

**GOVT. HOLKAR (MODEL AUTONOMOUS)
SCIENCE COLLEGE, INDORE**



(An ISO 9001:2015 & ISO 14001:2015 Certified Institution)



SSR DOCUMENT

2017-18 TO 2021-22

CRITERION -1

Curricular Aspects

Metric No.:1.3.3

Document Title:

Program and course contents having element of field projects / research projects / internships as approved by BOS

Govt. Holkar (Model Autonomous) Science College, Indore

Department of Biochemistry

Programme Name: **B.Sc. (Biochemistry Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill	Ability	Field Project / Internship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III	Enhancement	Enhancement	Apprenticeship /		
		Major		Minor	Generic Elective	Vocational Course	Course (AEC)	# Inter / Intra Faculty		
Level	Semester	Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	

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Department of Bioinformatics

Programme Name: B.Sc. (Bioinformatics Major)

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill Enhancement	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III			# Inter / Intra Faculty		
		Level	Semester	Major		Minor	Generic Elective			
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
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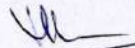
Govt. Holkar (Model Autonomous) Science College, Indore

Department of Biotechnology

Programme Name: **B.Sc. (Biotechnology Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill	Ability	Field Project / Internship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III	Enhancement	Enhancement	Apprenticeship /		
Level	Semester	Major		Minor	Generic Elective	Vocational Course	Course (AEC)	# Inter / Intra Faculty		
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
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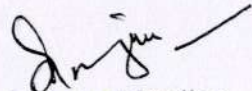
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Department of Botany

Programme Name: **B.Sc. (Botany Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III	Enhancement		# Inter / Intra Faculty		
Level	Semester	Major		Minor	Generic Elective	Vocational Course				
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
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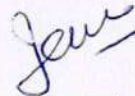
Department of Chemistry

Programme Name: **B.Sc. (Chemistry Major)**

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Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill Enhancement	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III					
Level	Semester	Major		Minor	Generic Elective	Vocational Course		# Inter / Intra Faculty		
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
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Department of Computer Science

Programme Name: **B.Sc. (Computer Science Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill	Ability	Field Project / Internship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III	Enhancement	Enhancement	Apprenticeship /		
Level	Semester	Major		Minor	Generic Elective	Vocational Course	Course (AEC)	# Inter / Intra Faculty		
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	

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Department of Economics

Programme Name: **B.Sc. (Economics Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

Level	Semester	Main Faculty		(As per	Any Faculty	Skill Enhancement	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship / # Inter / Intra Faculty	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III					
		Major		Minor	Generic Elective	Vocational Course				
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Certificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	

Damini Bhasu

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Department of Electronics

Programme Name: **B.Sc. (Electronics Major)**

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Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

Level	Semester	Main Faculty		(As per	Any Faculty	Skill Enhancement	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship / # Inter / Intra Faculty	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III					
		Major		Minor	Generic Elective	Vocational Course				
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Certificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	

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Department of Industrial Fish Ans Fishries

Programme Name: **B.Sc. (Industrial Fish Ans Fishries Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

Level		Main Faculty		(As per	Any Faculty	Skill	Ability	Field Project / Internship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III	Enhancement	Enhancement	Apprenticeship /		
		Major		Minor	Generic Elective	Vocational Course	Course (AEC)	# Inter / Intra Faculty		
Core	DSE									
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
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Department of Forensic Science

Programme Name: **B.Sc. (Forensic Science Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill	Ability	Field Project / Internship /	Credits	Qualification Title (Credit Requirement)
Level	Semester	Subject I		Subject II	Subject III	Enhancement	Enhancement	Apprenticeship /		
		Major		Minor	Generic Elective	Vocational Course	Course (AEC)	# Inter / Intra Faculty		
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
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Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
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Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
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Department of Geography

Programme Name: **B.Sc. (Geography Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill	Ability	Field Project / Internship /	Credits	Qualification Title
		Subject I		Subject II	Subject III	Enhancement		Apprenticeship /		
Level	Semester	Major		Minor	Generic Elective	Vocational Course	Enhancement Course (AEC)	# Inter / Intra Faculty		(Credit Requirement)
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	

