

1.3.2

Number of courses that include experiential learning through project work/field work/internship during the year

D.P. Vipra College

Old High Court Road, Bilaspur Chhattisgarh, India 495001

OFFICE OF THE PRINCIPAL



D. P. VIPRA COLLEGE, BILASPUR (C.G.)

Accredited "A" by NAAC, ISO-9001:2015 Certified

Phone No.- 07752-424497, Web. - www.dpvipracollege.in, Email- dpvipracollege@gmail.com

Summary-Sheet

Criteria	1.Curricular Aspects						
Key Indicator 1.3: Curriculum Enrichment Metric 1.3.2: Number of courses that include experiential learning through work/field work/internship during year Number of courses that No of courses that include experiential learning through courses that							
work/field work/internship during year							
	Year	2023-24					
include experiential learning	No. of courses that include experiential learning through project work/field work/internship year-wise during the year	83					
through project work/field work/internship during year							

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N	2+2
- 1	ote

Since all supporting documents for this metric exceeds the upload limit of 5Mb, hence we have hosted the scanned documents as per SOP on institutional website on the following links,

have hosted the scanned documents as per SOP on institutional website on the following links,
Description Relevant link
1. List of the Courses that include experiential learning
through project work/field work/internship during the
year is attached.
(Appendix-I)
2) Supporting document (Syllabus Copy) showing the https://dpvipracollege.ac.in/aqar-2023-
experimental learning through project work/field 24/
work/internship as prescribed by the affiliating
university / affiliating university curriculum.
(Appendix-II)

IQAC Co-ordinator D.P. Vipra College BILASPUR (C.G.)

IQAC Coordinator

PRINCIPAL D.P. Vipra College Bilaspur (C.G.) Principal



2023-24

D.P. Vipra College

Old High Court Road, Bilaspur Chhattisgarh, India 495001



Appendix I

D.P. Vipra College

Old High Court Road, Bilaspur Chhattisgarh, India 495001

office of the principal O. VIPRA COLLEGE, BILASPUR (C.G.)

NAAC ACCREDITED "A" GRADE

PHONE: 07752-424497, E-mail - dpvipracollege@gmail.com

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during the years 2023-24

1.J.Z Average	e her centus	ge of courses that men	uue exp	erientiai te	arning through pro	ject work/field work/internship during the years 2025-24
Program name	Program code	Name of the Course that include experiential learning through project work/field work/internship	Course code	Year of offering	Name of the student studied course on experiential learning through project work/field work/internship	Link to the relevant document
	B.A.I	Environmental Studies & Human Rights	NA	2023-24	All students Enrolled for the subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
		Geography	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/BAFIRSTYEAR202324.pdf
Bachelor of ARTS	B,A,II	Environmental Studies & Human Rights	NA	2023-24	All students Enrolled for the subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
		Geography	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/BA-Part-II-All-ExamCode-02.pdf
	B.A.III	Environmental Studics & Human Rights	NA	2023-24	All students Enrolled for the subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
		Geography	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/BA-Part-3-2021-22.pdf
		Environmental Studies & Human Rights	NA	2023-24	All students Enrolled for the subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
	:	Botany	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/BSC-1st-Year-WEF-2023-24-20230706.pdf
		Zoology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/BSC-1st-Year-WEF-2023-24-20230706.pdf
		Chemistry	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/BSC-1st-Year-WEF-2023-24-20230706.pdf
Bachelor of Science	B.Sc.I	Microbiology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/BSC-1st-Year-WEF-2023-24-20230706.pdf
	:	Physics	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/BSC-1st-Year-WEF-2023-24-20230706.pdf
		Computer Science	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/BSC-1st-Year-WEF-2023-24-20230706.pdf
		Electronics	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/BSC-1st-Year-WEF-2023-24-20230706.pdf
	ĺ	Biotechnology	NA		All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/BSC-1st-Year-WEF-2023-24-20230706.pdf
		Biochemistry	NA		All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/BSC-1st-Year-WEF-2023-24-20230706.pdf

Program name	Program code	Name of the Course that include experiential learning through project work/field work/internship	Course code	Year of offering	Nar the student studied course on experiential learning through project work/field work/internship	Link to the relevant document
		Environmental Studies & Human Rights	NA	2023-24	All students Enrolled for the subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
		Botany	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/B,Sc-Part-II-ExamCode-05.pdf
		Zoology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/B,Sc-Part-II-ExamCode-05.pdf
		Chemistry	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/B.Sc-Part-II-ExamCode-05.pdf
Bachelor of Science	B,Sc.II	Microbiology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/B,Sc-Part-II-ExamCode-05.pdf
	-	Physics	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/B.Sc-Part-II-ExamCode-05.pdf
		Computer Science	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/B.Sc-Part-II-ExamCode-05.pdf
		Electronics	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/B.Sc-Part-II-ExamCode-05.pdf
	ļ	Biotechnology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/B.Sc-Part-II-ExamCode-05.pdf
		Biochemistry	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/B.Sc-Part-II-ExamCode-05.pdf
		Environmental Studies & Human Rights	NA	2023-24	All students Enrolled for the subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
		Botany	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus202122/BSc-Part-3.pdf
		Zoology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus202122/BSc-Part-3.pdf
		Chemistry	NA		All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus202122/BSc-Part-3.pdf
Bachelor of Science	B.Sc.III	Microbiology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus202122/BSc-Part-3.pdf
Science		Physics	NA		All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus202122/BSc-Part-3.pdf
		Computer Science	NA		All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus202122/BSc-Part-3.pdf
		Electronics	NA	2022.24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus202122/BSc-Part-3.pdf
		Biotechnology	NA	2023-24	All Students	https://www.bilaspuruniversity.ac.in/PDF/Syllabus202122/BSc-Part-3.pdf
		Biochemistry	NA	2022-24	All Students	https://www.bilaspuruniversity.ac.in/PDF/Syllabus202122/BSc-Part-3.pdf

Program name	Program code	Name of the Course that include experiential learning through project work/field work/internship	Course code	Year of offering	Name of the student sti course on experiential learning through project work/field work/internship	Link to the relevant document
Bachelor of		Computer Science	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/Revised-BCA-1st-Year-WEF-2023-24-20230706.pdf
Computer BCA-I Environmental Studies & Human Rights			NA	2023-24	All Students Enrolled for the Subject EVS	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/Revised-BCA-1st-Year-WEF-2023-24-20230706.pdf
Bachelor of Computer	BCA-II	Environmental Studies & Human Rights	NA	2023-24	All Students Enrolled for the Subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
Application		Computer Science	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2017/BU%20BCA%20II%20(NEW%20COURSE)%202017-18.pdf
Bachelor of Computer	BCA-III	Environmental Studies & Human Rights	NA	2023-24	All Students Enrolled for the Subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
Application		Computer Science	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2017/BU%20BCA%20III%20(NEW%20COURSE)%202017-18.pdf
Diploma in Computer Application	DCA	Computer Science	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2017/BU%20DCA%202017-18.pdf
Bachelor of Commerce	B.COM-I	Environmental Studies & Human Rights	NA	2023-24	All Students Admitted for the subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
Commerce		Computer Application	NA	2023-24	All Students Admitted	https://www.bilaspuruniyersity.ac.in/PDF/Syllabus2023/BCOM-1st-Year-WEF-2023-24-20230706.pdf
Bachelor of Commerce	B.COM-II	Environmental Studies & Human Rights	NA	2023-24	All Students Admitted for the subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
Commerce		Computer Application	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus202122/BCOMPART2.pdf
Bachelor of Commerce	B.COM-III	Environmental Studies & Human Rights	NA	2023-24	All Students Admitted for the subject EVS	https://www.bilaspuruniversity.ac.in/PDF/2017/Syllabus%20ENVIRONMENTAL%20STUDIES%20&%20HUMAN%20RIGHTS.pdf
Commerce		Computer Application	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity,ac.in/PDF/Syllabus202122/BCOMPart3.pdf
Post Graduate Diploma in Computer Application	P.G.D.C.A	Computer Science	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2017/PGDCA.pdf
Management	P.G.D.B.M.	Management	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2017/PGDBM.pdf
Master of Commerce	M.COM I to II sem	Commerce	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M,Com.pdf

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, Program name	Program code	Name of the Course that include experiential learning through project work/field work/internship	Course code	Year of offering	Name of the student stocourse on experiential learning through project work/field work/internship	Link to the relevant document
Master of Commerce	M.COM III to IV sem	Commerce	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/MCOM.pdf
		Zoology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M,Sc.%20Zoology.pdf
		Microbiology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M.Sc.%20Microbiology.pdf
		Botany	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/M.ScBotany%20%201%20and%20II%20semester%202023-24%20%202023-24%20(1).pdf
Master of Science	M.SC. I To II sem	Chemistry	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M.Sc.%20Chemistry.pdf
		Physics	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M.Sc.%20PHYSICS.pdf
		Maths	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M.Sc.%20MATHS.pdf
L		Computer Science	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M.Sc.%20Computer%20Science.pdf
		History	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M.A.%20History%20R.pdf
		Geography	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M.A.%20Geogrphy%20R.pdf
		Public Administration	NA	2023-24	All Students Admitted	https://www.bilaspurunjyersity.ac.in/PDF/Syllabus2023/M.A.%20Public%20Administration%20R.pdf
Moster of Arts	M.A. I To II	Political Science	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M.A.%20Political%20Science%20R.pdf
Waster Of Arts	sem	Economics	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M.A.%20Economics%20R%20(Hindi).pdf
j		Hindi	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus2023/M.A.%20Hindi%20R.pdf
		English	NA		All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/2019/MA_English_Semester01.pdf
		sociology	NA	2023-24	All Students Admitted	https://www.bilaspuruniyersity.ac.in/PDF/2019/MASociologyR.pdf
	·	Zoology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGScm/M.SC.%20ZOOLOGY001.pdf
		Microbiology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGScm/M.SC.%20MICRQBIOLOGY001.pdf
Master of Arts IT	M.SC.	Botany	NA		All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.SC.%20BOTANY001.pdf
ľ	III To IV	Chemistry	NA		All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.SC.%20CHEMISTRY001.pdf
		Physics	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.SC.%20PHYSICS001.pdf
		Maths	NA	2023-24	Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.SC.%20MATHS001.pdf
		Computer Science	NA		All Students Admitted	https://www.bilaspuruniversitv.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.SC.%20COMPUTER%20SC.001.pdf

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. Program name	Program code	Name of the Course that include experiential learning through project work/field work/internship	Course code	Year of offering	Name of the student step l course on experiential learning through project work/field work/internship	Link to the relevant document
		History	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.A.%20HISTORY001.pdf
		Geography	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.A.%20GEOGRAPHY001.pdf
	-	Public Administration	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.A.%20PUBLIC%20ADM.001.pdf
Master of Arts	M.A. III To IV	Political Science	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.A.%20POLITICAL%20SC.001.pdf
Waster of Tites	sem	Economics	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.A.ECONOMICS.pdf
		Hindi	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.A.%20HINDI001.pdf
		English	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.A.%20ENGLISH001.pdf
		sociology	NA	2023-24	All Students Admitted	https://www.bilaspuruniversity.ac.in/PDF/Syllabus/2020NewCoursePGSem/M.A.%20SOCIOLOGY001.pdf

D. P. VIPRA COLLEGE
D.P. BILASPUR (C.G.)
BILASPUR (O.G.)



Appendix II

D.P. Vipra College

Old High Court Road, Bilaspur Chhattisgarh, India 495001

Afal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)



Scheme and Syllabus

of

M. A. (Economics)

Program Code: MAECOR105

Semester system for affiliated college (As per LOCF and credit system)

w.e.f. 2023-2024



अटल बिहारी वाजपेयी विश्वविद्यालय, बिलासपुर (छ.ग.) कोनी पुलिस थाना के सामने, बिलासपुर-रतनपुर मार्ग, कोनी, बिलासपुर (छ.ग.) 495009 Website: www.biluspuruniversity.ac.in

