी जाये तो वे शर्तियाँ  
सहसम्बन्ध कहलाती हैं।"

**सहसम्बन्ध के प्रकार**

सम्बन्धित चरों के बीच परिवर्तनों की दिशा और  
अनुपात के आधार पर सहसम्बन्ध के  
निम्नलिखित प्रकार हो सकते हैं -

1] दानात्मक अथवा प्रणात्मक सहसम्बन्ध :- जब दो  
आश्रय शर्तियों में परिवर्तन की दिशा एक ही  
हो तो वही दानात्मक सहसम्बन्ध होता है। उदाहरण  
के लिये वस्तु के द्रव्य में वृद्धि होने पर  
उसकी द्रव्य में वृद्धि होता है। इसके विपरीत, जब दो  
आश्रय शर्तियों में परिवर्तन की दिशा विपरीत हो तो  
वही प्रणात्मक सहसम्बन्ध होता है। उदाहरण के  
लिये वस्तु के द्रव्य में वृद्धि होने पर उसकी  
मात्रा में कमी होगा।

**Covulation (सहसम्बन्ध) :-**  
सहसम्बन्ध का आश्रय एवं परिभाषा :-  
सहसम्बन्ध एक सांख्यिकीय लक्षणीक है जिसका  
प्रयोग दो या अधिक चरों के व्यवहार का विश्लेषण  
करने के लिये किया जाता है। व्यवहार में यह  
देखा जाता है कि दो या दो से अधिक प्रयोगों में  
पारस्परिक सम्बन्ध होता है। उदाहरण के लिये लोगों  
की आयु बढ़ने के साथ-साथ उन्का वजन भी  
बढ़ जाता है अर्थात् लोगों की आयु एवं वजन  
में पारस्परिक सम्बन्ध होता है। इसी प्रकार  
लोगों की आयु बढ़ जाने पर उनका उपभोग  
व्याय भी बढ़ जाता है। अतः कहा जा सकता  
है कि दो प्रमाणों में इस प्रकार से सम्बन्धित  
हो सकते हैं कि एक में होने वाले उन्परिवर्तन  
से दूसरी मात्रा में भी उन्परिवर्तन हो जाये।  
दो प्रमाणों के ऐसे परिवर्तनों के बीच  
सम्बन्ध जान करने की विधि को सहसम्बन्ध  
विश्लेषण कहते हैं।  
सहसम्बन्ध दो चरों में मूल्य और परिणाम  
के सम्बन्ध को व्यक्त करता है।  
कोई गटन :- जब दो या दो से अधिक चरों, अथवा  
शा समूहों में, के मध्य कुछ निर्धारण  
सम्बन्ध हो तो उसे सहसम्बन्ध कहा जाता है।"

2] सह-विचरण की मात्रा :- इसके द्वारा सह-विचरण  
को (Covariance) की मात्रा को भी जाना जाता  
है।  
इस प्रकार है -  $Covariance = \frac{\sum dxy}{N}$   
कार्त प्रियार्थन के सहसम्बन्ध की परिचयनाओं  
या मापनाओं :-  
1] सम्प्रमाणों अनेक कारणों से प्रभावित होती हैं।  
अतः उनमें सम्प्रामाण्यता आ जाती है।  
2] प्रभावित करने वाले अनेक कारणों से परस्पर  
कारण व प्रभाव का सम्बन्ध होता है।  
3] दोनों श्रेणियों में रेखीय सम्बन्ध होता है।  
गणना के प्रमाण इस सूत्र का उपयोग  
किया जाता है -  
**Formula :-** 1)  $r = \frac{\sum dxy}{\sqrt{\sum d^2x \times \sum d^2y}}$   
2)  $r = \frac{\sum dxy - \frac{(\sum dx)(\sum dy)}{N}}{\sqrt{\left[ \sum dx^2 - \frac{(\sum dx)^2}{N} \right] \times \left[ \sum dy^2 - \frac{(\sum dy)^2}{N} \right]}}$

# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



**B.Sc. III sem.**  
**Mode: ASSIGNMENT**  
**Session: 2015-16**

मांग रेखा  
(Demand curve)

जब किसी वस्तु की विभिन्न मूल्यों पर मांगी गई मात्रा को रेखाचित्र द्वारा प्रदर्शित किया जाता है तब खूब्य एवं मात्रा के सम्बन्ध को बताने वाली रेखा को मांग रेखा कहा जाता है।

ए मांग तालिका का रेखाको द्वारा प्रस्तुत रूप ही मांग रेखा है।

प्रो. सेम्यूलसन के शब्दों में, "मांग तालिका का चित्रिकरण ही मांग रेखा कहलाती है"।

मांग तालिका की तरह ही मांग रेखा भी दो प्रकार की होती है।

व्यक्तिगत मांग रेखा (Individual demand curve) &

व्यक्तिगत मांग तालिका के आधार पर मांग रेखा काई गई है।

मांग की मात्रा

चित्र 1 में OX-अक्ष पर खालू की मात्रा एवं OY-अक्ष पर खालू का मूल्य दर्शाया गया है। खालू के विभिन्न मूल्यों पर मांगी गई मात्राओं के सम्बन्ध को चित्र में बिन्दुओं को दर्शाया गया है। इन बिन्दुओं को जोड़ने से जो रेखा बनती है, उसे ही अर्थशास्त्र में मांग रेखा या मांग वक्र रेखा कहते हैं। इस चित्र में खालू की व्यक्तिगत मांग रेखा OD रेखा है।