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Govt. Holkar (Model Autonomous) Science College, Indore

Department of Geology

Programme Name: **B.Sc. (Geology Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III	Enhancement		Apprenticeship /		
Level	Semester	Major		Minor	Generic Elective	Vocational Course		# Inter / Intra Faculty		
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	

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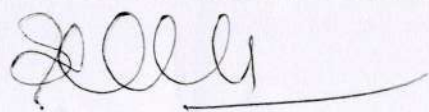
Govt. Holkar (Model Autonomous) Science College, Indore

Department of Horticulture

Programme Name: **B.Sc. (Horticulture Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

Level	Semester	Main Faculty		(As per	Any Faculty	Skill Enhancement	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship / # Inter / Intra Faculty	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III					
		Major		Minor	Generic Elective	Vocational Course				
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Certificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	


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Govt. Holkar (Model Autonomous) Science College, Indore

Department of Microbiology

Programme Name: **B.Sc. (Microbiology Major)**

Approved

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill Enhancement	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III			# Inter / Intra Faculty		
Level	Semester	Major		Minor	Generic Elective	Vocational Course				
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	

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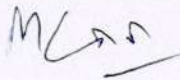
Department of Pharmaceutical Chemistry

Programme Name: **B.Sc. (Pharmaceutical Chemistry Major)**

Approved

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill Enhancement	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III					
Level	Semester	Major		Minor	Generic Elective	Vocational Course		# Inter / Intra Faculty		
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	


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Govt. Holkar (Model Autonomous) Science College, Indore

Department of Physics

Programme Name: **B.Sc. (Physics Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty (As per prerequisite)		Any Faculty	Skill	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship /	Credits	Qualification Title (Credit Requirement)
Level	Semester	Subject I		Subject II	Subject III		Enhancement		
		Major		Minor	Generic Elective		Vocational Course		
		Core	DSE						
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)	6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)	6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)		6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)		6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)	1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)			1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)			1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits


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Govt. Holkar (Model Autonomous) Science College, Indore

Department of Seed Technology

Programme Name: **B.Sc. (Seed Technology Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

Level		Main Faculty (As per prerequisite)		Any Faculty		Skill Enhancement Course (SEC)	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship / Community engagement and service	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III					
		Major		Minor	Generic Elective			Vocational Course		
Core	DSE									
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	

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Govt. Holkar (Model Autonomous) Science College, Indore

Department of Statistics

Programme Name: **B.Sc. (Statistics Major)**

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill Enhancement	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III			# Inter / Intra Faculty		
		Level	Semester	Major		Minor	Generic Elective			
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	

Vandti Bheja
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Govt. Holkar (Model Autonomous) Science College, Indore

Department of Zoology

Programme Name: **B.Sc. (Zoology Major)**

Approved

Structure for Undergraduate Programme (Ordinance 14(A) NEP 2020): UGC CBCS System for Govt. Holkar (Model Autonomous) Science College, Indore

		Main Faculty		(As per	Any Faculty	Skill Enhancement	Ability Enhancement Course (AEC)	Field Project / Internship / Apprenticeship /	Credits	Qualification Title (Credit Requirement)
		Subject I		Subject II	Subject III					
Level	Semester	Major		Minor	Generic Elective	Vocational Course		# Inter / Intra Faculty		
		Core	DSE							
Level 5	1	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	(40) Undergraduate Cetrificate in Main Faculty
	2	1 (6 Credits)		1 (6Credits)	1 (4 Credits)		1 (4 Credits)		6+6+4+4=20	
Level 6	3	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	(80) Undergraduate Diploma in Main Faculty
	4	1 (6 Credits)		1 (6Credits)	1 (4 Credits)	1 (4 Credits)			6+6+4+4=20	
Level 7	5	1 (6 Credits)	1 (4 Credits)			1 (4 Credits)		1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(120) Bachelor Degree in Main Faculty
	6	1 (6 Credits)	2 (4 Credits) + (4 Credits)					1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	
Level 8	7	1 (6 Credits)	1 (4 Credits)	1 Research Methodology (4 Credits)				1 Field Project / Internship / Apprenticeship (6 Credits)	6+4+4+6=20	(160) Bachelor Degree (Honours) in Main Faculty Bachelor Degree (Research) in Main Faculty
	8	1 (6 Credits)		1 (4 Credits)				1 Field Project / Internship / Apprenticeship (10 Credits)	6+4+10=20	
Total		48 Credits	16 Credits	32 Credits	16 Credits	12 Credits	08 Credits	28 Credits	160 Credits	