सेमेस्टर प्रणाली के अंतर्गत अंक योजना THUE EDE . MARCODIOS

		प्रोग्राम कोड : MAI	CO	R10)5	~	¥			
सेमेस्टर	कोर्स कोड	विषय का नाम	क्रे	डिट		कुल क्रेडिट	अंक			
111101	4/10 4/10	1444 4/1 1111				क्रेडिट	ESE	IA	То	
			L	T	P			l	Max	Min
		अनिवार्य प्रश्न				·				
	ECOT101	सूक्ष्म आर्थिक विश्लेषण	3	1	-	4	80	20	100	36
	ECOT102	परिमाणात्मक पद्धतियां	3	1	_	4	80	20	100	36
	ECOT103	भारतीय आर्थिक नीति	3	1	-	4	80	20	100	36
	ECOT104	अंतर्राष्ट्रीय व्यापार और वित्त	3	1	-	4	80	20	100	36
		ऐच्छिक (वैकल्पिक)प्रश्न पत्र (वि	र्मी प	रुक र	समूह	ह का च	यन क	₹)		
I	ECOT105	समूह अ- 1 औद्योगिक शास्त्र	3	1		4	80	20	100	36
1	ECOT106	समूह ब-। श्रम अर्थशास्त्र	3	1	-	4	80	20	100	36
	ECOT107	समूह स-। जनांकिकी	3	1	-	4	80	20	100	36
	ECOT108	समूह द-। कृषि अर्थशास्त्र	3	1		4	80	20	100	36
	ECOT109	समूह इ- 1 आर्थिक विश्लेषण में कम्प्यूटर का अनुप्रयोग	3	1	-	4	80	20	100	36
		Subtotal	15	5	-	20	_	-	500	_
		अनिवार्य प्रश्न	पत्र							
	ECOT201	सूक्ष्म आर्थिक विश्लेषण	3	1	-	4	80	20	100	36
		अनुसंधान क्रिया विधि एवं								
	ECOT202	कम्प्यूटर अनुप्रयोग	3	l		4	80	20	100	36
	ECOT203	भारतीय आर्थिक नीति	3	1	_	4	80	20	100	36
	ECOT204	अंतर्राष्ट्रीय व्यापार और वित्त	3	1	-	4	80	20	100	36
	ऐच्छिक (वैकर्ा	ल्पक) प्रश्न पत्र (प्रथम सेमेस्टर में चर	वित प	समूह	के 1	द्वितीय प्रश	न पत्र	का च	यन करें)
11	ECOT205	समूह अ-2 औद्योगिक शास्त्र	3	1	-	4	80	20	100	36
	ECOT206	समूह ब- 2 श्रम अर्थशास्त्र	3	1	_	4	80	20	100	36
	ECOT207	समूह स-2 जनांकिकी	3	1	-	4	80	20	100	36
	ECOT208	समूह द- 2 कृषि अर्थशास्त्र	3	1		4	80	20	100	36
	ECOT209	समूह इ- 2 आर्थिक विश्लेषण में कम्प्यूटर का अनुप्रयोग	3	1	_	4	80	20	100	36
		Subtotal	15	5	_	20		_	500	-

Troorgyntion used;

ESE: End Semester Exam IA: Internal Assesstment

टीप:--

- 1. एम.ए. प्रथम सेमेस्टर में ऐच्छिक प्रश्नपत्र से जिस समूह का चयन करते है, एम.ए. द्वितीय सेमेस्टर में ऐच्छिक प्रश्न पत्र में उसी समूह का अनिवार्यतः चयन करना होगा। इसी तरह एम.ए. तृतीय सेमेस्टर में किसी अन्य ऐच्छिक प्रश्नपत्र से जिस समूह का चयन करते है, एम.ए. चतुर्थ प्रश्नपत्र से उसी समूह का अनिवार्यतः चयन करें।
- 2. पाठयक्रम का हिन्दी में भी अनुवाद किया गया है। पाठयक्रम के हिन्दी अनुवाद में विभ्रम की स्थिति में अंग्रेजी में लिखा हुआ पाठयक्रम ही मान्य होगा।

(DM



बिलासपुर विश्वविद्यालय, बिलासपुर (छत्तीसगढ़)

SEMESTER SYLLABUS M.A. ECONOMICS

SEMESTER-III

Paper No.	Title of the Paper	Internal Assessment	Term End Exam	Total Marks
	'Macro Economic Analysis	20	80	100
mark 2 grans	Rublic Economics X	20mm	41.25.80 Acres	**********
9 ₹3 ₽ 10	Economics of Growth	20	80	:4.001
t MA. ort	Environmental and Welfare Economics	20.		0100
OPTION	IAL (Choose Any one Group)		a combine	
5.	Group A 1. Industrial Economics	20	80	100
5.	Group B 1. Labour Economics	20	80	100
5.	Group C 1. Demography	20	8045	1007
30.5. N	Group D 1. Agriculture Economics	20,	: 60° ≀	স্বর্গ (00)
%5. ⊙:	Group E 19 Computer Application in Economic analysis	20	80	°100
	108	Transpire of	TOTAL	.\$500

SEMESTERIV

Paper -	Title of the Paper	Internal Assessment	TermEnd*	ार्णवा Marks
C 1	Macro Economic Analysis	20	*1080	2100
Y 2.	Public Economics	200:: ::	80	
¹ €1 3.	Economic Development and Planning	20*	/80 <u>/</u>	°100
4,	Economics of Social Sector	. : 20	108 VI	100
OPTION	NAL (Choose Any one Group)	Mariana and		
5.	Group A 2. Industrial Economics	20	80	100
5.	Group B 2. Labour Economics	20	80	= 100-
4075. N	Group C 2. Demography	3 20 55 95	80	and 100
1€ √5.	Group D.2/Agriculture Economics	20	.80	. 100
(2) (5.) (0)	Group E 2. Computer Application in Economic analysis	20	80 373	100
		in the property of the second	TOTAL	500
w	SQ. 2	and the second	rand Total	2000

अर्थिय क्षेत्र

PRINCIPAL D.P. Vipra Colic Bilaspur (C.C.)

Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)



Scheme and Syllabus

of

M. A. (Geography)

Program Code: MAGEOGR108

Semester system for affiliated college (As per LOCF and credit system)

w.e.f. 2023-2024



कोनी पुलिस थाना के सामने, बिलासपुर-रतनपुर मार्ग, कोनी, बिलासपुर (छ.ग.) 495009 Website: www.bilaspuruniversity.ac.in

		Scheme of M.A. (Geography) Uno PROGRAM CODE: MA				System	iii aad kaasa			
Semester	Course		Cı	redit	÷	Total		M	arks	
Semester	Code	Subject Name				Credit	ESE	IA	Total	
			L	T	P		ESE	IA	Max	Min
	GEOGT101	Geomorphology	3	1	-	4	80	20	100	36
	GEOGT102	Climatology	3	1	-	4	80	20	100	36
	GEOGT103	Evolution of Geographical thought	3	1		4	80	20	100	36
I	GEOGT104	Geography of India	3	1 .	-	4	80	20	100	36
	GEOGP101	Practical: Interpretation of Topographical Sheets and Surveying		-	4	4	-	-	100	36
)		Subtotal	12	4	4	20	-	-	500	-
	GEOGT201	Oceanography	3	1	-	4	80	20	100	36
	GEOGT202	Regional Planning and Development	3	1	_	4	80	20	100	36
	GEOGT203	Geography of Chhattisgarh	3	1	-	4	80	20	100	36
п	GEOGT204	Elective I : Social Geography	3	1	-	4	80	20	100	36
11	GEOGT205	Elective I : Political Geography	3	1	-	4	80	20	100	36
	GEOGP201	Practical: Map Projection, Geological Maps and Surveying	æ	-	4	4	-		100	36
		Subtotal	15	5	4	24	+	-	500	

Abbreviatias used:

ASE: End Semester Exam IA: Internal Assessment

Note: Dissertation (लघुशोध प्रबंध) जो विद्यार्थी प्रथम व द्वितीय सेमेस्टर परीक्षा में कुल प्राप्तांक का 60% एवं 60% से अधिक अंक प्राप्त किया है। वह चतुर्थ सेमेस्टर में किसी एक सैद्धांतिक प्रश्न पत्र के स्थान पर लघु शोध प्रबंध का चयन कर सकता है।

The student who has secured 60% and more than 60% of the total marks in the first and second semester examination He/she can opt for dissertation in place of any one theory paper in the fourth semester.

Note: Student have to opt, one paper from the pool of Elective 1^{st} of 2^{nd} semester, one paper from the pool of Elective 2^{nd} of 3^{rd} semester and Elective 3^{rd} of 4^{th} semester.





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M. A. GEOGRAPHY PROGRAMME OUTCOME

PO1: Understand earth's tectonic and structural evolution, Gain knowledge about earth's interior. Develop an idea about concept of plate tectonics and resultant Landforms.

PO2: Acquire knowledge about types of folds and faults and earthquake, volcanoes and associated, Landforms.

PO3: Student can understand the climatic phoneme- non and its impact.

PO4: Demonstrate and advanced understanding of and ability to differentiate among the various methodologies used in geographic research.

PO5: Acquire, analyse, evaluate, interpret and Critique geography data and /or research.

PO6: Identity and assess how geographic concepts apply in the workplace and in everyday life to solve real-world problem.

PO7: Most of the competitive examinations cover 15-20% questions from the subject Geography In this way PG program is a base for the students to be successful in such exams.

Dr.D.D. Kashyas



कोनी पुलिस थाना के सामने, बिलासपुर-रतनपुर मार्ग, कोनी, बिलासपुर (छ.ग.) 495009 Website: www.bilaspuruniversity.ac.in

M. A. GEOGRAPHY PROGRAMME SPECIFIC OUTCOME

PSO1: Acquireing Knowledge of Physical Geography: Student will gain the knowledge of physical geography. Student will have a general understanding about the geomorphological and geotechnical process and formation. They will be able to correlate the knowledge of physical geography with the human geography.

PSO2: Acquireing Knowledge of Human Geography: They will be able to acquire the knowledge of Human Geography and will correlate it with their practical life.

PSO3: Ability of Problem Analysis: Student will be able to analyse the problems of physical as well as cultural environments of both rural and urban areas. Moreover they will try to find out the possible measures to solve those problems.

PSO4: Conduct Social Survey Project: They will be eligible for conducting social survey project which is needed for measuring the status of development of a particular group or section of the society.

PSO5: Application of modern instruments: Students will be able to learn the application of various modern instruments and by these they will be able to collect primary data.

PSO6: Application of GIS and modern Geographical Map Making Techniques: They will learn how to prepare map based on GIS by using the modern geographical map making techniques.

PSO7: Development of Observation Power: As a student of Geography Honours Course they will be capable to develop their observation power through field experience and in future they will be able to identify the socioenvironmental problems of a locality.

PSO8: Development of Communication Skill and Interaction Power: After the completion of the project they will be efficient in their communication skill as well as power of social interaction. Some of the students are being able to understand and write effective reports and design credentials, make effective demonstrations, and give and receive clear instructions.

PSO9: Enhancement of the ability of Management: Demonstrate knowledge and understanding of the management principles and apply these to theirs own work, as a member and leader in a team, to manage projects. They will perform effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PSO10: Understand Environmental Ethics and Sustainability: Understand the impact of the acquired knowledge in societal and environmental contexts, and demonstrate the knowledge of need for sustainable development.

PSO11: Life-long learning: Identify the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of societal and environmental change.

BILASPUR (C.G.)

As approved by academic council and executive council meetings

Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)



Scheme and Syllabus

of

M. A.(Public Administration)

Program Code: MAPAR130

Semester system for affiliated college (As per LOCF and credit system)

w.e.f. 2023-2024

जटल ।षठारा पाणपपा ।परपापघालप, ।षलासपुर (छ.प.)