2 बाजार की मांग रेखा :: (Market demand curve) &

बाजार मांगिका को आधार मानकर चित्र में बाजार मांग रेखा खींची गई है।

खालू का मूल्य दर्शाया गया है। OX-अक्ष के ऊपर जो बिन्दु दर्शाए गए हैं वे विभिन्न मूल्यों पर खालू की मांगी गई मात्रा को दर्शाते हैं। इन बिन्दुओं को परस्पर जोड़ने से जो रेखा बनती है, उसे ही अर्थशास्त्र में "बाजार की मांग रेखा" या "बाजार बमंग वक्र" कहा जाता है।

मांग की मात्रा

इस प्रकार स्पष्ट है कि व्यक्तिगत मांग वक्र एवं बाजार मांग वक्र की आकृतियाँ लगभग समान ही हैं। दोनों रेखाओं में एक ही प्रवृत्ति यथा - "बायें से दायें की ओर गिरती" दिखाई देती है। खालू की मांग रेखा की यह प्रवृत्ति बताती है कि खूब्य कम होने पर मांग बढ़ती है और खूब्य बढ़ने पर मांग घटती है। दूसरे शब्दों में, खूब्य एवं मांग में विपरीत या उल्टा सम्बन्ध होता है।

Types of Demand  
(मांग के प्रकार)

किसी वस्तु या सेवा की मांग की मात्रा पर मुख्यतः तीन बातों का प्रभाव पड़ता है - (1) उस वस्तु के खूब्य पर, (ii) उपभोक्ता की आय पर, तथा (iii) वस्तु की पूरक और स्थानापन्न वस्तुओं के खूब्य पर। अतः इन इन बातों को ध्यान में रखते हुए अर्थशास्त्री बाजार में मांग के तीन प्रकार बताते हैं -

1. मूल्य मांग (Elastic demand)
2. आय मांग (Income demand)
3. प्रतुल्य या अति मांग (Unit demand)

1. मूल्य मांग & "यदि उगा बाने अमान रहे" में "मूल्य मांग" किसी वस्तुओं की उन मात्राओं को दिखाती है जो एक उपभोक्ता एक निश्चित समय में विभिन्न मूल्यों पर खरीदने को तैयार है। यहाँ बताने का उद्देश्य यह है

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**





# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



B.Sc. V sem.

Mode: ASSIGNMENT

Session: 2015-16

- Objectives-
- (1) To provide opportunity for large-scale employment at a minimum cost
  - (2) To provide steady source of income to the low-income groups living in rural and urban areas of the country
  - (3) To meet the growing demands of the consumer goods and simple producers goods
  - (4) To mobilise resources of capital and skill and their optimum utilisation
  - (5) To eliminate economic backwardness of rural and under developed regions in the country
  - (6) To attain self-reliance
  - (7) To reduce regional imbalances
  - (8) To effect an integration of the activities of small business with the rural economy on the one hand and with the large scale business on the other
  - (9) To reduce disparities in income, wealth and consumption
  - (10) To provide substitutes for various industrial products now being imported into the country
  - (11) To improve the quality of industrial products manufactured in the cottage industry sector and to enhance both productivity and export.

- ★ Difference between cottage and small scale industries
- (a) The basis of classification between cottage and small scale business is that the cottage industry embraces predominantly manual process of work. The difference b/w the small scale and cottage industries are basically two
    - (1) Small scale industries are mainly located in urban centres as separate establishments, the cottage industries are generally associated with agriculture and provide subsidiary employment in rural areas
    - (2) Small scale industries produce goods with mechanised equipment employing outside labour, while cottage industries involve operations mostly by hand which are carried on primarily with the help of members of the family
- The following major industry group comes in the small sectors
- (1) Food products
  - (2) Paper products and Printing
  - (3) Chemical products
  - (4) Basic Metal industries
  - (5) Electrical machinery and Parts

- (6) Rubber and Plastic products
  - (7) Machinery and Parts except Electrical goods
  - (8) Hosiery and Garments - Wool product
  - (9) Non Metallic Mineral products
  - (10) Transport Equipment and Parts
  - (11) Leather products
  - (12) Repair services
  - (13) Cotton Textiles
  - (14) Jute, Hemp and Mesta Textiles
  - (15) Other services
- 12/15

**OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G.  
COLLEGE UJJAIN M.P.**

**A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE**



# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



**B.Sc. VI sem.**  
**Mode: ASSIGNMENT**  
**Session: 2015-16**

Govt. MADHAV SCIENCE College  
2015-2016  
B.Sc. VI Sem  
ECONOMICS ASSIGNMENT  
SUBMITTED BY - ARUN UPADHYAY  
Date - 24 FEB 2016  
SUBMITTED TO - RAJKUMAR NEEMA