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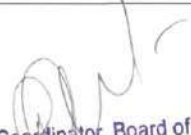
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Department of Biochemistry

Syllabus Session 2020-2021

Approved

Programme: B.Sc.							Class: III Year		
Paper No.	Title	Paper code	Theory					Practical	
			External	Min	CCE	Min	Total Min	Max	Min
I	Molecular Biology	301-I	40	28	10	5	33	50	17
II	Nutritional, clinical and Environmental Biochemistry	301-II	40		10				
-	INTERNSHIP	-	External (50 M= 100arks) + Internal(50Marks)						


Coordinator, Board of Studies
Govt. Holkar (Model Autonomous)
Science College, Indore


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Govt. Holkar (Model Autonomous)
Science College, Indore

BCA PART VI Semester Academic Year: 2021-2022
Course of studies for the BCA – VI Semester

BCA – VI Semester Course

SCHEME OF MARKS

Course	Theory Max. Marks		Practical Max. Marks	Max. Marks	Min. Marks
	Internal	External			
BCA – 601 Operations Research	15	85	--	100	5 + 28
BCA -602 Internet and Web Technology using PHP	15	85	--	100	5 + 28
BCA -603 Computer Graphics and Multimedia	15	85	--	100	5 + 28
BCA -604 Principal and Practices of Management	15	85	--	100	5 + 28
BCA -605 Project	40	60		100	33
BCA -606 Computer Graphics and Multimedia LAB	--	--	50	50	17
BCA -607 Practical on Internet and Web Technology using PHP	--	---	50	50	17
Total Marks	100	400	100	600	--

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Department of Computer Science
Govt. Holkar Science College,
INDORE (M.P.)

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Govt. Holkar (Model. Autonomous) Science College, Indore

Department of Biochemistry

Syllabus Session 2021-22

Programme: M.Sc.

Class: IV semester

S. No.	Paper	Course Title	Course Code	Credits	CCE (Max)	CCE (Min)	External Assessment (Max.)	External Assessment (Min.)	Total (Max)	Total (Min.)
1	Core 11	Molecular Biology	BC-41	4	25	9	75	26	100	35
2	Core 12	Metabolism II	BC-42	4	25	9	75	26	100	35
3	Core 13	Applied Clinical Biochemistry	BC-43	4	25	9	75	26	100	35
4	Elective 3/1	Immunology	BC-44-A	4	25	9	75	26	100	35
5	Elective 3/2	Environmental Biochemistry	BC-44-B							
6	Practical 7	Based on Theory paper 11 & 12	PR-BC-41	3			75	26	75	26
7	Practical 8	Based on Theory paper 3/1 & 3/2 (elective)	PR-BC-42	3			75	26	75	26
8	Internship			4	50		50		100	
Total				26	150		500		650	

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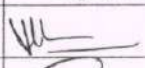
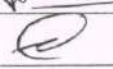
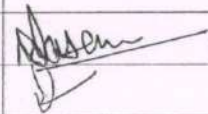
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GOVT. HOLKAR (MODEL. AUTONOMOUS) SCIENCE COLLEGE, INDORE
DEPARTMENT OF BIOTECHNOLOGY
Syllabus Session: 2021-22