कोनी पुलिस थाना के सामने, बिलासपुर-रतनपुर मार्ग, कोनी, बिलासपुर (छ.ग.) 495009 Website: www.bilaspuruniversity.ac.in

Scheme of M.A. (Public Administration) under Semester System Program Code: MAPAR130

Semester	Course	Subject Name	c	redi	it	Total	Marks				
Semester	Code	Susject (unit			Credit	ESE	IA	Tot	tal		
			L	T	P		ESE	IA	Max	Min	
	PUBAT101	Principles of Public Administration	3	1	-	4	80	20	100	36	
	PUBAT102	Theories of Public Administration	3	1	-	4	80	20	100	36	
TT: (PUBAT103	Indian Administration	3	1	-	4	80	20	100	36	
First	PUBAT104	Development Administration	3	1	-	4	80	20	100	36	
	PUBAT105	Administrative Behavior	3	1	-	4	80	20	100	36	
	Subtotal		15	5	-	20	-	-	500	-	
)	PUBAT201	State Administration	3	1	-	4	80	20	100	36	
	PUBAT202	Municipal Government of India (with special reference to Chhattisgarh state)	3	1	-	4	80	20	100	36	
	PUBAT203	Rural Development and Tribal Welfare in Chhattisgarh	3	1	-	4	80	20	100	36	
Second	PUBAT205	Elective-I: Social Welfare Administration									
	PUBAT206	Elective-I: Public Policy	3	1	-	4	80	20	100	36	
	PUBAT207	Elective-I:Economic System & Administration									
	PUBAT208	Panchayati Raj (with special reference to Chhattisgarh)	3	1	-	4	80	20	100	36	
		Subtotal	15	5	-	20	-		500		

Note:-Student have to opt one paper from the pool of Elective 1 of 2nd Semester.

Abbreviations used:

ESE: End Semester Exam IA: Internal Assessment

Dr. A.K.Shukla

Dr. Harish Thakur

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B.O.S. Expert

B.O.S. Expert

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Dr. MuktaDubey

Dr. S.K. Tiwari

Chairman B.O.S

Dr. G.S. Dhruwe

Dr. M.M. Bajpay

Dr. K.K. Mishra

PRINCIPAL D.P. VIPRA COLLEGE BILASPUR (C.G.)

कोनी पुलिस थाना के सामने, बिलासपुर-रतनपुर मार्ग, कोनी, बिलासपुर (छ.ग.) 495009 Website: www.bilaspuruniversity.ac.in

PROGRAM OBJECTIVES

M. A. Public Administration objectives of the program are-

- 1. To fulfill contemporary societal needs of public governance and equip the learner / students with necessary knowledge, wisdom and skills relevant for local, national and international governance.
- 2. To develop specialized knowledge and skills among its students to engage themselves in Public governance and its related activities. There is need for well informed and proficient manpower for discharging regulatory responsibilities and delivering a set of quality services to the satisfaction of the citizens.
- 3. To prepare and competent the youth for civil services need and their academic development by equipping them with recent developments at national scenario, as the concerns for good Governance and citizen centric governance have become important objectives in addition to the Traditional narratives of efficiency, economy and effectiveness.
- 4. To develop students as a responsible part of civil society. In recent years, mega developments like information and communication technology, liberalization, privatization, globalization, decentralization and growing role of the civil society have impacted the role of the state and its agencies. It has changed the citizens' interface with the governance and market forces. Innovative citizen-centric practices in governance have been adopted across the world.

After successful completion of the course the learner will be competent and confident to capture and join various government opportunities such as civil service, police service and others. Besides planning career in activity area of public administration, the learners can also prepare themselves in research and teaching.

PROGRAM OUTCOMES (PO)

Learners with strong knowledge in public administration can deal with the critical issues of public and individual life including political, social, and economic aspects. The framework of the course and papers are designed in a way to develop understanding of the principles, institutions and their ecological concerns, processes and issues of local, regional, national and international levels of public governance and academics of public administration. After successful completion of Program the Learning Outcomes will be reflect:

- 1. Fair understanding of theories, principles, models and ideas of discipline of public Administration and its academic significance.
- 2. Competency to respond on contemporary societal needs of public governance and equip them with necessary knowledge, wisdom and skills relevant for local, national and International governance.
- 3. Knowledge about the inter-disciplinary nature and ecology of public administration in both theory and practice (activities).
- 4. Knowledge about public welfare administration, development administration and various schemes, programs, measures and techniques to achieve them.
- 5. Knowledge about the economic and finance part of the government and administration, and role-responsibilities of the citizen in their social and economic activities. 6. Knowledge about real working of administration and its personnel, and issues affecting their performance, efficiency and effectiveness.
- 7. Competency in communicational skill, group discussion, public speaking, academic writing and personality development through ability enhancement and skill development papers and CCE activities.
- 8. Familiarity with the issues of good governance, responsive governance, transparency and accountability, and the use of Information and communication technology in the field of public administration.

जिटल । बहारा पाणप्या । परपापघालय, । बलासपुर (छ.प.)

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PROGRAMME SPECIFIC OUTCOMES (PSO)

The program specific outcomes of the M.A Public Administration program are as under-

- 1. Students would be able to live, perform and participate as a responsible citizen.
- 2. Students would be able to know about the research and development opportunities in the field of administration/policy/ governance studies.
- 3. Students would be able to analyze the effectiveness of governmental policies and program.
- 4. Students would gain confidence while dealing with administrative officials and political leaders.

5. Students would be able to develop their research aptitude and orientation.

PRINCIPAL D.P. VIPRA COLLEGE BILASPUR (C.G.)

Dr. A.K.Shukla

Dr. Harish Thakur

B.O.S. Expert

B.O.S. Expert

Member's of B.O.S.

Dr. VandanaTiwari

Dr. S.K. Tiwari

Dr. MuktaDubey

Chairman B.O.S

Dr. G.S. Dhruwe

Dr. M.M. Bajpai

Dr. K.K. Mishra

Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)



Scheme and Syllabus

of

M. A. (Political Science)

Program Code: MAPSR122

Semester system for affiliated college (As per LOCF and credit system)

w.e.f. 2023-2024



कोनी पुलिस थाना के सामने, बिलासपुर-रतनपुर मार्ग, कोनी, बिलासपुर (छ.ग.) 495009 Website: www.bilaspuruniversity.ac.in

Scheme of M.A. (Political Science) under Semester System Program Code: MAPSR122

Semester	Course	Subject Name		red	it	Total	Marks				
Semester	Code	Subject Name			Credit	ESE	IA	Tota	ıl		
	-	5.0445	L	T	P		ESE	IA	Max	Min	
***************************************	POLST101	Western Political Thought	3	1	-	4	80	20	100	36	
First	POLST102	Comparative Politics	3	1	-	4	80	20	100	36	
	POLST103	Public Administration	3	1	-	4	80	20	100	36	
	POLST104	International Politics	3	1	-	4	80	20	100	36	
	POLST105	Chhattisgarh Government & Politics	3	1	-	4	80	20	100	36	
	Subtotal		15	5	-	20	-		500	-	
	POLST201	Modern Indian Political Thought	3	1	-	4	80	20	100	36	
	POLST202	Contemporary Political Issues	3	1	-	4	80	20	100	36	
	POLST203	Research Methodology	3	1	-	4	80	20	100	36	
	POLST205	Elective-I: Party System and Election Process in India									
Second	POLST206	Elective-I: Major Constitution of the World	3	1	-	4	80	20	100	36	
	POLST207	Elective-I: Personal Administration in India									13
	POLST208	International Organization	3	1	-	4	80	20	100	36	
		Subtotal	15	5	-	20	_	-	500		

Note:- Student have to opt one paper from the pool of Elective 1 of 2nd Semester.

Abbreviations used:

ESE: End Semester Exam **IA:** Internal Assessment

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Dr. G.S. Dhruwe Dr. M.M. Bajpai

Dr. K.K. Mishra

PRITICIPAL D.P. VIPRA COLLEGE BILASPUR (C.G.)



कोनी पुलिस थाना के सामने, बिलासपुर--रतनपुर मार्ग, कोनी, बिलासपुर (छ.ग.) 495009 Website: www.bilaspuruniversity.ac.in

Program Objectives

- 1. To develop comprehensive understanding of the subject by teaching both conventional and new areas of relevance in the domain of Political Theory and Philosophy, Indian Politics, Comparative Politics, Public Administration, International Politics, Political thinkers.
- 2. To develop comprehensive and interdisciplinary knowledge by emphasizing enter ages between various Political, Economics and Social issues and Challenges.
- 3. The studies will provide theoretical and practical knowledge to the student.
- 4. To motivate and inform student about the opportunities and futures prospects in the field.
- 5. To develop the overall personality of the student and prepare them to compete and succeed in their areas.
- 6. To provide aknowledge for the educational upliftment to the marginalised through papers like Human Rights,
 Political Ideas in Modern India, Women and Politics in India

Program Outcome:

On successful completion of the program, student should be able to

- 1. Demonstrate knowledge and understanding of the key theories and concepts in Political Science.
- 2. Evaluate theories in the light of empirical evidence or normative propositions.
- 3. To apply appropriate theories to analyzes social and political happenings.
- 4. To demonstrate the intellectual ability by undertaking inters disciplinary research.
- 5. To achieve and demonstrate the ability to communicate their ideas effectively using appropriate languages of the discipline.
- 6. To apply critical thinking, communication and analytical skills to address significant issues.
- 7. To Demonstrate understanding of the philosophical dimensions of the Political system, processes and movements at the local national and trans national labels.

Programme Specific Outcomes (P.S.O.)

- 1. Students will excel as responsible national and global citizens, actively participating in societal matters.
- 2. Students will acquire knowledge in Politics, Consulting, Competitive exams, and Administration Studies, exploring various research and development opportunities.
- 3. Students will proficiently analyse and discuss the effectiveness of government policies, constitution, thinkers, International Law, and International Politics.
- 4. Students will develop self-assurance while engaging with Administration, NGOs, and Political Leaders.
- 5. Students will cultivate a deep understanding of political issues, enhancing their conceptual clarity.
- 6. Students will master the art of research paper writing and delivering presentations in seminars and conferences.

Dr. A.K.Shukla

Dr. Harish Thakur

B.O.S. Expert

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Dr.K.K.Mishra

PRINCIPAL D.P. VIPRA COLLEGE

BILASPUR (C.G.)

Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)



Scheme and Syllabus

of

M. A. (Sociology)

Program Code: MASOCIOR126

Semester system for affiliated college (As per LOCF and credit system)

w.e.f. 2023-2024



कोनी पुलिस थाना के सामने, बिलासपुर-रतनपुर भार्ग, कोनी, बिलासपुर(छ.ग.) 495009 Website: www.bilaspuruniversity.ac.in

Sample Scheme of Sociology under Semester System

Semester	Course	Subject Name	c	Credit Total		Marks				
	Code					Credit	ESE	TA	Total	
			L	T	P]	ESE	IA	Max	Min
First	SOCIOR101	Subject 1	3	1	-	4	80	20	100	36
	SOCIOR102	Subject 2	3	1	-	4	80	20	100	36
	SOCIOR 103	Subject 3	3	1	-	4	80	20	100	36
	SOCIOR 104	Subject 4	3	1	-	4	80	20	100	36
	SOCIOR 105	Subject 5	3	1	-	4	80	20	100	36
		Subtotal	15	5	-	20	-	-	500	-
	SOCIOR 201	Subject 6	3	1	-	4	80	20	100	36
	SOCIOR 202	Subject 7	. 3	1	-	4	80	20	100	36
	SOCIOR 203	Subject 8	3	1	-	4	80	20	100	36
	SOCIOR 204	Elective-I: Subject 9								
Second	SOCIOR 205	Elective-I: Subject 10	3	1	-	4	80	20	100	36
	SOCIOR 206	Elective-I: Subject 11	12.5000							
	SOCIOR 207	Subject 12	3	1	-	4	80	20	100	36
		Subtotal	15	5	-	20	-	•	500	

Note: Students have to opt one paper from the pool of Elective I of 2^{nd} Semester, one paper from the pool of Elective II of 3^{rd} Semester and Elective III of 4^{th} Semester.

