



IES UNIVERSITY, BHOPAL

IES Campus Kalkheda, Ratibad Main Road, Bhopal (M.P.) – 462044

New Scheme of Examination (NEP Based w.e.f 2024)

Bachelor of Science (B. Sc) Chemistry, Botany and Zoology (I Semester) for the Batch Admitted 2024

S No	Course Code	Course Name	Course Category	Teaching Hours per Week (L+T+P)	CIE	EE	Total Marks	Credit
1	BOT 125MJ	Basic Botany	MAJOR	4+0+0	40	60	100	4
	ZOL 123MJ	Vertebrates						
	CHM 124MJ	Fundamentals of Chemistry						
	BOT 125MN	Applied Botany						
2	ZOL 123MN	Cell biology, Reproductive biology and Developmental Biology	MINOR	4+0+0	40	60	100	6
	CHM 124MN	Analytical Chemistry			40	60	100	4
	HIN 121AEC	Hindi Language-I			40	60	100	2
4	ENG 122AEC	English Language-I	AEC	2+0+0	40	60	100	2
5	BOT 125MJ [P]	Basic Botany Lab	MAJOR LAB	0+0+4	20	30	50	2
	ZOL 123MJ [P]	Vertebrates Lab						
	CHM 124MJ[P]	Fundamentals of Chemistry Lab						
	BOT 122MN[P]	Applied Botany						
6	CHM 122MN[P]	Analytical Chemistry	MINOR LAB	0+0+4	20	30	50	2
7	BOT 125GEC	Fundamental Botany	GEC	4+0+0	40	60	100	4
	ZOL 123GEC	Cell biology and Reproductive biology						
	CHM 124GEC	Chemistry in Every Day Life						
	EVS 126GEC	Environmental Studies						
Total					240	360	600	20

2024



IES UNIVERSITY, BHOPAL

New Scheme of Examination (NEP Based w.e.f 2024)

Bachelor of Science (B. Sc) Chemistry , Botany and Zoology (II Semester) for the batch admitted 2024

S No	Course Code	Course Name	Course Category	Teaching Hours per Week (L+T+P)	CIE	EE	Total Marks	Credit
1	BOT 225MJ	Applied Botany	MAJOR	4+0+0	40	60	100	4
	ZOL 223MJ	Cell Biology, Reproductive Biology & Developmental Biology						
	CHM 224MJ	Qualitative and Quantitative Chemical Analysis						
2	BOT 225MN	Basic Botany	MINOR	4+0+0	40	60	100	4
	ZOL 223MN	Invertebrate						
	CHM 224MN	Basics of Organic Chemistry						
3	END 223AEC	Personality Development	AEC	3+0+2	40	60	100	4
4	BOT 225MJ [P]	Applied Botany Lab	MAJOR LAB	0+0+4	20	30	50	2
	CHM 224MJ[P]	Qualitative and Quantitative Chemical Analysis Lab						
	ZOL 223MJ[P]	Cell Biology, Reproductive Biology & Developmental Biology Lab						
5	ZOL 223MN [P]	Invertebrate Lab	MINOR LAB	0+0+4	20	30	50	2
	CHM 224MN [P]	Basics of Organic Chemistry lab						
6	HUM 222GEC	Universal Human Values & Ethics	GEC	4+0+0	40	60	100	4
	BOT 225GEC	Functional Botany						
	CHM 224GEC	Herbal Cosmetics						
	ZOL 223GEC	Development Biology & Reproductive Techniques						
Total					200	300	500	20






IES UNIVERSITY, BHOPAL

IES Campus Kalkheda, Ratibad Main Road, Bhopal (M.P.) – 462044

New Scheme of Examination (NEP Based w.e.f 2024)

Bachelor of Science (B. Sc) Chemistry , Botany and Zoology (III Semester) for the batch admitted 2024