Programme: **MSc. (Biotechnology)**

Class: **M.Sc. IV Sem**

S. No	Paper	Course Title	Course Code	Credits	CCE (Max)	CCE (Min)	External Assessments Max	External Assessments Min	Total Max	Total Min
1	Core 11	Paper XIV Bioprocess Technology	BT-41	4	25	9	75	26	100	35
2	Core 12	Paper -XV Animal Biotechnology	BT-42	4	25	9	75	26	100	35
3	Elective 3/1	Paper XVI A) Cancer Genetics	BT-43	4	25	9	75	26	100	35
	Elective 3/2	B) Bio nanotechnology								
4	Elective 4/1	Paper XVII A) Genomics, Proteomics, IPR & Biosafety	BT-44	4	25	9	75	26	100	35
	Elective 4/2	B) Engineering Principles/Project								
5	Practical -7	Practical based on Theory Paper -XIV & XV	PRBT-41	3	-	-	75	-	75	26
6	Practical-8	Practical based on Elective Theory Paper VI & XVII	PRBT-42	3	-	-	75	-	75	26
7	Internship			4	-	-	-	-	-	-
				26	125		525		650	

Experts Members (Name & Signature)			
S.No.	Name	Designation	Signature
1	Dr. Kiran Billore	Chairman	
2	Dr. A. Nighojkar	VC Member	
3	Dr. Bhavesh Patel	Subject Expert	
4	Dr. R K Garg	Subject Expert	
5	Mr. Nitesh Jasani	Representative from Industry	
6	Dr. Rekha Sharma	Member	
7	Mrs. Farida Johar	Alumni	

Govt. Holkar (Model Autonomous) Science College, Indore										
Name of Department Botany										
Syllabus Session 2021-22										
Programme :M.Sc. Botany					Class :M.Sc. IV Sem.					
Sn.No	Paper	Course Title	Course Code	Credits	CCE	CCE	External	External	total	Total
					(Max)	(Minimum)	Assessment	Assessment	Max	Mini
							Max.	mini		
1	Core 1	Plant Cell, Tissue & Organ Culture	BO41	4	25	9	75	26	100	35
2	Core 2	Biotechnology & Genetic Engineering	BO42	4	25	9	75	26	100	35
3	Core 3	Paper III-A Elective 3: Plant Pathology	BO43-I	4	25	9	75	26	100	35
		Paper III-B Elective 3: Plants & Society	BO43-II							
4	Core 4	Paper IV-A Elective 4: Industrial Microbiology	BO44-I	4	25	9	75	26	100	35
		Paper IV-B Elective 4: Pollution Ecology	BO44-II							
		* Project / Applied Botany							100	35
5	Practical 1	Practical based on Theory paper 1 & 2)		3			75		75	26
6	Practical 2	Practical based on Theory paper 3 & 4		3			75		75	26
7	Internship						50	50	100	9
				24	100		500		600	










Govt. Holkar (Model, Autonomous) Science College, Indore (M.P.)

Department of Chemistry

M.Sc. IV semester

Syllabus Session 2021-2022

S.No	Paper	Course Title	Course Code	Credits	CCE (max)	CCE (min)	External Assessment Max	External Assessment Min	Total Max	Total Min
01	Core 12	Application of Spectroscopy-II	CH-41	4	25	9	75	26	100	35
02	Core 13	Solid State	CH-42	4	25	9	75	26	100	35
03	Core 14	Biochemistry	CH-43	4	25	9	75	26	100	35
04	Elective-I	Applied Analytical Chemistry	CH-44-A	4	25	9	75	26	100	35
	Elective-II	Medicinal Chemistry	CH-34-B							
	Elective-III	Organic Synthesis	CH-34-C							
	Elective-IV	Electrochemistry	CH-44-D							
	Elective-V	Chem-informatics	CH-44-E							
05	Practical-10	Inorganic Chemistry		2			50		50	17
06	Practical 11	Organic Chemistry		2			50		50	17
07	Practical 12	Physical Chemistry		2			50		50	17
08	Internship			4						
				26	125		525		650	

See 3m a/c

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DEPARTMENT OF COMPUTER SCIENCE

M.Sc. Computer Science

Academic Year 2021-2022

Govt. Holkar (Model Autonomous) Science College, Indore

Computer Science Department

Syllabus Session 2021-22

Programme: **M.Sc. Computer Science**

Class :M.Sc. IV Sem.