Abbreviations used:

ESE: End Semester Exam

IA: Internal Assessment

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Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)



Scheme and Syllabus

of

M. A. (History)

Program Code: MAHISR111

Semester system for affiliated college (As per LOCF and credit system)

w.e.f. 2023-2024



कोनी पुलिस थाना के सामने, बिलासपुर-रतनपुर मार्ग, कोनी, बिलासपुर(छ.ग.) 495009 Website :www.bilaspuruniversity.ac.in

M.A. History Under Semester System

Program Code:MAHISR111

History, as we all know, is a vital source to obtain knowledge about a nation's soul. Of late, this has been argued and established that there can't be a nation without a past. Today, more than ever before, the challenges of globalization obligate historians and researchers to go beyond the local, national, and even continental frontiers of their knowledge. However, competing and keeping pace with the ever expanding horizon of history, one has to be sensitive in understanding the issues of nations history on larger canvas, absorbing polemics and not only create a belief of continuity by exploring nation's past, which lie in abundance. This certainly will further a dialog between past and present and a new narrative may emerge.

Program outcomes

- Pol- Give requisite information about different aspects of the past to students
- Po2- To teach them how to use this information for a better of society.
- Po3- This also gives an idea about how historians research, frame an argument and debate details that have significance to understand the past and the present.
- Po4- The expected outcome is to provide students with a sense of how interconnected our present is with the past and how learning about the past provides them with the skills to understand the present.
- Po5- The idea is to equip the student so that their ability to think and analyze is enhanced also, they develop good research oriented perspective.

Program Specific Outcomes

- Pso1- To learn a basic narrative of historical events in a specific region of the world in a specific time frame.
- Pso2- To articulate factual & contextual knowledge of specific places & times, to make careful comparisons (across time, space & culture),
- Pso3- The ability to use bibliographical tools for the advanced study of history.
- Pso4- To understand & evaluate different historical ideas, various arguments and point of view.
- Pso5- To develop an appreciation of themselves & of other through the study of the past in local, regional, national and global context
- Pso6- It instills an appreciation of the uniqueness of visual evidence and cultivate the particular skill of using visual evidence to understand human activity of the recent and distant past.



अटल ।बहारा वाजपया ।वश्वविद्यालय, बिलासपुर (छत्तीसगढ़)

कोनी पुलिस थाना के समाने, बिलासपुर-रतनपुर मार्ग, कोनी जिला- बिलासपुर (छ.ग.) 495009, फोन : 07752-220031, फैक्स 07752-260294, ई-मेल : registrar@bilaspuruniversity.ac.in website: www.bilaspuruniversity.ac.in

Scheme of M.A. (History) under Semester System Program Code: MAHISR111

			(redi	t			M	arks	
Semester	Course	Subject Name				Total			To	tal
	Code	-35-1	L	Р	Т	Credit	ESE	IA	Max	Min
	HISTT101	इतिहास पद्धति : अवधारणा, पद्धति एवं उपकरण (Historiographical Method: Concept, Method and Tools)	3	1	1	4	80	20	100	36
	HISTT102	प्राचीन भारतीय सभ्यता एवं संस्कृति (Ancient Indian Civilisation and Culture)	3	_	1	4	80	20	100	36
	HISTT103	छत्तीसगढ़ का प्रारंभिक इतिहास (Early History of Chhattisgarh)	3	•	1	4	80	20	100	36
First	HISTT:104	प्राचीन भारत में राजनीतिक विचार एवं संस्थाएं (Political thought and institutions in Ancient India)	3	•	1	4	80	20	100	36
	HISTT105	Elective Papers - अभिलेखागार एवं संग्रहालय का इतिहास (History of Archives and Museum)	3	-	1	4	80	20	100	36
	HISTT106	विज्ञान एवं प्रौद्योगिकी का इतिहास (History of Science and Technology)								
		Sub Total	15	-	5	20			500	
	HISTT201	इतिहास लेखन (Historiography)	3	-	1	4	80	20	100	36
	HISTT202	मध्यकालीन भारतीय सभ्यता एवं संस्कृति (Medieval Indian Civilisation and Culture)	3	3₩	1	4	80	20	100	36
	HISTT203	आधुनिक छत्तीसगढ़ का इतिहास (History of Modern Chhattisgarh)	3	_	1	4	80	20	100	36
Second	HISTT204	पूर्व मध्यकालीन भारत में राजनीतिक विचार एवं संस्थाएं (8वीं से 15वीं शताब्दी) (Political thought and institutions in Pre Medieval India) (8th to 15th A.D.)	3	-	1	4	80	20	100	36
	HISTT205	Elective Papers - राजपूतों का इतिहास (History of Rajputs)	3	-	1	4	80	20	100	36
	HIST P 206	मराठों का इतिहास (History of Marathas)				C. P. Walter				
		Sub Total	15		5	20		0	500	1

PRINCIPAL D.P. VIPRA COLLEGE BILASPUR (C.G.)



सेमेस्टर पाठ्यकम एम.ए. इतिहास

टीप :- एम.ए. इतिहास सेमेस्टर पद्धित में सेमेस्टर ॥। एवं । ४ में परीक्षार्थियों को निम्नलिखित खण्ड-अ एवं खण्ड-ब में से किसी एक खण्ड का चयन कर उसके दोनों प्रश्न पत्रों को हल करमा होगा। उपरोक्त 4 वैकल्पिक प्रश्न पत्रों में से परीक्षार्थियों को सरल क्रमांक 1, 3 में से कोई एक एवं 2. 4 में से कोई एक वैकल्पिक प्रश्न पत्रों का चयन करना होगा। सभी प्रश्न पत्रों में 100-100 अंक होंगे। 100 अंकों में 80 अंक सैद्धांतिक एवं 20 अंक आंतरिक मूल्यांकन के होंगे।

गणन गल का सम	मणीतः	गै टांतिक	आंतरिक
प्रराप्त पत्र पत्र गाम	र्यूजाक	त्रसातक	जातारक मूल्यांकन
ਪ੍ਰਸ਼ਹੀਰ ਪਹੁਰ			-1ૂલ્વાવ/1
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सल्तनत कालीन समाज एवं संस्कृति			
(1200 से 1526 ई.)	100 -	80	20
Society and culture in Sultanate	1		
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: MODERN INDIA		3	
आधनिक भारत 1757 ई से 1857 ईतक			
	100	80	20 .
A.D. (Political, Administrative)			
आधुनिक भारत 1757 ई. से 1857 ई. तक			
# 1	100	80	20
Modern India 1757 A.D. to 1857			
A.D. (Economic, Social, Cultural)			
	100	80	20
से 1922 ई. तक)			
History of National Movement (1857 to 1922			
A.D.)			
	100	80	20
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	100	80	20
The second of th	100	00	20
पर्यटन सिद्धांत	100	80	20
	(1200 से 1526 ई.) Society and culture in Sultanate Period (1200-1526 A.D.) [धुनिक भारत 3: MODERN INDIA आधुनिक भारत 1757 ई. से 1857 ईतक (राजनीतिक, प्रशासनिक) Modern India 1757 A.D. to 1857 A.D. (Political, Administrative) आधुनिक भारत 1757 ई. से 1857 ई. तक (आर्थिक, सामाजिक, सांस्कृतिक) Modern India 1757 A.D. to 1857 A.D. (Economic, Social, Cultural) न पत्र (OPTIONAL PAPER) भारतीय राष्ट्रीय आंदोलन का इतिहास (1857 से 1922 ई. तक)	यकालीन भारत .: MEDIEVAL INDIA सत्तनकालीन भारतीय राजनय एवं अर्थव्यवस्था (1200 से 1526 ई. तक) Indian polity and economy in Sultanate period (1200-1526 A.D.) सत्तनत कालीन समाज एवं संस्कृति (1200 से 1526 ई.) Society and culture in Sultanate Period (1200-1526 A.D.) [धुनिक भारत : MODERN INDIA आधुनिक भारत 1757 ई. से 1857 ईतक (राजनीतिक, प्रशासनिक) Modern India 1757 A.D. to 1857 A.D. (Political, Administrative) आधुनिक भारत 1757 ई. से 1857 ई. तक (आर्थिक, सामाजिक, सांस्कृतिक) Modern India 1757 A.D. to 1857 A.D. (Economic, Social, Cultural) न पत्र (OPTIONAL PAPER) भारतीय राष्ट्रीय आंदोलन का इतिहास (1857 to 1922 A.D.) भारत का सांस्कृतिक इतिहास (प्रारंभ से 1526 ई. तक) Cultural History of India (Begining to 1526 A.D.) भारतीय संविधान और शासन व्यवस्था Indian Constitution and Administrative	यकालीन भारत : MEDIEVAL INDIA सल्तनतकालीन भारतीय राजनय एवं अर्थव्यवस्था (1200 से 1526-ई. तक) 100 80 Indian polity and economy in Sultanate period (1200-1526 A.D.) सल्तनत कालीन समाज एवं संस्कृति (1200 से 1526 ई.) 100 80 Society and culture in Sultanate Period (1200-1526 A.D.) ह्युनिक भारत : MODERN INDIA आधुनिक भारत 1757 ई. से 1857 ईतक (राजनीतिक, प्रशासनिक) 100 80 आधुनिक भारत 1757 A.D. to 1857 A.D. (Political, Administrative) आधुनिक मारत 1757 ई. से 1857 ई. तक (आर्थिक, सामाजिक, सांस्कृतिक) 100 80 Modern India 1757 A.D. to 1857 A.D. (Economic, Social, Cultural) न पत्र (OPTIONAL PAPER) भारतीय राष्ट्रीय आंदोलन का इतिहास (1857 100 80 से 1922 ई. तक) History of National Movement (1857 to 1922 A.D.) भारत का सांस्कृतिक इतिहास (प्रारंभ से 1526 ई. तक) Cultural History of India (Begining to 1526 A.D.) भारतीय संविधान और शासन व्ययस्था 100 80 Indian Constitution and Administrative

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सेमेस्टर पाठ्यकम एम.ए. इतिहास

TOTAL 400

टीप :- एम.ए. इतिहास सेमेस्टर पद्धित में सेमेस्टर III एवं IV में परीक्षार्थियों को निम्नलिखित खण्ड-अ एवं खण्ड-व में से किसी एक खण्ड का चयन कर उसके दोनों प्रश्न पत्रों को हल करना होगा। उपरोक्त 4 वैकल्पिक प्रश्न पत्रों में से परीक्षार्थियों को सरल क्रमांक 1, 3 में से कोई एक एवं 2, 4 में से कोई एक वैकल्पिक प्रश्न पत्रों का चयन करना होगा। सभी प्रश्न पत्रों में 100-100 अंक होंगे। 100 अंकों में 80 अंक सैद्धांतिक एवं 20 अंक आंतरिक मूल्यांकन के होंगे।

चतुर्थ सेमेस्टर SEMESTER IV

चतुर्थ समस्टर	SEMESTER IV			
प्रश्न पत्र	प्रश्न पत्र का नाम	पूर्णाक	सैद्धांतिक	आंतरिक भूल्यांकन
खण्ड अ : मध	यकालीन भारत		-	
SECTION A	: MEDIEVAL INDIA			
ī	मुगलकालीन भारतीय राजनय एवं अर्थव्यवस्था			
7	(1526 से 1750 ई. तक)	100	80	20
	Indian polity and economy in Mughal period (1526-1750 A.D.)			
11	मुगलकालीन समाज एवं संस्कृति (1526 से 1750 ई.)	100	80	20
	Society and culture in Mughal period (1526-1750 A.D.)			9
खण्ड ब : आ	धुनिक भारत	£		
SECTION B	: MODERN INDIA		H.(٠.
l	आधुनिक भारत 1858 ई. से 1964 ई.तक ,			
	(राजनीतिक, प्रशासनिक)	100	80	20
	Modern India 1858 A.D. to 1964 A.D.			
	(Political, Administrative)		Š.	
11	आधुनिक भारत 1858 ई. से 1964 ई. तक			
	(आर्थिक, सामाजिक, सांस्कृतिक)	100	80	20
	Modern India 1858 A.D. to 1964 A.D.			
	(Economic, Social, Cultural)			
वैकल्पिक प्रश	न पत्र (OPTIONAL PAPER)			
OPTIONAL	भारतीय राष्ट्रीय आंदोलन का इतिहास (1922 से	100	80	20
1	1947 ई. तक)			
	History of National Movement (1922 to 1947			
	A.D.)			
OPTIONAL	भारत का सांस्कृतिक इतिहास (1526 से 1950 ई.)	100	80	20
11	Cultural History of India (Begining to 1526 AD	100		
OPTIONAL III	भारतीय की केन्द्रीय तथा प्रांतीय शासन व्यवस्था	100	80	20
	Central and State Administrative System of India			
OPTIONAL	पर्यटन सिद्धांत एवं व्यवहार-इतिहास के संदर्भ में	100	80	20
IV	Tourism Theory and Priniciples In Reference of History			
			TOTAL	400

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सेमेस्टर पात्यक्रम M.Com.