केन्द्रीय त्वरति के माप

संक्रियण साधनी आ कारिकरण, सारणीयन व सम्पादन करने के पञ्चांग मुख्य भागमा इन सबको के नुकरा बाणिमि विद्यया निकालने की होती है। ये क्रियाएँ, मानकी, को सरल व सुदृश्यमान बनाने के लिए की जाती है। परन्तु यह कठम सारभिक अनुपात है, जिन्हे धारिय कोम सारभिकी की मीमा विवेचनमा स्पष्ट नहीं होती है। अतः इन समको की विवेचनमा को कम-से-कम-अंको से सारभिक व संकट करने के लिए केन्द्रीय त्वरति के माप आ सारभिकीय माध्यों का परिचय करना पडता है।

केन्द्रीय त्वरति के माप मा सारभिकीय माध्य की परिभाषा:-  
कार्टेजियन द्वारे काउन्डन के अनुसार  
माध्य समको के विचार के अन्तगत विचार पूर्व कोम हाका समको के विचार के अन्तगत विचार पूर्व कोम है। विचार समको के साथ शुरू कर अभिविचार करने के लिए किया जाता है। तबसे के विचार के अन्तगत विचार होने के कारण माध्य को केन्द्रीय त्वरति का माप भी कहा जाकर है।

केन्द्रीय त्वरति के माप मा सारभिकीय माध्य के लार्म:-  
केन्द्रीय त्वरति के माप के अनुसार  
करी विचार है।

⑩ केन्द्रीय त्वरति के माप

① कुलुड या कुमिपुड  
② माध्य  
③ विभागाय मुख्य

अनुसंधानीय माध्य निकालने की शक्तियां

A. वारिन्सिय श्रेणी :- वारिन्सिय श्रेणी आ अनुसंधानीय माध्य समको के लघु श्रेणी इका जाल मैसा पारसक/है।

१) वारिन्सिय श्रेणी :-  
यदि वारिन्सिय श्रेणी के  $m_1, m_2, m_3, \dots, m_n$  विचारन परसे के मुख्य है।

इस श्रेणीय माध्य :-  
$$a = \frac{m_1x_1 + m_2x_2 + \dots + m_nx_n}{N}$$

उत्तर  $a = \frac{\sum dx}{N}$  होगा

मार्ग पर  $a =$  केन्द्रीय त्वरति माध्य

$\sum m =$  परसे के सके इनको का योग  
 $N =$  परसे की संख्या के समुह/है।

लघु श्रेणी :-  
लघु श्रेणी उन तथ्य पर आधारित है कि वारिन्सिय माध्य से विचारन पर जैसे से अनुसंधानीय माध्य निकालने की शक्तिया विचार है।

1) किमी की संख्या को श्रेणी का कुलित माध्य मान लिया जाता है, चले यह संख्या श्रेणी के परसे की समको में परन्तु श्रेणी की ही श्रेणी के संख्या विचारन। मुख्य अनुसंधानीय माध्य में ही तो कुलित माध्य मानने से अनुसंधानीय त्वरति सरल हो जाती है।

2) विचारन का योग किया जाता है।

3) विचारन के योग में परसे की संख्या का भाग देकर जो मुख्य भाग होता है। उसे कुलित माध्य के समको पर वारिन्सिय माध्य प्राप्त हो जाता है।

मुख्य के अनुसार  
$$a = X + \frac{\sum dx}{N}$$

मार्ग पर  
 $a =$  अनुसंधानीय माध्य  
 $X =$  कुलित माध्य

$\sum dx =$  विचारन का योग  
 $N =$  परसे की संख्या

उदा. 1. किमी दूरी के 10 कुलित श्रेणी का एक दिन की वेग माप विचारन परसे में किया जाता है। संचय वारिन्सिय श्रेणी द्वारा अनुसंधानीय माध्य प्राप्त कीजिए।

कारिकारी : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10  
कुलित दिन का वेगन, 44, 48, 51, 55, 57, 60, 37, 48, 48, 60

संचय श्रेणी द्वारा

कारिकारी (कुलित संख्या)	कुलित दिन का वेगन (कि.)
1	44
2	48
3	51
4	55
5	57
6	60
7	37
8	48
9	48
10	60
कुलित योग ( $\sum m$ )	528

# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



B.Sc. II sem.

Mode: Subjective long test

Session: 2016-17

GOVT MADHAV SCIENCE COLLEGE

SESSION  
2016 - 2017

SMALL SCALE AND COTTAGE INDUSTRIES

SUBMITTED BY:  
NAME : AJAY SOLANKI  
CLASS: B SC II SEM  
SUBJECT : ECONOMICS

SUBMITTED TO:  
RAJKUMAR NEEMA SIR

*Dr. Akshay*  
Head of the Dept. of Economics  
Govt. Madhav Science College, Ujjain

## Small Scale & Cottage Industries

\* Introduction :-

The definition used by the government of India to describe small industries is based on the investment in plant and machinery. This measure seeks to keep in view the socio economic environment in India where capital is scarce and labour is abundant. One more point to note is that a definition exists only for small and tiny units but not for large and medium units.