No	Paper	Course Title	Course Code	Credits	CCE (Max)	CCE (Min.)	External Assessment Max.	External Assessment Min.	Total Max.	Total Min.
1	Core 11	System Analysis And Design	CS41	4	25	9	75	26	100	35
2	Core 12	Design and Analysis of Algorithms	CS42	4	25	9	75	26	100	35
	Elective 3/1	Internets and Web Technology	CS43 – A	4	25	9	75	26	100	35
	Elective 3/2	Computer Graphics & Multimedia	CS43 – B							
4	Elective 4/1	Compiler Design	CS44- A	4	25	9	75	26	100	35
	Elective 4/2	Python for Data Science	CS 44- B							
5	Practical 7	Practical based on Theory paper 11 & 12		3			75			26
5	Practical 8	Practical based on Theory Paper 3 & 4 (Elective)		3			75			26
6	Internship			4						
				26	100		500		600	

26
HEAD
Department of Computer Science
Govt. Holkar Science College
INDORE (M.P.)

M.Sc. (CS). Department of Computer Science, GHSC, Indore

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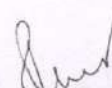
GOVT. HOLKAR (MODEL AUTONOMOUS) SCIENCE COLLEGE, INDORE
DEPARTMENT OF INDUSTRIAL FISH AND FISHERIES
Syllabus Session : 2021-22

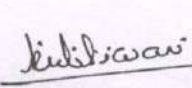
Programme: **M.Sc. (FISHERIES)**

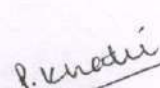
Class : M.Sc. IV Sem

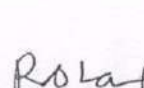
Code	Theory/Practical	Teaching Hours/Week	Credit	Examination Scheme		
				External	Internal	Total
Core -11	Paper -14: Fish Genetics And Biotechnology	4	4	75	25	100
Core -12	Paper -15 Fish Nutrition and Feed Technology	4	4	75	25	100
Elective - 3	Paper -16: (Elective -3) Fish Health Management	4	4	75	25	100
	Paper -16: (Elective -3) Fishery technology and Fish pathology	4	4	75	25	100
Elective - 4	Paper -17: (Elective -4) Nutritional Management in Aquaculture	4	4	75	25	100
	Paper -17: (Elective -4) Fisheries Economics and Extension	4	4	75	25	100
Practical- 7	Practical (Based on Theory Paper 14 & 15)	6	3	75	-	75
Practical- 8	Practical (Based on Theory Paper 15 & 16)	6	3	75	-	75
Internship		4	4	50	50	100
		32	26	-	-	650
	Total	100	100	-	-	2500


(Dr. Lata Bhattacharya)
Subject Expert


(Dr. Ruchira Choudhary)
Subject Expert


(Dr. Kirti Tiwari)
VC Member


(Dr. Pratima Khatri)
Industrial Member


(Dr. Rekha Sharma)
Chairman & Head

(Mr. Mohit Rathore)
Student representative

DEPARTMENT OF FORENSIC SCIENCE SESSION-2021-22

Govt. Holkar (Model, Autonomous) Science College, Indore (M.P.)										
Department of Forensic Science										
M.Sc. IV semester										
Syllabus Session 2021-2022										
S.no	Paper	Course Title	Course Code	Credits	CCE (max)	CCE (min)	External Assessment Max	External Assessment Min	Total Max	Total Min
01	Core 11	Forensic Physics	FS-41	4	25	9	75	26	100	35
02	Core 12	Applied Forensic Science and Scientific Investigation of crime	FS-42	4	25	9	75	26	100	35
03	Elective-I	Emerging trends in forensic science	FS-43-A	4	25		75	26	100	35
	Elective-II	Forensic Psychology	FS-43-B							
	Elective-III	Biometrics	FS-44-A							
04	Elective-IV	Computer and Cyber Forensic OR Project	FS-44-B	4	25		75	26	100	35
05	Practical-09	Based on Theory Paper 11 & 12	PRFS-41	3			75		75	26
06	Practical-10	Based on Theory Elective Paper	PRFS-42	3			75		75	26
08	Internship			4					100	
				26					650	