M.Com. - Semester IV

Special attention to the students. Students are required to select 'any one' Specialization out of Three suggested below.

Choice Based - Specialization

(A) Marketing (B)Management

(C)Banking and Insurance

Optional Group- (A) Marketing

Paper No.	⁰⁹ प्रश्निभन्न का नाम	Internal Assessment	TermiEnd Exam	Total Marks
gy2 1. ;	्विप्रग्न के सिद्धांत	20	80	100
	Principal of Marketing		Name of the second	
2.	विज्ञापन एवं विक्रय	20	18011-18	± 32100
, i i d	Advertising & Sales Management	(al Tecure)	driving 1	2.4
∴3.	विष्णुन अनुसम्राह्महरू 🔑	20	80	100
i.h	Marketing Research	994-2121e./	medicano i	
4.	अन्तर्राष्ट्रीय विपणन	20.	80.	100
	International Marketing	323607573	THURST.	

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Paper No.	्र _भ प्रश्तुद्भन्न किलाम	(a) in the residence of	Internal Assessment	Term End .	Total Marks
or ⁴ .	वित्तीय प्रविध Financial Management	t between	20	80	100
2. O:	लामिकप्रवर्ध Personal Management		200	****80	100
3.	उत्पादनप्रवेध Production Management	a s	20	80	100
4.	व्यहरवना प्रबंध Strategic Management	A COMP	20*	**************************************	100

Optional Group- (C) Banking and Insurance

Paper No.	प्रश्न पत्र कानाम	Internal Assessment	Tem/End Exam	Total Marks
1.	बैकिंग व्यवहार Banking Practices	20	80	100
2.	भारत के बैकिंग संस्थाए Banking Institution in India	-20	80	100
3.	जीवन बीमा Life Insurance	. , ,20	-80	100
4.	सामान्य बीमा	20	-80	100

Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)



Scheme and Syllabus

of

M. Sc. (Microbiology)

Program Code: MSCMBR117

Semester system for affiliated college (As per LOCF and credit system)

w.e.f. 2023-2024



कोनी पुलिस थाना के सामने, बिलासपुर-रतनपुर मार्ग, कोनी, बिलासपुर (छ.ग.) 495009 Website : www.bilaspuruniversity.ac.in

> Scheme for M.Sc. Microbiology Program Code: MIC

Semester	Course	Subject Name	C	red	it	Total	Marks			
Semester	Code	Subject Name				Credit	ESE IA		Tot	al
			L	T	P		LSL	IA	Max	Min
First	MICT101	General Microbiology and Bacteriology	3	1	-	4	80	20	100	36
	MICT102	Virology	3	1	-	4	80	20	100	36
	MICT103	Phycology, Mycology and Proto- Zoology	3	1	-	4	80	20	100	36
	MICT104	Biochemistry	3	1	-	4	80	20	100	36
	MICP101	Lab 1	-		2	2	100	-	100	36
	MICP102	Lab 2	-	-	2	2	100	-	100	36
	Subtotal		12	4	4	20	-	-	600	-
	MICT201	Bioinstrumentation and Biochemical Techniques	3	1	-	4	80	20	100	36
	MICT202	Microbial Physiology	3	1	-	4	80	20	100	36
	MICT203	Microbial Genetics and Molecular Biology	3	1	-	4	80	20	100	36
Second	MICT204(A)	Cell Biology (Elective)								
	MICT204(B)	Genetic Engineering (Elective)	3	1	-	4	80	20	100	36
-	MICT204(C)	Agriculture Microbiology (Elective)								
	MICP201	Lab 3	-	-	2	2	100	-	100	36
	MICP202	Lab 4	-	-	2	2	100	-	100	36
		Subtotal	12	4	4	20	-	-	600	

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Note: Students have to opt one paper from the pool of Elective I of 2^{nd} Semester, one paper from the pool of Elective II of 3^{rd} Semester and Elective III of 4^{th} Semester.

Abbreviations used: ESE: End Semester Exam; IA: Internal Assessment

As approved by academic council and executive council meetings

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Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)



M. Sc. (Computer Science)

(w.e.f. 2023-2024)

Program Code: MSCITR104

PROGRAMME OUTCOMES (POs):

After the completion of the program students will be able to:

PO-1: Understand use of ladvanced computing techniques and tools.

PO-2: Understand and apply programming knowledge to solve complex problems not just by using technology, but also to contribute in creation of new & emerging technologies which meet the desired needs of industry and society.

PO-3: Understand the impact of technology & its applications and provide solutions to the end user in a cost effective and efficient manner.

PO-4: To adapt existing design patterns, techniques, algorithms, data structures, etc. to solve real world problems.

PO-5: Understand the impact of IT related solutions in socioeconomic context.

PO-6: Build a strong foundation for research in future & emerging technological trends.

PO-7: Emphasize on life-long learning considering the ever changing technological environment.

PO-8: To develop, a real world application.

PO-9: Understand advanced emerging techniques and to apply there in read world application.

PO-10: Carry on research based project and to develop commercial projects.

(As approved by AC and EC meetings held on 16.08.2023 and 18.04.2023 respectively)



अटल बिहारी वाजपेयी विश्वविद्यालय, बिलासपुर (छ.ग.) कोनी पुलिस धाना के सामने, बिलासपुर-रतनपुर मार्ग, कोनी, बिलासपुर (छ.ग.) 495009 Website :www.bilaspuruniversity.ac.in

Scheme of M.Sc. (Computer Science) under Semester System Program Code: MSCCSR104

Comenter	Course	Subject Name	Credit		Total		M	arks		
Semester	Code	Subject Name				Credit	ESE	ESE IA	Tot	tal
			L	T	P	Control of the Contro	ESE	IA	Max	Min
	CST101	Computer System Architecture	3	l	-	4	80	20	100	36
	CST102	Data Communication and Computer Network	3	1	-	4	80	20	100	36
	CST103	Object Oriented Programming with Java	3	1	-	4	80	20	100	36
First	CST104	Operating Systems	3	I	-	4	80	20	100	36
	CSP101	Lab 1: Programming in Java	-	1/2	2	2	-		100	36
	CSP102	Lab 2: Operating Systems (Unix, Linux & Android)	-	-	2	2	-		100	36
		Subtotal	12	4	4	20	-	-	600	-
	CST201	Relational Database Management System	3	1	-	4	80	20	100	36
	CST202	Data Structure	3	1	-	4	80	20	100	36
	CST203	Software Engineering	3	1	-	4	80	20	100	36
	CST204	Elective-I: Computer Graphics								
Second	CST205	Elective-I: Introduction to Block chain Technology	3	1	-	4	80	20	100	36
	CST206	Elective-I: Cryptography and Network Security								
	CSP201	Lab 3: Relational Database Management System	-	-	2	2	-		100	36
	CSP202	Lab 4: Data Structure	-	-	2	2	-	-	100	36
		Subtotal	12	4	4	20	-	-	600	

D.P. VIPRA COLLEGE BILASPUR (C.G.)

Note: Students have to opt one paper from the pool of Elective-I of 2nd Semester, one paper from the pool of Elective-II of 3rd Semester and one paper from the pool of Elective-III of 4th Semester. Abbreviations used:

> ESE: End Semester Exam IA: Internal Assessment

Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur (C.G.)



Scheme and Syllabus

of

M. Sc. (Chemistry)

Program Code: MSCCHER102

Semester system for affiliated college (As per LOCF and credit system)

w.e.f. 2023-2024

(As approved by AC and EC meetings held on 16.08.2023 and 18.04.2023 respectively)



अटल बिहारी वाजपेयी विश्वविद्यालय, बिलासपुर (छ.ग.) कोनी पुलिस थाना के सामने, बिलासपुर-रतनपुर मार्ग, कोनी, बिलासपुर (छ.ग.) 495009 Website :www.bilaspuruniversity.ac.in

Scheme of M.Sc. (Chemistry) under Semester System Program Code: MSCCHER102

Credit	Semester	Course	Subject Name	Credit Total		Credit 7		Credit Total			Marks			
CHEMT101 Inorganic Chemistry 3 1 - 4 80 20 100 36	Semester	Code	oudjeet titule				Credit	FCF	7.	Tot	al			
CHEMT102 Organic Chemistry 3 1 - 4 80 20 100 36			L	T	P		ESE	IA	Max	Min				
CHEMT103 Physical Chemistry 3 1 - 4 80 20 100 36		CHEMT101	Inorganic Chemistry	3	1	-	4	80	20	100	36			
CHEMT104 Spectroscopy & Maths. for chemist 3 1 - 4 80 20 100 36		CHEMT102	Organic Chemistry	3	1	-	4	80	20	100	36			
CHEMP101 Lab 1 Organic Chemistry -		CHEMT103	Physical Chemistry	3	1		4	80	20	100	36			
CHEMP102 Lab 2:Analytical Chemistry	First	CHEMT104	Spectroscopy & Maths. for chemist	3	1	-	4	80	20	100	36			
Subtotal 12 4 4 20 - - 600 -		CHEMP101	Lab 1 Organic Chemistry	-	-	2	2	-	-	100	36			
CHEMT201 Inorganic Chemistry 3 1 - 4 80 20 100 36		CHEMP102	Lab 2:Analytical Chemistry	-	-	2	2	-		100	36			
CHEMT202 Organic Chemistry 3 1 - 4 80 20 100 36			Subtotal	12	4	4	20	-	-	600	-			
CHEMT203 Physical Chemistry 3 1 - 4 80 20 100 36		CHEMT201	Inorganic Chemistry	3	1	-	4	80	20	100	36			
CHEMT205 Elective-I A: Photo-inorganic chemistry CHEMT206 Elective-I B: Chemistry of Hetrocyclic compounds CHEMT207 Elective-I C: Chemistry of Material CHEMP201 Lab 3: Inorganic Chemistry 2 2 2 100 36 CHEMP202 Lab 4: Project Work 2 2 2 100 36 CHEMP203 CHEMP204 CHEMP205 CHEMP206 CHEMP206 CHEMP207 CHEMP207 CHEMP207 CHEMP208 C		CHEMT202	Organic Chemistry	3	1	-	4	80	20	100	36			
Second CHEMT206 Elective-I B: Chemistry of Hetrocyclic compounds 3 1 - 4 80 20 100 36 CHEMT207 Elective-I C: Chemistry of Material CHEMP201 Lab 3: Inorganic Chemistry - - 2 2 - - 100 36 CHEMP202 Lab 4: Project Work - - 2 2 - - 100 36		CHEMT203	Physical Chemistry	3	1	-	4	80	20	100	36			
Second CHEM1206 compounds 3 1 - 4 80 20 100 36 CHEMT207 Elective-I C: Chemistry of Material CHEMP201 Lab 3: Inorganic Chemistry - - 2 2 - - 100 36 CHEMP202 Lab 4: Project Work - - 2 2 - - 100 36		CHEMT205	Elective-I A: Photo-inorganic chemistry		1	Ī								
CHEMP201 Lab 3: Inorganic Chemistry - - 2 2 - - 100 36 CHEMP202 Lab 4: Project Work - - 2 2 - - 100 36	Second	СНЕМТ206	The state of the s	3	3	3	3	í	ī -	- 4	80	20	100	36
CHEMIP202 Lab 4: Project Work 2 2 100 36		CHEMT207	Elective-I C: Chemistry of Material			İ								
		CHEMP201	Lab 3: Inorganic Chemistry	-	T-	2	2	-		100	36			
Subtotal 12 4 4 20 600		CHEMP202	Lab 4: Project Work	-	-	2	2	-	•	100	36			
			Subtotal	12	4	4	20	-	-	600				

D.P. VIPRA COLLEGE BILASPUR (C.G.)