Medium and large sized enterprises not defined. Anything that does not fall under the definition of small can be large or medium. Taking capital invested as the basis, the small business in India can be one of the following categories

A small scale industrial undertaking is defined as one in which the investment in fixed assets of plant and machinery does not exceed rupees one crore. However, in case of small industries in the field of export promotion and modernisation, investment limits in plant and machinery is fixed at rupees five crores.

\* Role and Importance of Small Scale Industries

The small scale sector promotes entrepreneurship and helps to earn foreign exchange and is very important to the Indian economy. The following points will highlight the importance of small scale enterprises

- (1) Innovation and productivity: It is the small scale enterprises which leads to innovation and productivity although they do not maintain their own research and development wings.
- (2) Individual taste, fashion and personalised service: Small scale firms are receptive to change in

taste and fashions of consumers and in adjusting the production process accordingly.

- (3) Symbols of national identity - They are locally owned and controlled. They can strengthen the social system and cultural traditions of India. They are perceived as valuable symbols of national identity.
- (4) Tendency of dispersal over wide area - Small scale enterprises have a tendency to disperse over wide areas. More than 62.9% of the units are located in the backward areas.

\* Features of Cottage Industries -

Cottage industries are also known as rural industries or traditional industries. They are not defined by capital investment criteria as in the case of other small scale industries. However, cottage industries are characterised by certain features as follows.

- (1) They are organised by individuals, with private resources.
- (2) It normally use family labour and locally available talent.

- (3) The equipment used in simple manner.
- (4) Capital investment is small.
- (5) It produces simple products, normally in their own premises.
- (6) It produces the goods using indigenous technology.

\* Characteristics and Objectives of Small Scale Industries

Characteristics  
Any small business is characterised by at least two of the following key features

- (1) Management is independent. Usually the managers are also owners.
- (2) Capital is supplied and ownership is held by an individual or a small group.
- (3) The area of operations is mainly local. Workers and owners are of one home community. Markets need not be local.
- (4) Relative size within the industry - the business is small when compared to the biggest units in its field. The size of the top bracket varies greatly, so that what might seem large in one field would be definitely small in another.

# OFFICE OF THE PRINCIPAL GOVT. MADHAV SCIENCE P.G. COLLEGE UJJAIN M.P.

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST COLLEGE



**B.Sc. I YEAR.**  
**Mode: ASSIGNMENT**  
**Session: 2017-18**

**Govt. Madhav Science College**

Ujjain (M.P.)  
Session 2017-2018

Sub- Economics

**C.C.E**  
On  
**Market & Its Types**

Guided By  
Prof. Rajkumar Neema Sir

Submitted By  
Tushita Yadav  
B.Sc I yr

**Market**

**Its Types**

बाजार का अर्थ एवं बाजार के प्रकार

**Meaning of Market**

बाजार का अर्थ

जबकि जलचाल की भांति बाजार का तात्पर्य अन्तःस्थान विशेष से होता है जहाँ पर लोग वस्तुओं को खरीदने के लिए एकत्रित होते हैं। किन्तु अर्थशास्त्र में बाजार शब्द का तात्पर्य अधिक व्यापक अर्थ में किया जाता है। आर्थशास्त्र में बाजार का अर्थ स्थान विशेष से न लेकर अन्तःस्थान क्षेत्र से होता है। जहाँ तक किसी वस्तु के किता मुझे विक्रीतागत होने रहते हैं। वस्तु कारण यह है कि वर्तमान युग में वस्तुओं की शरीर विक्री सुपेयों में होती है। अतः (Example) की विशेष के शरीरवार एवं विदेशी एक बड़े क्षेत्र में हर-हर तक फैले रहते हैं। अतः क्षेत्र वस्तुओं का लेबल पर-पर्यटन टेलीफोन, तार आदि के माध्यम से भी हो सकता है।

अतः अर्थशास्त्र में बाजार का अर्थ स्थान विशेष से न लेकर अन्तःस्थान क्षेत्र से होता है जहाँ पर वस्तु विशेष की खरीदने के लिए लोगों की जाती है। वस्तु लेन-देन से सम्बन्धित बाजार में वस्तु का एक ही मूल्य होता है।

**Definition of Market according to :-**

बाजार की परिभाषा :-

संक्षेप :- संक्षेप के अनुसार बाजार शब्द का अर्थ किसी स्थान विशेष से नहीं है परन्तु संक्षेप एक या अनेक वस्तुओं और उनके क्रय और विक्री से सम्बन्धित क्षेत्रों में स्थितिगत होती है।

प्रो. सिमिथ :- प्रो. सिमिथ के अनुसार बाजार वह क्षेत्र है जहाँ व्यक्ति के समूह या संग्रह को कहते हैं जिनके बीच वस्तुओं के परस्पर-व्यापक सम्बन्ध हैं। किन्तु व्यक्ति को सुगमता से वस्तु का पूर्ण ज्ञान होना चाहिए कि वस्तु व्यक्ति समय पर वस्तुओं और सेवाओं का विभिन्न किन वस्तुएं कहते हैं।