Govt. Holkar (Model Autonomous) Science College, Indore

Name of Department

Syllabus Session 2021-22

Programme : **M.Sc.(Subject). Geology**

Class : **M.Sc IV Sem**

Sn.No	Paper	Course Title	Course Code	Credits	CCE (Max)	CCE (Minimum)	External Assessment Max.	External Assessment mini	total Max	Total Mini
1	core 11	✓ Ore Geology	G-41	4	25	9	75	26	100	35
2	core 12	✓ Applied Geology	G-42	4	25	9	75	26	100	35
3	elective 3/1	✓ Environmental Geology (Elective - 3)	G-43A	4	25	9	75	26	100	35
	elective 3/2	Mineral Processing and Technology (Elective - 3)	G-43B							
4	elective 4/1	✓ Fuel Geology (Elective - 4)	G-44A	4	25	9	75	26	100	35
	elective 4/2	Project in House (Elective - 4)	G-44B							
6	Practical-7	Field work and practical of Applied and Ore Geology ✓		3			75		75	26
7	Practical-8	Environmental Geology/Mineral Processing Technology/Fuel Geology ✓		3			75		75	26
8	internship			4						
				26	125		525		650	

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Govt. Holkar (Model, Autonomous) Science College, Indore										
Department of Microbiology										
Syllabus Session 2021-2022										
Class: M.Sc. IV Sem.										
Programme : M.Sc. Microbiology										
S.N.	Paper	Course Title	Course Code	Credits	CCE (Max)	CCE (Min.)	External assessment Max.	External assessment Min.	Total Max	Total Mini.
1	Core 11	Food and Dairy Microbiology	MB-41	4	25	9	75	26	100	35
2	Core 12	Environmental Microbiology	MB-42	4	25	9	75	26	100	35
3	Elective 3/1	Pharmaceutical Microbiology	MB-43 A	4	25	9	75	26	100	35
	Elective 3/2	Biosafety and IPR Issues	MB-43 B							
4	Elective 4/1	Bio-Nanotechnology	MB-44 A	4	25	9	75	26	100	35
	Elective 4/2	Cell Biology	MB-44 B							
5	Practical -7	Lab. Course-7	PRMB-41	3	-----	-----	75	-----	75	26
6	Practical -8	Lab. Course-8	PRMB-42	3	-----	-----	75	-----	75	26
				4	25	09	75	26	100	35
7	Internship	Pathology Laboratories, Pharmaceutical industry, Hospitals, Sanchi dugdh Sahkari Maryadit Sangh, Indore, National research center for soyabean (NRCS), Schools & Coaching Institutes, Biofertilizer Industry								
			Total	26	125		525	-----	650	-----

Govt. Holkar (Model Autonomous) Science College, Indore
 Name of Department - Pharmaceutical Chemistry
 Syllabus Session 2021 -22
 Programme : **M.Sc. (Subject) Pharmaceutical Chemistry**
 Class : M.Sc. IV Sem.

Sr. No	Paper	Course Title	Course Code	Credits	CCE (Max)	CCE (Minimum)	External Assessment Max.	External Assessment mini	Total Max	Total Mini
1	Core 11	Advanced Medicinal Chemistry	PC-41	4	25	9	75	26	100	35
2	Core 12	Modern Analytical Techniques	PC-42	4	25	9	75	26	100	35
3	Elective 3/1	Drug Design	PC-43-A	4	25	9	75	26	100	35
	Elective 3/2	Pharmacology	PC-43-B							
4	Elective 4/1	Biopharmaceutics And Pharmacokinetics	PC-44-A	4	25	9	75	26	100	35
	Elective 4/2	Applied Pharmaceutics - II	PC-44-B							
5	Practical - 7	---	PRPC-41	3	---	---	75	---	75	26
6	Practical - 8	---	PRPC-42	3	---	---	75	---	75	26
7	Internship	---	---	4	25	9	75	26	100	35
	---	---	---	26	125	---	525	---	650	---

Sum *ms*

Prishu

Vishal
(V.R. Chourey)
 29.10.21

Prishu
 29/10/21

Prishu
 29/10/2021
 CD: Rakesh Shilpa

GOVERNMENT HOLKAR (MODEL-AUTONOMOUS) SCIENCE COLLEGE, INDORE (M.P.)