M.Sc. Chemistry

Programme outcome

After completing M.Sc. Chemistry programme, students will be able to:

Knowledge Outcomes:

- PO1: Demonstrate and apply the fundamental knowledge of the basic principles in various fields of Chemistry
- PO2: Create awareness and sense of responsibilities towards environment and apply knowledge to solve the issues related to Environmental pollution.
- PO3: Apply knowledge to build up small scale industry for developing endogenous product.
- PO4: Apply various aspects of chemistry in natural products isolations,

 pharmaceuticals, dyes, textiles, polymers, petroleum products, nanopartcles, computer
 programming for chemists etc. and also todevelop interdisciplinary approach of the
 subject.

Skill Outcomes: It would help students to

- PO4: collaborate effectively on team-oriented projects in the field of Chemistry or other related fields.
- PO5: communicate scientific information in a clear and concise manner both orally and in Writing.
- PO6: inculcate logical thinking to address a problem and become result oriented with a positive attitude.
- PO7: Explain environmental pollution issues and the remedies thereof.
- PO8: apply the knowledge to develop the sustainable and eco-friendly technology in Industrial Chemistry.

Generic Outcomes:

- PO9: Have developed their critical reasoning, judgment and communication skills.
- PO10: Augment the recent developments in the field of green and eco-friendly reactions, pharmaceutical, Bioinorganic Chemistry and relevant fields of research and development.
- PO11: Enhance the scientific temper among the students so as to develop a research culture and implementation of the policies to tackle the burning issues at global and local level.
- PO12: Will be able to undertake various projects of chemistry and will be familiar about research methodology.



बिलासपुर विश्वविद्यालय, बिलासपुर (छत्तीसगढ़) SEMESTER SYLLABUS M.Sc. CHEMISTRY

SCHEME OF EXAMINATION & DISTRIBUTION OF MARKS

SEMESTER - I

Paper No.	Title of the Paper (s)	Internal Assessment	Term End Exam	Practical	Total Marks
7. 7	Inorganic Chemistry	.,20	80,		100
2.	Organic Chemistry, Stereochemistry & Pericyclic Reaction	20	80		100
3.	Physical Chemistry- I	20	80`		100
4.	Spectroscopy And Mathematics/Biology For Chemists	20	80		100
	Organic Chemistry				100
LAB-II	Analytical Chemistry	al a na e a			100
		1112		TOTAL	600

SEMESTER - II

Paper No.	সাঁtle of the Paper (s)	Internal Assessment	Term End Exam	Practical	Total Marks
: 1,.	Inorganic Chemistry	20	80 .		100
2.	Organic Chemistry	. 20	8.0		100
3.	Physical Chemistry	20	80		100
, 4. L	Spectroscopy, Diffraction Methods & Computer For Chemists	20	80		100
ALAB_LA	Inorganic Chemistry				100
LAB-II	Physical Chemistry				100
				TOTAL	600

SEMESTER - III

Paper	Titlé of the Paper (s)	Internal	Term End	Practical	Total
No.		Assessment	Exam		Marks
COMP	ULSORY FOR GROUP A, B & C				
1.	Applications Of Spectroscopy .	20	80		100
2.	Chemistry Of Bio-Inorganic & Bio-Organic	20	80		100
LAB-I	General (Compulsory)			200	200
OPTIO	NAL GROUP-A INORGANIC		,		
3.	Organotrasition Metal Chemistry	20	80		100
4.	Photo inorganic Chemistry	20	80		100
OPTIO	NAL GROUP-B ORGANIC				
3.	Physical Organic Chemistry	20	80		100
4.	Chemistry Of Heterocyclic Compounds	20	80		100
OPTIO	NAL GROUP-C PHYSICAL				
3.	Chemistry Of Materials	20	80		100
4.	Advanced Quantum Chemistry	20	80		100
0.)	3			TOTAL	600



बिलासपुर विश्वविद्यालय, बिलासपुर (छत्तीसगढ़) SEMESTER SYLLABUS M.A. ENGLISH

SCHEME OF EXAMINATION & DISTRIBUTION OF MARKS

SEMESTER - I

Paper No.	Title of the Paper (s)	Internal Assessment	Term End Exam	Total Marks
. 1	Boetry≍l (From Chaucer To Blake)	20	480j	400 .
2.	Drama -I	20	80	100
3.	Prose	20	80	4-1400
4.	Fiction	V 20	380.	100

SEMESTER - II

Paper	Title of the Paper (s)	Internal	Term End ^E	- 切る台
Ņο.	5 2 5 E	Assessment	(L) Exam	"Marks
1:	Poetry -II	1201 A	- 802 9, 191	1188400
2.	Drama- II	20	80	100
3.	Modern Literature (Poetry and Prose)	20	80 YA	100
4.	Fiction And Short Stories	1	80	100

SEMESTER - III

Paper	Title of the Paper (s)	internal 3	Terro End.	THE SET
No.	A. Saran	HASSESSMENT	Examp	Marke
4.3	Critical Theory	De la constantia	v 80	7100
2	Indian Literature	20	80)	7000
34	Américan Literature	20	80	100
4.	Optionali(Arty onen) 1941(Stony onen glish Literature	49203	-1800-	
2 (13 - 14-17) C.z.	2. Linguistics	32.3		

SEMESTERLIV

		WITH THE WILL THE	to with the same	ACH THE PARTY OF THE
Raper	Title of the Paper (s).	internal .	Hemal ng	Tional
(No	A STATE OF THE STA	Assessment	alexam y	Marks
re p	Hiteratureun Translation	201		1100
2.	Diaspora and Dalit Literature	20	80	TQO
3.	World Literature	20 %	607) AGO
4.	Optional:(Any one)	1207	7807	7 100
	1. Colonial and Post Colonial	1	A PORT MESTA	1 are
	Literature			1 8 m
!	2. Gender Studies	- 1		10.00

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(छत्तीसगढ़) सेमेस्टर पाठ्यकम

M.Sc. ZOOLOGY

111	Fish(Ichthyology) structure and function	80	20
IV	Applied Fisheries	80 .	20
Optional G	Applied Fisheries	745 July 02 1 2 14	•
111	.Cell biology	80	20
IV	Cellular organization and molecular organization	80	20
Optional G	roup-III		
111	Entomology	80	20
1V	Applied Entomology	80	20
Optional G	roup-IV.		
-111	Wildlife conservation	80	20
IV	Environment and biodiversity conservation	80	20
	M.Sc. Zoology Lab Course I	100	
	M.Sc. Zoology Lab Course II	100	

Student has choice to opt. For any one group out of four optional groups.(Paper III and IV in semester four)

Each theory paper will have 5 questions of equal marks. First question will be compulsory encompassing all the five units without any internal choice, whereas rest questions will be unit wise with internal choice.

Internal Assessment shall comprise of two parts- Ten marks for test and ten marks for seminar/ assignment /presentation.

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M.Sc. ZOOLOGY

SCHEME OF EXAMINATION & DISTRIBUTION OF MARKS

SEMES	TER - I			- 43	it idamii ide i
Paper No.	Title of the Paper			∭úMa	rks
	Ş .	10		External	Internal
1	Invertebrate structure Minor Phyla	and	function,	80	20
. 11	Animal Behaviour			80	20
111	Quantitative Biology		11.00 Mar. 1000	80:	20
IV	Ecology and environment	al phy	siology	80	20
	M.Sc. Zoology Lab Cours	el		100	77.
	M.Sc. Zoology Lab Cours	e II	T	100	

SEMESTER - II

Paper No.	Title of the Paper	* Marks	
0447	,	External	Internal
1	General & comparative endocrinology of vertebrates	80	20
II	Gamete biology and reproductive physiology in human beings	/80:	20 a
111	Molecular cell biology	180 ∺	20
IV	Tools and techniques for biology	80	20
15.	M.Sc. Zoology Lab Course I	100	
	M.Sc. Zoology Lab Course II	100	

SEMESTER - III

Paper No.	Title of the Paper	Marķs		
		External	Internal	
1	Comparative anatomy of vertebrates	80	20	
11	Biosystematics, taxonomy & biodiversity	80	20 '	
111	Immunology and developmental biology	80	20	
IV	Population genetics & evolution	80	20	
	M.Sc. Zoology Lab Course I	100		
	M.Sc. Zoology Lab Course II	100		

SEMESTER - IV

Paper No	Title of Paper	Marks	
		Externa I	Int ernal
1	General physiology and neurophysiology (compulsory)	80	20
II	Biochemistry and metabolic regulation and cell function (compulsory)	80	20

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		Branch and the second second second second	
		External	Internal
.1	General physiology and neurophysiology (compulsory)	80	20
11	Biochemistry and metabolic regulation and cell function (compulsory)	80	20
10	Fish(Ichthyology) structure and function	80	20
IV	Applied Fisheries	80	20
HERE			
10	Cell biology	80	20
IV	Cellular organization and molecular organization	80	20
111	Entomology	80	20
IV	Applied Entomology	80	20
		1	
W	Wildlife conservation	80	20
IV '	Environment and biodiversity conservation	80	20
	M.Sc. Zoology Lab Course	200	
		III Fish(Ichthyology) structure and function IV Applied Fisheries III Cell biology IV Cellular organization and molecular organization IV Entomology IV Applied Entomology IV Applied Entomology IV Environment and biodiversity conservation IV IV IV IV IV IV IV I	III Fish(ichthyology) structure and function 80 IV Applied Fisheries 80 III Cell biology 80 IV Cellular organization and molecular organization 80 IV Applied Entomology 80 IV Applied Entomology 80 III Wildlife conservation 80 IV Environment and biodiversity conservation 80

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Bilaspur (C.G.)