(Prof. Coase) के अनुसार अर्थशास्त्र में बाजार शब्द का अर्थ किसी स्थान विशेष से नहीं होता है। किन्तु अन्तःस्थान क्षेत्र से होता है। जहाँ विक्री एवं खरीद दोनों ही प्रकार से वस्तुओं का लेबल पर-पर्यटन टेलीफोन, तार आदि के माध्यम से भी हो सकता है।

**Elements of Market**

बाजार के आवश्यक तत्व

वस्तु की गोपनीयता से सम्बन्धित है कि एक वस्तु वस्तु के बाजार में विक्री-खरीद लाने जाते हैं।

(In open) एक क्षेत्र :- अर्थशास्त्र में बाजार का अर्थ स्थान विशेष से न लेकर अन्तःस्थान क्षेत्र से होता है। जहाँ पर वस्तु विशेष के लिए एकत्रित होते हैं। अतः अन्तःस्थान क्षेत्र से होता है। जहाँ विक्री एवं खरीद दोनों ही प्रकार से वस्तुओं का लेबल पर-पर्यटन टेलीफोन, तार आदि के माध्यम से भी हो सकता है।

(One commodity) एक वस्तु :- अर्थशास्त्र में बाजार का अर्थ स्थान विशेष से न लेकर अन्तःस्थान क्षेत्र से होता है। जहाँ पर वस्तु विशेष के लिए एकत्रित होते हैं। अतः अन्तःस्थान क्षेत्र से होता है। जहाँ विक्री एवं खरीद दोनों ही प्रकार से वस्तुओं का लेबल पर-पर्यटन टेलीफोन, तार आदि के माध्यम से भी हो सकता है।

वस्तु विशेष (Buyer & Seller) :- बाजार में खरीद विक्री करने के लिए वस्तुओं एवं विक्रीतागत की आवश्यकता होती है। अतः अन्तःस्थान क्षेत्र से होता है। जहाँ विक्री एवं खरीद दोनों ही प्रकार से वस्तुओं का लेबल पर-पर्यटन टेलीफोन, तार आदि के माध्यम से भी हो सकता है।

**Classification of Market**

**बाजार का वर्गीकरण**

1) क्षेत्र के अनुसार

- (a) स्थानीय बाजार
- (b) जिला बाजार
- (c) राष्ट्रीय बाजार
- (d) अन्तर्राष्ट्रीय बाजार

2) समय के अनुसार

- (a) अल्पकालीन बाजार
- (b) अल्पकालीन बाजार
- (c) दीर्घकालीन बाजार
- (d) अति-दीर्घकालीन बाजार

3) विक्री-खरीद के अनुसार

- (a) पूर्ण बाजार
- (b) अर्ध-पूर्ण बाजार
- (c) अपूर्ण बाजार

4) वस्तु के अनुसार

- (a) वस्तु बाजार
- (b) सेवा बाजार
- (c) धातु बाजार

5) वस्तु के आधार पर

- (a) अविभाज्य वस्तु बाजार
- (b) विभाज्य वस्तु बाजार
- (c) अविभाज्य वस्तु बाजार
- (d) विभाज्य वस्तु बाजार

6) वस्तु की प्रकृति के अनुसार

- (a) उपभोग बाजार
- (b) संरक्षण बाजार
- (c) धातु बाजार







ज्ञानं परमं बलम्



GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC

DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



**Sample Signed CCE sheets**

**Mecahnism to display internal marks to students**



ज्ञानं परमं बलम्

GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Record of Comprehensive Continuous Evaluation (CCE)

Session - 2015-2016

Subject: Electronics

Name of the College Govt. MMM College  
Class & Section : B.Sc. 1st Sem

Teachers Name (1) : Anamika Sharma  
(2) :

SN	Roll Number	Enrollment Number	Student's Name / Father's Name	Record of CCE-I		
				Mode / Remark	Marks Obt. Out of	
1	15144913		Akanksha Agrawal		14	Student's Signature Akanksha
2	15144914		Akshay Ghanghoriya		11	Student's Signature Akshay
3	15144916		Akshay Patidar		10	Student's Signature Akshay
4	15144920		Bablu Rathod		12	Student's Signature Bablu
5	15144920		Deepak Bhagwat		11	Student's Signature Deepak
6	15144921		Deepak Prajapati		12	Student's Signature Deepak
7	15144923		Kuldeep		13	Student's Signature Kuldeep
8	15144924		Nageshwar Choudhary		08	Student's Signature Nageshwar
9	15144925		Nitin Hatuniya		12	Student's Signature Nitin
10	15144926		Nitin Kumar Gautam		13	Student's Signature Nitin
11	15144928		Pratik Kumar		11	Student's Signature Pratik
12	15144929		Rahul Patidar		10	Student's Signature Rahul
13	15144930		Rishabh Singh		13	Student's Signature Rishabh
14	15144931		Sanyam Nagar		13	Student's Signature Sanyam
15	15144933		Shalendra Maitya		12	Student's Signature Shalendra
16	15144934		Shankar Kushwah		11	Student's Signature Shankar
17	15144935		Sheetal Shastri		13	Student's Signature Sheetal
18	15144936		Suraj Singh Bhatiya		10	Student's Signature Suraj
19	15144937		Vaibhav Raj Singh Chouhan		14	Student's Signature Vaibhav
20	15144938		Vijay Singh Chouhan		12	Student's Signature Vijay

Scheme of Marks:  
CCE - I : 75% of the maximum marks in the subject.  
CCE - II : 75% of the maximum marks in the subject.