S No	Course Code	Course Name	Course Category	Teaching Hours per Week (L+T +P)	CIE	EE	Total Marks	Credit
1	BOT 325MJ	Plant Anatomy & Embryology	MAJOR	4+0+0	40	60	100	4
	ZOL 323MJ	Diversity of Vertebrate and Comparative Anatomy						
	CHM 324MJ	Physical Chemistry -1						
2	BOT 325MN	Industrial Botany	MINOR	6+0+0	40	60	100	6
	ZOL 323MN	Physiology & Biochemistry						
	CHM 324MN	Basic Inorganic Chemistry						
3	BOT 325SEC	Nursery Management	SEC	3+0+2	40	60	100	4
	BCS 323SEC	Fundamental of Computers						
4	BOT 325MJ [P]	Plant Anatomy & Embryology Lab	MAJOR LAB	0+0+4	20	30	50	2
	ZOL 323MJ [P]	Diversity of Vertebrate and Comparative Anatomy Lab						
5	CHM 324MJ [P]	Physical Chemistry -1 Lab	MINOR LAB	0+0+4	20	30	50	2
	ZOL 323MN [P]	Physiology & Biochemistry Lab						
6	CHM 324MN [P]	Basic Inorganic Chemistry Lab	GEC	4+0+0	40	60	100	4
	BOT 325GEC	Economic Botany						
	ZOL 323GEC	Biomolecules & Metabolism						
	CHM 324GEC	Chemistry for Farmers						
Total					200	300	500	20





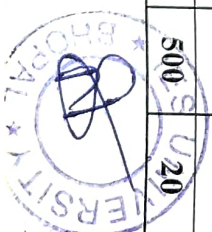
IES UNIVERSITY, BHOPAL

IES Campus Kalkheda, Ratibad Main Road, Bhopal (M.P.) – 462044

New Scheme of Examination (NEP Based w.e.f 2024)

Bachelor of Science (B. Sc) Chemistry , Botany and Zoology (IV Semester) for the batch admitted 2024

S No	Course Code	Course Name	Course Category	Teaching Hours per Week (L+T +P)	CIE	EE	Total Marks	Credit
1	BOT 425MJ	Industrial Botany	MAJOR	4+0+0	40	60	100	4
	ZOL 423MJ	Physiology & Bio-chemistry		4+0+0	40	60	100	4
	CHM 424MJ	Organic Qualitative Analysis, Reaction and Synthesis		6+0+0	40	60	100	6
	BOT 425MN	Plant Anatomy & Embryology		4+0+0	40	60	100	4
2	ZOL 423MN	Diversity of Vertebrates and Comparative Anatomy	MINOR	4+0+0	40	60	100	4
	CHM 424MN	Inorganic Chemistry -II						
3	ZOL 423GEC	Animal Physiology	GEC	3+0+2	40	60	100	4
	BOT 425GEC	Principles of Organic Farming						
	BCS 423GEC	Office Automation Package & Tools						
4	BOT 425MJ[P]	Industrial Botany Lab	MAJOR LAB	0+0+4	20	30	50	2
	ZOL 423MJ[P]	Physiology & Bio-chemistry Lab						
	CHM 424[MJ]	Organic Qualitative Analysis, Reaction and Synthesis Lab						
5	ZOL 423MN[P]	Diversity of Vertebrates and Comparative Anatomy Lab	MINOR LAB	0+0+4	20	30	50	2
	CHM 424MN[P]	Inorganic Chemistry -II Lab						
6	BSC 423SEC	NCC/NSS/Cultural	SEC	2+0+2	40	60	100	4
Total					200	300	500	20





IES UNIVERSITY, BHOPAL

IES Campus Kalkheda, Ratibad Main Road, Bhopal (M.P.) – 462044

New Scheme of Examination (NEP Based w.e.f 2024)

Bachelor of Science (B. Sc) Chemistry, Botany and Zoology (V Semester) for the batch admitted 2024