बिलासपुर विश्वविद्यालय, बिलासपुर (छत्तीसगढ़) SEMESTER SYLLABUS

1888 Acres

M.Sc. MATHEMATICS

SCHEME OF EXAMINATION & DISTRIBUTION OF MARKS

SEMESTER - I

Paper No.	Title of the Paper (s)	Internal Assessment	Term End Exam	Practical	Total Marks
1.	Advanced Abstract Algebra (I)	20	80		100
2.	Real Analysis (I)	20	80		100
3.	Topology (I)	20	80		100
4.	Complex Analysis (I)	20	80		100
5.	Advanced Discrete Mathematics (I)	20	80		100

SEMESTER - II

Paper	Title of the Paper (s)	Internal	Term End	Practical	Total
No.		Assessment	Exam		Marks
1.	Advanced Abstract Algebra (II)	20	80		100
2.	Real Analysis (II)	20	80		100
3.	Topology (II)	20	80		100
4.	Complex Analysis (II)	20	80		100
5.	Advanced Discrete Mathematics (II)	20	80		100

SEMESTER - III

Paper	Title of the Paper (s)	Internal	Term End	Practical	Total
No.		Assessment	Exam		Marks
1.	Integration Theory and Functional Analysis -I	20	80		100
2.	Partial Differential Equations. Mechanics and	20	80		100
ODTIO	Gravitation - I				
OPHO	NAL PAPER (ANY THREE)				
3.	Program. in C with ANSI Features I	20	50	30	100
4.	Fuzzy Sets and their Applications-I	20	80		100
5.	Operations Research-I	20	80		100
6.	Fluid Mechanics-I	20	80		100
7.	Information Theory-I	20	80		100
8.	Fundamentals of Computer Science -I	20	80		100

SEMESTER - IV

Paper	Title of the Paper (s)	Internal	Term End	Practical	Total
No.		Assessment	Exam		Marks
1.	Integration Theory and Functional Analysis -II	20	80		100
.2.	Partial Differential Equations Mechanics and	20	80		100
	Gravitation - II				
OPTIO	NAL PAPER (ANY THREE)				
3.	Programming in C with ANSI Features- II	20	50	30	100
4.	Fuzzy Sets and their Applications-II	20	80		100
5.	Operations Research-II	20	80		100
6.	Fluid Mechanics-II	20	80		100
7.	Information Theory-II	20	80		100
8.	Fundamentals of Computer Science II	20	80		100

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SYLLABUS B.COM. PART-III

GROUPING OF SUBJECTS AND SCHEME OF EXAMINATION

Subject			Max.	Min.
Fou	ndation Course			
l.	Hindi Language		75	26
11.	English Language		75	26
Con	npulsory Groups			
Group-I			The state of	
ī.	Income Tax	75]	4-0	
II.	Auditing	75 ∫	150	50
Group-II			/	
l.	Indirect Taxes	75]	150	50
II.	Management Accounting	75	130	30
Group-III	Optional Optional			
Option Gr	oup A (Finance Area)			
1.	Financial Management	75]	150	
H.	Financial Market Operations	75 ∫	150	50
Option Gr	oup B (Marketing Area)			
1.	Principles of Marketing	75]	150	
11.	International Marketing	75 📗	150	50
Option Gr	oup C (Commercial Area)			
1.	Information Technology and	75]		
	its Applications in Business	}	150	50
П.	Essential of e-Commerce	75 J		
Option G	Group D (Money Banking &			
Inst	ırance Area)			
1.	Fundamental of Insurance	75 }	150	50
П.	Money & Banking System	75 📗	200	30

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2020-21

ENGLISH LETERATURE

PAPER -I

INDIAN WRITING IN ENGLISH

M.M.: 75

(Paper Code-0235)

All questions are compulsory.

Note: 1 Uint - I is compulsory. Two passages from each of the units II to V to be set and three to be attempted. (3x5 = 15)

2 Short answer questions from unit VII, seven to be set and five to be attempted. (5x2 = 10)

3. Long-answer questions from unit II to VI. Eive questions from each unit with internal choice to be set. (5x10 = 50)

UNIT-I Annotations and short answer questions.

UNIT-II Poetry -

Toru Dutt - 'Our Casurina Tree'

Tagore - Songs 1 & 103 from 'Gitanjali' Sarojini Naidu - 'The Ecstasy', 'The Lotus'

UNIT-III Kamla Das - 'The old playhouse'

Gauri Deshpandey Or 'The female of the species

Jayant Mahapatra - 'Dawn at Puri'
K.N. Daruwala Or 'Death by Burial'
Shiv K. Kumar - 'Indian Women'

UNIT-IV Prose -

Nirad C. Choudhary - My Birth Place.

Dr. S. Radhakrishnan - The call of the suffering.

UNIT-V Drama -

Girish Karnad - Hayavadana

Or

Tendulkar - Silence! The Court is in session.

UNIT-VI Fiction -

R.K. Narayan - Guide

UNIT-VII 1. Lyric, 2. Subjective poetry, 3. Couplet, 4. Fable, 5. Hymn, 6. Allegory, 7. Autobiography,

BOOK RECOMMENDED :

- 1. Indian Poetry in English, Ed. Hari Mohan prasad, Sterling Publication.
- 2 An Introduction to the study of English Literature, B. Prasad.
- 3. A Glossary of Literary Terms M.H. Abrams.
- 4. Prose of To day M.C. Millan.

PAPER - II

(A) AMERICAN LITERATURE

(Paper Code-0236)

All questions are compulsory.

Note: 1. Uint-I is compulsory. Two passages from each of the units II to V to be set and three to be attempted. (3x5 = 15)

B.A.-Part-III

(14)

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- 2 Short answer questions from unit VII, seven to be set and five to be attempted.
- 3. Long-answer questions from unit II to VI. (word limit for each answer is 300-400 words) internal choice to be set. (5x10 = 50)

UNIT-I Annotations and short answer question.

UNIT-II Poetry -

Wait whitman - O Captain! My Captain, when the Lilacs Last in

the Dooryard Bloomed.

Carl Sandberg - 'Who Am I ?', 'I am the People, The Mob'

UNIT-III Emily Dickinson - 'Hope is the thing with Feather' I Felt a funeral

in My Brain'

E.E. Cummings - 'The Cambridge Ladies'

'As Freedom is a Breakfast food'

UNIT-IV Prose -

William Faulkner - Nobel Award Acceptence Speech

W. Carlos Williams - In the American Grain

Walt Whitman - Preface to "Leaves of Grass'

UNIT-V Drama -

Miller - All My Sons

Or

Eugene O'Neill - The Hairy Ape

UNIT-VI Fiction -

E. Hemingway - A Farewell to Arms

Or

W. Faulkner - The Sound and the Fury

UNIT-VII 1. Naturalism, 2. Realism, 3. Art for Art's sake, 4. Poetic-Drama, 5. Symbolism,

6. American Renaissance, 7. Existentialism.

BOOK RECOMMENDED :

- 1 American Literature, An Anthology, Ed. Fr. Egbert S. Oliver.
- 2 A Glossary of Literary Terms M.H. Abrams.

PAPER - II

(B) 20TH CENTURY LITERATURE IN ENGLISH

(Paper Code-0237)

The paper will be taught as an optional paper to Paper-II(A) which is a paper on American Literature. The Principle focus will be to probe the students a general background and cultural history of this period and also to make them aware of the Literary trends of the twentieth century. The Paper will comprise six units and in all six quetions are to be attempted, one from each unit.

- UNIT-I The following historical and literary topics will be included in this unit. Students are required to write short notes of not more than three hundred words on any two of the following topics. (10 Marks)
 - i The Two world wars.
 - in The Russian Revolution.

B.A.-Part-III

(15)

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The Great Depression.
             The Vietnam war.
         v
              Freudian Thought
         (iv
             Existentialism.
             Absurdism.
         viii) Modernism and Post Modernism.
             New Development in fiction and Drama.
        Ten objective type questions on the life History and major poetical works of the
UNIT-II
         following poets of the twentieth century will be asked in this unit.
              W.B. Yeats (1865-1939)
             Siegfried Sasson (1886-1967)
             Rupert Brooke (1887-1915)
             T.S. Eliot (1888-1965)
             Wilfred Owen (1893-1918)
             W.H. Auden (1907-1937)
         (iv
            Louis Macheice (1907-1963)
         viii) Stephen Spender (1909-
             Dylan Thomas (1914-1953)
             Philip Larkin (1922-1985)
UNIT-III
                                                                                 (15 marks)
         T.S. Elict
                                             'The Waste Land'
                                    Or
         Wilfred Owen
                                             'Disabled'
         Siegfried Sassoon
                                             'Attack', 'Falling Asleep'
         Rupert Brooke
                                             'The Hill'
         W.H. Auden
                                             'Miss Gee'
UNIT-IV
                                                                                 (15 marks)
         Joseph Conrad
                                             'Heart of Darkness'
                                    Or
         Chinua Achebe
                                             'Things Fall Apart'
UNIT-V
         (Non Fictional Prose)
                                                                                 (10 marks)
         Virginia Woolf
                                             'The Death of the Moth'
         Graham Greene
                                             'The Lost Childhood'
UNIT-VI (Drama)
                                                                                 (15 marks)
         Bernard Shaw
                                             'Pygmalian'
                                    or
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B.A.-Part-III

Samuel Beckett

PRINCIPAL D.P. VIPE CON

'Waiting for Godot'

(15)

MATHEMATIS

There shall be three theory papers Two compulsory and one optional Each paper carrying 50 marks is divided into five units and each unit carry equal marks

PAPER - I Paper Code-0898;

ANALYSIS

REAL ANALYSIS

- UNITI-I Series of arbitrary terms Convergence, divergence and Oscillation Abels and Dirichlets test Multiplication of series Double series

 Partial derivation and differentiability of real-valued functions of two variables Schwarz and Young s theorem Implicit function theorem

 Fourier series Fourier expansion of piecewise monotonic functions
- UNIT-II Riemann integral Intergrability of continuous and monotonic functions The fundamental theorem of integral calculus Mean value theorems of integral calculus Improper integrals and their convergence, Comparison tests Abel s and Dirichlet s tests Frullani's integral Integral as a function of a parameter Continuity, derivability and integrability of an integral of a function of a parameter

COMPLEX ANALYSIS

UNIT-III Complex numbers as ordered pairs Geometric representation of Complex numbers
Stereographic projection
Continuity and differentiability of Complex functions Analytic functions CauchyRiemann equations Harmonic functions
Elementary functions Mapping by elementary functions
Mobius transformations Fixedpoints, Cross ratio Inverse points and critical mappings
Conformal mappings

METRIC SPACES

- UNIT-IV Definition and examples of metric spaces Neighbourhoods, Limit points, Interior points, Open and closed sets, Closure and interior Boundary points, Sub-space of a metric space Cauchy sequences, Completeness, Cantor's intersection theorem Contraction principle, Construction of real numbers as the completion of the incomplete metric space of rationals Real numbers as a complete ordered field
- UNIT-V Dense subsets Baire Category theorem Separable, second countable and first countable spaces Continuous functions Extension theorem Uniform continuity, Isometry and homeomorphism Equivalent metrics Compactness Sequential compactness Totally bounded spaces Finite intersection property Continuous functions and compact sets, Connectedness, Components, Continuous functions and connected sets

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- 1 T.M. Apostol, Mathematical Analysis, Narosa Publishing House, New Delhi, 1985
- 2 R.R. Goldberg, Real Analysis, Oxford & IBH publishing Co , New Delhi, 1970
- 3 S Lang, Undergraduate Analysis, Springer-Verlag, New York, 1983
- D Somasundaram and B Choudhary, A First Coarse in Mathematical Analysis, Narosa Publishing House, New Delhi, 1997
- 5 Shanti Narayan, A Course of Mathematical Analysis, S Chand & Co New Delhi

B*S*c -Ⅲ

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- 6 PK Jain and SK Kaushik, An introduction to Real Analysis, S Chand & Co , New Delhi, 2000
- 7 R v Churchill & J W Brown, Complex Variables and Applications, 5*' Edition, McGraw-Hill, NewYork, 1990
- 8 MarkJ Ablowitz & A.S. Fokas, Complex Variables Introduction and Applications, Cambridge University Press, South Asian Edition, 1998
- Shanti Narayan, Theory of Functions of a Complex Variable, S Chand & Co , New Delhi
- 10 Et Copson, Metric Spaces, Cambridge University Press, 1968
- 11 PK Jain and K Ahmad, Metric Spaces, Narosa Publishing House, New Delhi, 1996
- 12 G F Simmons, Inroductin to Topology and Modern Analysis, McGraw-Hill, 1963

PART - II Paper Code-0899; ABSTRACT ALGEBRA

- UNIT-I Group-Automorphisms, inner automorphism Automorphism groups and their computations, Conjugacy relation, Normaliser, Counting principle and the class equation of a finite group Center for Group of prime-order, Abelianizing of a group and its universal property Sylows theorems, Sylow subgroup, Structure theorem for finite Abelian groups
- UNITI-II Ring theory-Ring homomorphism Ideals and Quotient Rings Field of Quotients of an Integral Domain, Euclidean Rings, Polynomial Rings, Polynomials over the Rational Field The Eisenstien Criterion, Polynomial Rings over Commutative Rings, Unique factorization domain R unique factorisation domain implies so is R x1, x2 xn Modules, Submodules, Quotient modules, Homomorphism and Isomorphism theorems
- UNIT-III Definition and examples of vector spaces Subspaces Sum and direct sum of subspaces, Linear span Linear dependence, independence and their basic properties Basis Finite dimensional vector spaces Existence theoremfor bases Invariance of the number of elements of a basis set Dimension Existence of complementary subspace of a subspace of a finite dimensional vector space Dimension of sums of subspaces Quotient space and its dimension
- UNIT-IV Linear transformations and their representation as matrices. The Algebra of linear transformations. The rank nullity theorem Change of basis. Dual space Bidual space and natural isomorphism. Adjoint of a linear transformation. Eigenvalues and eigenvectors of a linear transformation. Diagonalisation. Annihilator of a subspace Bilinear, Quadratic and Hermitian forms.
- UNIT-V Inner Product Spaces-Cauchy-Schwarz inequality Orthogonal vectors Orthogonal Complements Orthonormal sets and bases Bessel s inequality for finite dimensional spaces Gram-Schmidt Orthogonalization process