Signature with date (Subject Teacher)	15/10/2015	Counter signed (H.O.D.)	Counter signed (Principal)
---------------------------------------	------------	-------------------------	----------------------------



ज्ञानं परमं बलम्

GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Record of Comprehensive Continuous Evaluation (CCE)

Session - 2015-2016

Subject: Electronics

Name of the College : Govt. MVM College  
Class & Section : B.Sc. Ist Sem.

Teachers Name (1) : Anamika Sharma  
(2) :

SN	Roll Number	Enrolment Number	Student's Name / Father's Name	Record of CCE-I		
				Mode / Remark	Marks Obt. Out of	
1	15144912		Lalu Chouhan		12	Aashish
2	15144841		Govind Singh Rathore		15	Govind
3	15144875		Mulchand Dhosariya		12	Rahul
4	15144939		Manohar Patel		08	Manohar
5	15144941		Radheshyam Rathore		14	Radheshyam
6	15144916		Laxmi Narayan		13	Laxmi
7	15144917		Mahesh Mahakale		10	Mahesh
8	15144919		Kailash Chandra Moriya		09	Kailash
9	15144922		Suresh Chandra Basanwal		08	Suresh
10	15144952		Sanjay Singh		14	Sanjay
11	15144959		Hakam Singh Bharti		14	Hakam
12	15144961		Rampasad		12	Rampasad
13	15144972		Ramnarayan Jat		09	Ramnarayan
14	15144972		Surendra Pandey		13	Surendra
15	15144977		Manohar Singh Malviya		10	Manohar
16	15144978		Sanjay Shukla		14	Sanjay
17	15144978		Chandra Shekhar Chouhan		13	Chandra
18	15145884		Rakesh Sharma		10	Rakesh
19	15145884		Gendalal Sunail		09	Gendalal
20	15144988		Jagdish Joshi		11	Jagdish
Signature with date (Subject Teacher) Shyam Sunder Singh Parmar 15/03/2015				Countersigned (H.O.D.)	Countersigned Principal	

Scheme of Marks:

CCE - I : 15% of the maximum marks in the subject.

CCE - II : 15% of the maximum marks in the subject.



ज्ञानं परमं बलम्

GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Record of Comprehensive Continuous Evaluation (CCE)

Session - 2015-2016

Subject: Electronics

Name of the College : Govt. MVM College

Class & Section : B.Sc. 1st Sem.

Teachers Name (1) : Anamika Sharma  
(2) :

SN	Roll Number	Enrollment Number	Student's Name / Father's Name	Record of CCE-I			
				Mode / Remark	Marks Obt. out of	Student's Signature	
1	15144913.	41	Akanksha Agrawal	Rajendra Agrawal	✓	15	Akanksha
2	15144914.	✓	Akshay Chhanghoriya	Ashok Chhanghoriya	✓	14	Akshay
3	15144915	✗	Akshay Patidar	Gouri Shankar Patidar	P	AB-x	-
4	15144918.	✓	Bablu Rathod	Shivnarayan Rathod	✓	13	Bablu
5	15144920.	✓	Deepak Bhagwat	Subodh Bhagwat	✓	13	Deepak
6	15144921	✓	Deepak Prajapati	Poonam Chandra Prajapati	✓	14	Deepak
7	15144923.	✓	Kuldeep	Mukesh	✓	14	Kuldeep
8	15144924.	✗	Nageshwar Choudhary	Kamiram Choudhary	P	AB-x	-
9	15144925.	✓	Nitin Hatuniya	Gopal Hatuniya	✓	19	Nitin
10	15144926	✓	Nitin Kumar Gautam	Umesh Chandra Gautam	✓	15	Nitin
11	15144928	✓	Pratik Kumar	Madan Kumar	✓	13	Pratik
12	15144929.	✓	Rahul Patidar	Bhagwati Patidar	✓	14	Rahul
13	15144930.	✗	Rishabh Singh	Radhe Raman Singh	P	AB-x	-
14	15144931	✓	Sanyam Nagar	Nimesh Nagar	✓	14	Sanyam
15	15144933.	✓	Shalendra Malviya	Durga Prasad Malviya	✓	13	Shalendra
16	15144934	✗	Shankar Kushwah	Dwanika Prasad Kushwah	P	AB-x	-
17	15144935	✓	Sheetal Shastri	Vinlesh Shastri	✓	14	Sheetal
18	15144936	✓	Suraj Singh Bhatiya	Ishwar Singh Bhatiya	✓	13	Suraj
19	15144937.	✓	Vaibhav Raj Singh Chouhan	Yuvraj Singh Chouhan	✓	14	Vaibhav
20	15144938	✓	Vijay Singh Chouhan	Mod Singh Chouhan	✓	14	Vijay

Scheme of Marks:  
CCE - I : 75% of the maximum marks in the subject.  
CCE - II : 25% of the maximum marks in the subject.

Signature with date (Subject Teacher)

Counter signed (H.O.D.)