DEPARTMENT OF PHYSICS

SYLLABUS 2021-22

Scheme

Class :M.Sc IV Semester

Programme :M.Sc. PHYSICS

S. No	Paper	Course Title	Course Code	Credits	CCE (Max)	CCE (Minimum)	External Assessment Max.	External Assessment mini	total Max	Total Mini
1	Core 13	Condensed Matter Physics-II	PH 41	4	25	9	75	26	100	35
2	Core 14	Laser Physics	PH 42	4	25	9	75	26	100	35
3	Elective 1	Computer Programming and Informatics	PH 43 A	4	25	9	75	26	100	35
	Elective 2	Computational Methods and Programming	PH 43B							
4	Elective 3	Communication Electronics	PH 44 A	4	25	9	75	26	100	35
	Elective 4	Renewable Energy Resources	PH 44B							
6	Practical-7	General Physics	PH 45	3			75		75	26
7	Practical-8	Electronics Physics	PH 46A	3			75		75	26
		Renewable Energy Resources	PH 46 B							
8	Internship/Project		PH 47	4						
Total				26	125		525		650	

Note : Paper 3: Choice Elective 1 Or Elective 2

Paper 4: : Choice Elective 3 Or Elective 4, Practical 8 Choice : If Elective 3 PH44A then PH46A :Practical 8 Choice :If Elective 4 PH44 B then PH46 B

Govt. Holkar (Model, Autonomous) Science College, Indore

Name of Department Seed Technology

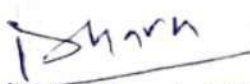
Syllabus Session 2022-2023

Approved

Programme : **M.Sc. seed Technology**

Class : **M.Sc. IV Sem.**

Sn.No	Paper	Course Title	Course Code	Credits	CCE	CCE	External	External	total	Total
					(Max)	(Minimum)	Assessment	Assessment	Max	Mini
							Max.	mini		
1	Core 1	Seed Marketing & Management	SE 41	4	25	9	75	26	100	35
2	Core 2	Statistic And Computer Application in Agriculture	SE 42	4	25	9	75	26	100	35
3	Core 3	Nursery management and plant propagation	SE 43	4	25	9	75	26	100	35
4	Core 4	Organic Farming and soil management	SE 44	4	25	9	75	26	100	35
5	Practical 1	Practical based on Theory paper 1 & 2)		3			75		75	26
6	Practical 2	Practical based on Theory paper 3 & 4		3			75		75	26
7	Internship						50	50	100	9
				24	100	36	500	154	650	


Coordinator, Board of Studies
Govt. Holkar (Model Autonomous)
Science College, Indore


Member Secretary, Academic Council
Govt. Holkar (Model Autonomous)
Science College, Indore

Govt. Holkar (Model Autonomous) Science College, Indore

Name of Department-Statistics

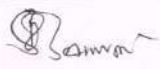
Syllabus Session: 2021-22

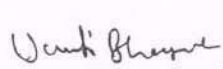
Programme: M.Sc.

Subject: Statistics

Class: M.Sc. IV Sem

Sr. No.	Paper	Course Title	Course Code	Credits	CCE (Max)	CCE (Minimum)	External Assessment Max.	External Assessment Mini.	Total Max.	Total Mini.
1	Core 11	Design of Experiments	S-41	4	25	9	75	26	100	35
2	Core 12	Statistical Quality Control	S-42	4	25	9	75	26	100	35
3	Elective 3/1	Advanced Operation Research	S-43-A	4	25	9	75	26	100	35
	Elective 3/2	Official Statistics	S-43-B							
4	Elective 4/1	Econometrics	S-44-A	4	25	9	75	26	100	35
	Elective 4/2	Stochastic Processes	S-44-B							
5	Practical - 7	Practical based on paper 13 & 14	PRS-41	4	25	9	75	---	100	35
6	Practical - 8	Practical based on paper 15 & 16	PRS-42	3	---	---	75	---	75	26
7	Internship	---	---	3	---	---	75	---	75	26
			---	26	125	---	525	---	650	---



Govt. Holkar (Model Autonomous) Science College, Indore

Name of Department - Zoology

Syllabus Session 2021-22

Programme : M.Sc. (Subject) Zoology

Class : M.Sc. IV Sem.