Course Code		Course Name	Course Category	Teaching Hours per Week (L+T +P)	CIE	EE	Total Marks	Credit
	BOT 525MJ	Plant Physiology & Metabolism	MAJOR	6+0+0	40	60	100	6
1	ZOL 523MJ	Aquaculture		4+0+0	40	60	100	4
	CHM 524MJ	Bio Physical, Bio inorganic and Organometallic Chemistry						
2	BOT 525.1	Department Specific Elective -I	DSE	3+1+0	40	60	100	4
	ZOL 523.1	Department Specific Elective -I						
	CHM 524.1	Department Specific Elective -I						
3	ZOL 523MJ [P]	Aquaculture Lab	MAJOR LAB	0+0+4	20	30	50	2
	CHM 524MJ[P]	Bio Physical, Bio inorganic and Organometallic Chemistry Lab						
4	BCS 527SEC	Data Analysis Visualization through Spreadsheet	SEC	3+0+2	40	60	100	4
	BOT 525SEC	Environmental Botany						
	ZOL 523SEC	Fish & Fisheries						
5	BSC 523	Minor Project	PROJECT	0+0+8	40	60	100	4
Total					180	270	450	18
DSE -I (BOTANY)		Ethnobotany BOT 525.1A	Plant Ecology BOT 525.1B					
DSE -I (Zoology)		Wild Life Conservation & Management ZOL 523.1.A	Nuclear & Particle Physics ZOL 523.1B					
DSE -I (Chemistry)		Green and Agriculture Chemistry CHM 524.1 A	Instrumental Techniques in Chemistry CHM 524.1B					



IES UNIVERSITY, BHOPAL

IES Campus Kalkheda, Ratibad Main Road, Bhopal (M.P.) – 462044

New Scheme of Examination (NEP Based w.e.f 2022)

Bachelor of Science (B. Sc) Chemistry , Botany and Zoology (VI Semester) for the batch admitted 2024

S No	Course Code	Course Name	Course Category	Teaching Hours per Week (L+T+P)	CIE	EE	Total Marks	Credit
1	BOT 625MJ	Cytology, Genetics & Biotechnology	MAJOR	4+0+0	40	60	100	4
	ZOL 623MJ	Insect Taxonomy & Applied Entomology						
	CHM 624MJ	Pharmaceutical Chemistry						
2	BOT 625.2	Discipline Specific Elective II	DSE	3+1+0	40	60	100	4
	ZOL 623.2	Discipline Specific Elective II						
	CHM 624.2	Discipline Specific Elective II						
	BOT 625.3	Discipline Specific Elective III	DSE	3+1+0	40	60	100	4
	ZOL 623.3	Discipline Specific Elective III						
	CHM 624.3	Discipline Specific Elective III						
3	BOT 625MJ[P]	Cytology, Genetics & Biotechnology Lab	MAJOR LAB	0+0+4	20	30	50	2
	ZOL 623MJ [P]	Insect Taxonomy & Applied Entomology Lab						
	CHM 624MJ [P]	Pharmaceutical Chemistry						
5	BSC 623	Dissertation/Internship	PROJECT	0+0+8	40	60	100	4
Total					180	270	450	18

Department Specific Elective -II [BOT 625.2]

1. Biodiversity BOT 625.2A

2. Forestry BOT 625.2 B

Department Specific Elective -III [BOT 625.3]

1. Plant as Economic Resources BOT 625.3A

2. Plant Breeding BOT 625.3B

Department Specific Elective -II [ZOL 623.2]

1. Ecology, Biodiversity & Evolution ZOL 623.2A

Department Specific Elective -III [ZOL 623.3]

1. Genetics ZOL 623.3 A

Department Specific Elective -II [CHM 624.2]

1. Industrial Chemistry CHM 624.2 A

Department Specific Elective -II [CHM 624.3]

1. Chemistry in human Welfare CHM 624.3B