Counter signed (Principal)



ज्ञानं परमं बलम्

GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Record of Comprehensive Continuous Evaluation (CCE)

Session - 2015-2016

Name of the College : Govt. MMV College  
Class & Section : B.Sc. I<sup>st</sup> Sem.

Teachers Name (1) : Anuradha Khatwani  
(2) : .....

Subject: Electronics

SN	Roll Number	Enrollment Number	Student's Name / Father's Name	Mode / Remark	Marks Out of 15	Student's Signature
1	15144912		Aashish Chouhan	P ✓	09	
2	15144841		Harshwardhan Singh	✓	15	
3	15144845		Rahul Dhosariya	✓	14	
4	15144939		Vivek Patel	✓	14	
5	15144941		Akash Rathore	✓	15	
6	15144916		Arun	P ✓	12	
7	15144917		Avdesh Mahakale	✓	13	
8	15144919	✓	Bharat Moriya	✓	14	
9	15144922		Kapil Basanwal	✓	14	
10	15144952		Kshiti Chhse Singh	✓	14	
11	15144959		Narendra Singh Bhati	✓	15	
12	15144961		Nilesh	P ✓	15	
13	15144927		Pawan Jat	✓	14	
14	15144972		Sachin Pandey	✓	15	
15	15144976		Satish Kumar Malviya	✓	14	
16	15144977		Sheetal Shukla	✓	14	
17	15144998		Shivani Chouhan	✓	14	
18	15145084		Shubham Sharma	✓	14	
19	15145484		Vikas Sunail	✓	12	
20	15144988		Vivek Joshi	P ✓	14	

Scheme of Marks:

CCE - I : 15% of the maximum marks in the subject.

CCE - II : 15% of the maximum marks in the subject.

Signature with date (Subject Teacher)

Counter signed (H.O.D.)

Counter signed (Principal)



ज्ञानं परमं बलम्

GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



25/09/2015  
CHEMISTRY

Record of Comprehensive Continuous Evaluation (CCE)

Session - 2015-2016

Teachers Name (1): Anamika Sharma

(2):

Subject : Electronics

Name of the College : Govt. MVM College  
Class & Section : B.Sc. I/IIrd Sem. I

SN	Roll Number	Enrollment Number	Student's Name / Father's Name	Mode / Remark	Marks Obt. Out of	Student's Signature
1	14144487		Anil Choudhari		13	
2	14144469		Ankita Mor		14	
3	14144490		Arijun Yadav		12	
4	14144470		Ashutosh Shivam Soni		12	
5			Ayush Rathore			
6	14144471		Chandrapal Singh		13	
7	14144474		Gyanendra Singh Udwat		14	
8	14144499		Jitendra Baroliya		12	
9	14144502		Mangal Prasad		13	
10	14144507		Prakash Maru		14	
11	14144476		Pratiba Ekka		15	
12	14144509		Rahul Kumar Bairagi		12	
13	14144510		Rajesh Maru		12	
14	14144478		Sandeep		12	
15	14144515		Shahrukh Shah		15	
16	14144482		Singha Ganguly		15	
17	14144483		Surendra Vashishtha		12	
18	14144421		Tahseen Raza Dehalvi		12	
19			Vipul Jaiswal		14	
20	14144472		Chandrasekhar Sen		14	
Scheme of Marks:						
CCE - I : 75 % of the maximum marks in the subject						
CCE - II : 25 % of the maximum marks in the subject						
Signature with date (Subject Teacher)						
Signature with date (Subject Teacher)						
Countersigned (H.O.D.)						
Countersigned Principal						

Note : (1) Keep this record sheet preserved up to the six months after declaration of the results.



ज्ञानं परमं बलम्

GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Record of Comprehensive Continuous Evaluation (CCE)

Name of the College : Govt. MVM College  
Class & Section : B.Sc. I/IIrd Sem. I

Session - 2015-2016

Subject : Electronics  
Teachers Name (1) Anamika Sharmar  
(2) .....

SN	Roll Number	Enrollment Number	Student's Name / Father's Name	Mode / Remark	Marks Obt. Out of .....	Student's Signature
21	14144475		Shankar Lal Solanki		-	
22	14144475		Nilesh Patidar		13	Nilesh
23	14144477		Rohit Choudhary		12	Rohit
24	14144480		Shivam Chaturvedi		-	
25	14144479		Shivam Panwar		-	
26			Shyamsunder Singh Panwar		14	Shyamsunder Singh Panwar
27	14144457		Sourabh Upadhyay		-	
Scheme of Marks:						
CCE - I : 15 % of the maximum marks in the subject				Signature with date (Subject Teacher)		
CCE - II : 15 % of the maximum marks in the subject				Signature with date (Subject Teacher)		
					Countersigned (H.O.D.)	Countersigned Principal

Note : (1) Keep this record sheet preserved up to the six months after declaration of the results.



ज्ञानं परमं बलम्

GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN

IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Name of the College : Govt. MVM College  
Class & Section : B.Sc. IT Sem.