REFERENCES

- 1 IN Herstein Topics in Algebra, Wiley Eastern Ltd , New Delhi, 1975
- 2 N Jacobson, Basic Algebra, Vols I & II W H Freeman, 1980 also published by Hindustan Publishing Company;
- 3 Shanti Narayan, A Text Book of Modern Abstract Algebra, S Chand & Co New Delhi
- 4 KB Datta, Matrix and Linear Algebra, Prentice Hall of India Pvt Ltd , New Delhi, 2000
- P B Bhattacharya, S K Jain and S R Nagpal, Basic Abstract Algebra 2'' Edition, Cambridge University Press, Indian Edition, 1997

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B*S*c -Ⅲ

- 6 K Hoffman and R Kunze, Linear Algebra, 2'' Editon, Prentice Hall Englewood Cliffs, New Jersey, 1971
- 7 S K Jain, A Gunawardena & P B Bhattacharya, Basic Linear Algebra with MATLAB Key College Publishing Springer-Verlag; 2001
- 8 S Kumaresan, Linear Algebra, A Geometric Approach, Prentice-Hall of India, 2000
- 9 Vivek Sahai and Vikas Bist, Algebra, Norosa Publishing House, 1997
- 10 I S Luther and I B S Passi, Algebra, Vol I-Groups, Vol II-Rings Narosa Publishing House Vol I-1996, Vol II-1999;
- 11 D S Malik, J N Mordeson, and M K Sen, Fundamentals of Abstract Algebra, McGraw-Hill International Edition, 1997

PAPER - III - OPTIONAL)

I; PRINCIPLES OF COMPUTER SCIENCE Paper Code-0900;

- UNIT-I Data Storage Storage of bits Main Memory Mass Storage Coding Information of Storage The Binary System Storing integers, storing fractions, communication errors Data Manipulation The Central Processing Unit The Stored-Program Concept Programme Execution Other Architectures Arithmetic/Logic Instructions Computer-Peripheral Communication
- UNIT-II Operating System and Networks The Evolutionof Operating System Operating System Architecture Coordinating the Machine's Activities Handling Competition Among Process Networks Networks Protocol

 Software Engineering The Software Engineering Discipline The Software Life Cycle Modularity Development Tools and Techniques Documentation Software Ownership and Liability
- UNIT-III Algorithms The Concept of an Algorithm, Algorithm Representation Algorithm
 Discovery Iterative Structures Recursive Structures Efficiency and Correctness
 Algorithms to be implemented in C⁺⁺;

Programming Languages - Historical Perspective Traditional Programming Concepts, Program Units Language Implementation Parallel Computing Declarative Computing

UNIT-IV Data Structures - Arrays Lists Stacks Queues Trees Customised Data Types Object Oriented Programming

Database Structure - General Issues The Layered Approach to Database Implementation The Relational Model Object-Oriented Database Maintaining Database Integrity E-R models

UNIT-V Artifical Intelligence - Some Philosophical Issues Image Analysis Reasoning, Control System Activities Using Heuristics Artificial Neural Networks Application of Artificial Intelligence

Theory of Computation - Turning Machines Computable functions A Non computable Function Complexity and its Measures Problem Classification

REFERENCES

- 1 J Glen Brookshear, Computer Science An Overview, Addition -Wesley
- 2 Stanley B Lippman, Josee Lojoie, C++ Primer 3rd Edition, Addison-Wesley

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PAPER - III - OPITONAL)

II. DISCRETE MATHEMATICS Paper Code-0901;

- UNIT-I Sets and Propositions Cardinality Mathematical Induction, Principle of Inclusion and exclusion Computability and Formal Languages - Ordered Sets Languages Phrase Structure Grammars Types of Grammars and Languages Permutations Combinations and Discrete Probability
- UNIT-II Relations and Functions Binary Relations, Equivalence Relations and Partitions Partial Order Relations and Lattices Chains and Antichains Pigeon Hole Principle Graphs and Planar Graphs - Basic Terminology Multigraphs Weighted Graphs Paths and Circuits Shortest Paths Eulerian Paths and Circuits Travelling Salesman Problem Planner Graphs TREES
- UNIT-III Finite State Machines Equivalent Machines Finite State Machines as Language Recognizers Analysis of Algorithms Time Complexity Complexity of Problems Discrete Numeric Functions and Generating Functions
- UNIT-IV1 Recurrence Relations and Recursive Algorithms Linear Recurrence Relations with Constant Coefficients Homogeneous Solutions Particular Solution Total Solution Solution by the Method of Generating Functions Brief review of Groups and Rings
- UNIT-V Boolean Algebras Lattices and Algebraic Structures Duality, Distributive and Complemented Lattices Boolean Lattices and Boolean Algebras Boolean Functions and Expressions Prepositional Calculus Design and Implementation of Digital Networks Switching Circuits

REFERENCES

C.L. Liu, Elements of Discrete Mathematics, Second Edition, McGraw Hill, International Edition, Computer Science Series, 1986

PAPER - III - OPTIONAL;

III; APPLICATION OF MATHEMATICS IN FINANCE AND INSURANCE Paper Code-0902;

Application of Mathematics in Finance

- UNIT-I Financial Management An overview Nature and Scope of Financial Management Goals of Financial Management and main decisions of financial management Difference between risk, speculation and gambling
 - Time value of Money-Interest rate and discount rate Present value and future valuediscrete case as well as continuous compounding case Annuities and its kinds
- UNIT-II Meaning of return Return as Internal Rate of Return IRR; Numerical Methods like Newton RaphsonMethod to calculate IRR Measurement of returns under uncertainty situations Meaning of risk Difference between risk and uncertainty Types of risks Measurement of risk Calculation of security and Portfolio Risk and Return-Markowitz Model Sharpe's Single Index Model Systematic Risk and Unsystematic Risk
- UNIT-III Taylor series and Bond Valuation Calculation of Duration and Convexity of bonds
 Financial Derivaties Futures Forward Swaps and Options Call and Put Option Call
 and Put Parity Theorem Pricing of contingent claims through Arbitrage and Arbitrage
 Theorem

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Application of Mathematics in Insurance

- UNIT-IV Insurance Fundamentals Insurance defined Meaning of loss Chances of loss, peril, hazard, and proximate cause in insurance Costs and benefits of insurance to the society and branches of insurance-life insurance and various types of general insurance Insurance Insurance Ensurance Insurance Insurance Insurance Insurance Mathematics Construction of Mortality Tables Computation of Premium of Life Insurance for a fixed duration and for the whole life
- UNIT-V Determination of claims for General Insurance Using Poisson Distribution and Negative Binomial Distribution-the Polya Case

 Determination of the amount of Claims in General Insurance Compound Aggregate claim model and its properties, and claims of reinsurance Calculation of a compound claim density function F-recursive and approximate formulae for F

REFERENCES

- 1 Aswath Damodaran, Corporate Finance Theory and Practice, John Wiley & Sons Inc
- 2 John C Hull, Options, Futures, and Other Derivatives, Prentice-Hall of Indian Private Limited
- 3 Sheldon M Ross, An Introduction to Mathematical Finance, Cambridge University Press
- 4 Mark S Dorfman, Introduction to Risk Management and Insurance, Prentice Hall, Englwood Cliffs, New Jersey
- 5 C D Daykin, T Pentikainen and M Pesonen, Practical Risk Theoryfor Actuaries, Chapman & Hall

PAPER - III - OPTIONAL)

Theory component will have maximum marks 30 Practical component will have maximum marks 20

UNIT-I Programmer's model of a computer Algorithms Flow Charts Data Types Arithmetic and input/output instructions Decisions control structures Decision statements Logical and Conditional operators Loop Case control structures Functions Recursions Preprocessors Arrays Puppetting of strings Structures Pointers File formatting

Numerical Analysis

- UNIT-II Solution of Equations Bisection, Secant, Regula Falsi, Newton's Method, Roots of Polynomials Interpolation Lagrange and Hermite Interpolation, Divided Differences, Difference Schemes, Interpolation Formulasusing Differences Numerical Differentiation Numerical Quadrature Newton-Cote's Formulas Gauss Quadrature Formulas, Chebychev's Formulas
- UNIT-III Linear Equations Direct Methods for Solving Systems of Linear Equations Guass Elimination, IU Decomposition, Cholesky Decomposition, Iterative Methods Jacobi, GaussSeidel, Relaxation Methods;

 The Algebraic Eigenvalue problem Jacobi s Method, Givens Method, Householder s

The Algebraic Eigenvalue problem Jacobi s Method, Givens Method, Householder s Method, Power Method, QR Method, Lanezos Method

UNIT-IV Ordinary Differential Equations Euler Method, Single-step Methods, Runge-Kutta s Method, Multi-step Methods, Milne-Simpson Method, Methods Based on Numerical

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Integration, Methods Based on Numerical Differentiation, Boundary Value Problems, Eigenvalue Problems

Approximation Different Types of Approximation, Least Square Polynomial Approximation, Polynomial Approximation using Orthogonal Polynomials, Approximation with Trigonometric Functions, Exponential Functions, Chebychev Polynomials, Rational Functions

Random variate generation, inverse tranform method, composition method, acceptancerejection method, generation of exponential, normal variates, binomial and Poisson variates

Monte Carlo integration, hit or miss Monte Carlo integration, Monte Carlo integration for improper integrals, error analysis for Monte Carlo intergration

REFERENCES

- 1 Henry Mullish& Herbert L Cooper, Spirit of C An Introduction to Modern Programming, Jaico Publishers, Bombay
- 2 B W Kernighan and D M Ritchie The C Programming Language 2'd Edition, ANSI features, Prentice Hall, 1989
- 3 Peter A Darmel and Philip E Margolis, C A Software Engineering Approach, Narcsa Publishing House, 1993
- 4 Robert C Hutehisonand Steven B Just, Programming using C Language, McGraw Hill, 1988
- 5 Les Hancock and Morris Krieger, The C Primer, McGraw Hill, 1988
- 6 V Rajaraman, Programming in C, Prentice Hall of India, 1994
- 7 Byron S Gottfried, Theory and Problems of Programming with C, tata McGraw-Hill Publishing Co Ltd., 1998
- 8 C.E. Froberg, Introduction to Numerical Analysis, Second Edition, Addison-Wesley, 1979
- 9 James B Scarborough, Numerical Mathematical Anasysis, Oxford and IBHPublishing Co Pvt Ltd 1966
- 10 Melvin J Marcn, Numerical Analysis A Practical Approach, Macmillan publishing Co , Inc New York, 1982
- 11 M.K. Jain, S.R.K. lyengar, R.K. Jain, Numerical Methods Problems and Solutions, New Age International P, Ltd., 1996
- 12 M.K. Jain, S.R.K. lyengar, R.K. Jain, Numerical Methods for Scientific and Engineering Computation, New Age International P, Ltd., 1999
- 13 R Y Rubistein, Simulation and the Monte Carlo Methods, John Wiley, 1981
- 14 D J Yakowitz Computational Probability and Simulation, Addison-Wesley, 1977

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IV. PRACTICAL

PROGRAMMING IN C AND NUMERICAL ANALYSIS

LIST OF PRACTICAL TO BE CONDUCTED

- 1 Write a program in C to find out the largest number of three integer numbers
- Write a program in C to accept monthly salary from the user, find and display income tax with the help of following rules

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