Sr. No	Paper	Course Title	Course Code	Credits	CCE (Max)	CCE (Minimum)	External Assessment Max.	External Assessment mini	Total Max	Total Mini
1	Core 11	ANIMAL BEHAVIOUR AND NEUROPHYSIOLOGY	ZO41	4	25	9	75	26	100	35
2	Core 12	Gamete Biology, Development and Differentiation	ZO42	4	25	9	75	26	100	35
3	Elective 3/1	Ichthyology (Fish Structure and Functions)	ZO43A	4	25	9	75	26	100	35
	Elective 3/2	Biology of Parasites	ZO43B							
4	Elective 4/1	Pisci Culture and Economic Importance of Fishes	ZO44A	4	25	9	75	26	100	35
	Elective 4/2	Cell Biology	ZO44B							
5	Practical - 7	Based on Theory Paper IVX & XV	PRZO41	3			75		75	26
6	Practical - 8	Based on Theory Paper XVI & XVII	PRZO42	3			75		75	26
7	Internship			4						
				26	125		525		650	

Miss. Manjita Rathore
Student representative

DEPARTMENT OF COMPUTER SCIENCE

PGDCA

Academic Year 2021-2022

Govt. Holkar (Model Autonomous) Science College, Indore

Computer Science Department

Syllabus Session 2021-22

Programme: **PCDCA**

Class :PGDCA II Sem.

S.No	Paper	Course Title	Course Code	Credits	CCE (Max)	CCE (Min.)	External Assessment Max.	External Assessment Min.	Total Max.	Total Min.
1	Core 6	Web Designing (HTML.XML. DHTML)	PGDCA-21	4	25	9	75	26	100	35
2	Core 7	Visual Basic	PGDCA-22	4	25	9	75	26	100	35
3	Core 8	RDBMS using Oracle	PGDCA-23	4	25	9	75	26	100	35
4	Core 9	Computer Networking	PGDCA-24	4	25	9	75	26	100	35
5	Core 10	Internet & E-Commerce	PGDCA-25	4	25	9	75	26	100	35
6	Project 2	Software Project Phase II		4			100			35
				24	125		475		600	

HEAD

Department of Computer Science
Govt. Holkar Science College
INDORE (M.P.)

M. Sc . (Mathematics) SEMESTER-III

Code	Theory /Practical	Teaching hours/ week	Examination scheme			
			Credit	Internal	External	Total
Core 11 / Paper 11	Functional Analysis-I	6	4	75	25	100
Core 12 / Paper 12	Advanced Special Functions-I	6	4	75	25	100
Elective 1 : Paper13	Advanced Fuzzy Mathematics-I	6	4	75	25	100
	Advanced Graph Theory-I					
Elective 2 : Paper 14	Operations Research-I	6	4	75	25	100
	Or					
	Theory of Linear Operators-I					
Elective 3 : Paper 15	Analytic Number Theory-I	6	4	75	25	100
	Or					
	Integral Transform-I					
Open Elective : Paper 16	Mathematical Modeling	6	4	75	25	100
External - III	Comprehensive viva voce	3	2	50	-	50
Comprehensive VIVA-Voce	Comprehensive viva voce	3	2	50	-	50
Total		42	28			700

M. Sc . (Mathematics) SEMESTER-IV

Code	Theory /Practical	Teaching hours/ week	Examination scheme			
			Credit	Internal	External	Total
Core 13/Paper 17	Functional Analysis-II	6	4	75	25	100
Core 14/Paper 18	Advanced Special Functions-II	6	4	75	25	100
Elective 4 : Paper 19	Advanced Fuzzy Mathematics-II	6	4	75	25	100
	Advanced Graph Theory-II					
Elective 5 : Paper20	Operations Research-II	6	4	75	25	100
	Or					
	Theory of Linear Operators-II					
Elective 6 : Paper21	Analytic Number Theory-II	6	4	75	25	100
	Or					
	Integral Transform-II					
Internship	Job Oriented Project	6	4	50	50	100
Total		36	24			600
Grand Total		208	100			2500
Minimum Passing marks will be 35% in each Theory, Practical, External, Internship, Project.						