Record of Comprehensive Continuous Evaluation (CCE)  
Session - 2015-2016  
Subject : Electronics

Teachers Name (1) : Anurika Srivastava  
(2) :

SN	Roll Number	Enrollment Number	Student's Name / Father's Name	Mode / Remark	Record of CCE-I Marks Obt Out of .....	Student's Signature
1	14144487		Anil Choudhari	Govardhan Choudhari	14	37/71
2	14144488		Ankita Mor	Ganesh Prasad Mor	14	Ankita Mor
3	14144490		Arijun Yadav	Balu Singh Yadav	13	Arijun
4	14144490		Ashutosh Shivam Soni	Ramesh Kumar Soni	-	AB
5	-		Ayush Rathore	Anil Rathore	-	AB
6	14144471		Chandrajpal Singh	Kishore Singh	13	Chandrajpal
7	14144474		Ganendra Singh Udawat	Kamal Udawat	15	Ganendra Singh
8	14144499		Jitendra Baroliya	Bheru Lal Baroliya	12	Jitendra
9	14144502		Mangal Prasad	Govind	14	Mangal
10	14144507		Prakash Maru	Rama Maru	14	Prakash
11	14144476		Pratibha Ekka	Christopher Ekka	15	Pratibha
12	14144509		Rahul Kumar Bairagi	Jagdish Prasad Bairagi	13	Rahul
13	14144510		Rajesh Maru	Goverdhan Maru	13	Rajesh
14	14144478		Sandeep	Jagdish	12	Sandeep
15	14144515		Shahrukh Shah	Rajlak Shah	14	Shahrukh
16	14144482		Snigdha Ganguly	Ashish Ganguly	14	Snigdha
17	14144483		Surendra Vashistha	Ramesh Chand Vashistha	13	Surendra
18	14144483		Tahseen Raza Dehalvi	Mom Aslam Dehalvi	10	Tahseen
19	14144421		Vipul Jaiswal	Bherulal Jaiswal	-	AB
20	14144472		Chandrasekhar Sen	Ashok Kumar Sen	14	Chandrasekhar

Scheme of Marks:  
CCE - I : 15 % of the maximum marks in the subject  
CCE - II : 15 % of the maximum marks in the subject.

Note : (1) Keep this record sheet preserved up to the six months after declaration of the results.



ज्ञानं परमं बलम्

GOVT. MADHAV SCIENCE COLLEGE, UJJAIN

A GRADE ACCREDITED THROUGH NAAC  
DST-FIST SUPPORTED

AFFILIATED TO VIKRAM UNIVERSITY UJJAIN  
IN FRONT OF POLYTECHNIC COLLEGE DEWAS ROAD, UJJAIN



Record of Comprehensive Continuous Evaluation (CCE)

Name of the College : Govt. MVM College  
Class & Se B.Sc. III Year

Session - 2019-2020  
Teachers Name (1) : Arunika Sharma  
(2) :

Subject: Electronics

SN	Roll Number	Student's Name	Father's Name	Record of CCE			Total	Signature - I	Signature - II
				CCE-I	CCE II	Countersigned (H.O.D.)			
1	017130802	RITIK ANJANA	HIRALAL ANJANA	0.8	0.8		16	<i>Ritik</i>	<i>Ritik</i>
2	17130741	ANUKESH RAWAT	RAMESH CHAND RAWAT	0.9	0.8		17	<i>Nuketa</i>	<i>Nuketa</i>
3	17130798	KSHWAR SINGH DO.	SHANKHAR DODIYA	0.8	0.7			<i>Shankhwar</i>	<i>Shankhwar</i>
4	17130807	ABHISHEK BORASI	CHUNNI LAL BORASI	0.9	0.9			<i>Abhishek</i>	<i>Abhishek</i>
5	17130804	SACHIN VAGHELA	ATMARAM VAGHELA	0.9	0.8			<i>Sachin</i>	<i>Sachin</i>
6	17130832	SHRAVAN KUMAR	RAMESHCHAND	0.9	0.8			<i>Shravan</i>	<i>Shravan</i>
7	17130801	MONIKA SHARMA	SANTOSH SHARMA	0.9	0.8			<i>Monika</i>	<i>Monika</i>
8	17130799	KHUSHBOO TRIVEDI	OMPRAKASH TRIVEDI	0.8	0.9			<i>Khushboo</i>	<i>Khushboo</i>
9	17130800	MOHINUDDIN	FAKRUDDIN	0.8	0.9			<i>Mohammad</i>	<i>Mohammad</i>
10	17130728	DIVYA GOWSAMI	NARENDRA GOWSAMI	0.8	0.8			<i>Divya</i>	<i>Divya</i>
11	17130754	PRIYA YADAV	ASHOK YADAV	0.9	0.9			<i>Priya</i>	<i>Priya</i>
Scheme of Marks: CCE - I : 15 % of the maximum marks in the subject. CCE - II : 15 % of the maximum marks in the subject.				Signature with date (Subject Teacher) <i>Arunika Sharma</i> 20/11/19		Countersigned (H.O.D.)		Countersigned Principal	

Record of Comprehensive Continuous Evaluation (CCE)

Name of the College : Govt. MVM College  
Class & Se B.Sc. II

Session - 2019-2020  
Teachers Name (1) : Arunika Sharma  
(2) :

Subject: Electronics