



**Gondwana University, Gadchiroli**  
**NEP 2020 U.G. PROGRAMME SESSION 2024-25**  
**Faculty of Science and Technology**  
**Programme Name - B.Sc.Sem-II (Level – 4.5)**

**Revised Examination Scheme & Basket**

Sr. No.	Course Category	Subject name		Total Credit	Teaching Scheme (Hrs)			Examination Scheme								Total Marks	
					Theory	Practical	Total Hrs.	Theory				Practical					
								UA	CA	Total Mark	Min. Passing	Duration of Exam (Hrs.)	UA	CA	Total Mark		Min. Passing
1	Core Subject-I	Select any Two core group subject from Annexure-VII	i) Subject- I	02	02	--	02	40	10	50	20	02					50
			ii) Subject- II	02	02	--	02	40	10	50	20	02					50
			iii) Practical Based on subject - I	02	--	04	04	--	--	--	--	--	30	20	50	25	50
			iv) Practical Based on subject - II	02	--	04	04	--	--	--	--	--	30	20	50	25	50
2	OE	Group-A (Any one from Annexure-VIII)		02	02	--	02	40	10	50	20	02	--	--	--	--	50
		Group-B (Any one from Annexure-VIII)		02	02	--	02	40	10	50	20	02	--	--	--	--	50
3	VSC	Advanced Laboratory Practical based on core group subject including hands on training (Annexure- IX )		02	--	04	04	--	--	--	--	--	30	20	50	25	50
4	SEC	Skill based course ( any one from Annexure-X)		02	02	--	02	40	10	50	20	02	--	--	-	-	50
5	VEC	Audit course (Any one from Annexure-XI)		02	02	--	02	--	50	50	20	--	--	--	--	--	50
6	AEC	English/Marathi/Hindi/Bengali/Pali/ Supplementary English, (Annexure-XII)		02	02	--	02	40	10	50	20	02	--	--	--	--	50
7	CC	NCC/NSS/Yoga/Sports(Any one)		02	--	04	04	--	--	--	--	--	--	50	50	25	50
<b>Total</b>				<b>22</b>	<b>14</b>	<b>16</b>	<b>30</b>	<b>240</b>	<b>110</b>	<b>350</b>	<b>140</b>	<b>12</b>	<b>90</b>	<b>110</b>	<b>200</b>	<b>100</b>	<b>550</b>

**Note(s):**

1) As per open elective (OE) is concerned, students shall opt any one subject from Group-A to be Chosen Compulsory from Faculty other than that of the core subject.

**B.Sc. SEMESTER II****ANNEXURE-VII****LIST OF CORE SUBJECTS**

<b>Sr No</b>	<b>Name of Faculty</b>	<b>Core Group Subjects</b>	<b>Name of Papers</b>
1	Faculty of Science and Technology	Computer Science	Programming with “C”
2		Environmental Science	Ecology
3		Chemistry	Basic Organic Chemistry
4		Mathematics	Integral calculus
5		Microbiology	Applied Microbiology
6		Botany	Botany in Twenty First Century
7		Electronics	Digital Electronics
8		Biochemistry	Cell Biology and Biomolecules
9		Geology	Crystallography and Optical Mineralogy
10		Biotechnology	Fundamentals of Microbiology
11		Zoology	Life and diversity of animals non Chordate(Arthropod to Hemichordate)
12		Physics	Magneto Statistics and Electromagnetic waves
13		Home Science	Fundamentals of Family Resource Management OR Fundamental of Textile & Clothing OR Fundamental of Human Development

**B.Sc. SEMESTER II**

**ANNEXURE-VIII**

**LIST OF OPEN ELECTIVES GROUP-A & GROUP B**

Sr. No	Name of Faculty	Core Group of Subject	Name of subject	
			Group A	Group B
1	Faculty of Science and Technology	Computer Science	Video Conferencing and Tools	Basics of Internet
			MS - Excel	Google Sheets
2		Environmental Science	Environmental Education	Global Environmental Concerns
			Fundamentals of natural Resources	Water and Water Resources
3		Chemistry	Chemistry of Drugs-I	Chemistry of Drugs-II
			Material Chemistry-II	Environmental Chemistry-II
4		Mathematics	Mathematical and Computational Thinking	Business Mathematics
5		Microbiology	Food Microbiology	Air, Soil and Water Microbiology
			Food Fermentation Technology	Mushroom Cultivation Technology
6		Botany	Green House Technology	Nursery Development
			Bamboo Technology	Moha Cultivation
7		Electronics	Domestic Equipment Maintenance	Renewable Energy and Energy Harvesting
8		Biochemistry	Basics of Microbiology	Indigenous System of Health and medicine
			Health and Wellness	Food Biochemistry
9		Geology	Introduction of landforms	Groundwater Quality and Management
10		Biotechnology	Application of Biotechnology in Agriculture	Biotechnology for Society
11		Zoology	Apiculture	Sericulture
12		Physics	Environmental Physics	Energy Sources
			Introduction to Geophysics	Energy Audit
13		Home Science	Basic Physics	Ecology & Environment
	Fabric Studies		Communicative Development	
	Food Additives		Infant Stimulation & Toddlerhood	
14	Language in Science	Foundation course in Spoken English	Introduction to Basic Language Skills	
15	Faculty of Humanities	Political Science	Election and Voter Behavior	Good Governance
16		Home Economics	Work Simplification	Flower Arrangement
			Timing and Energy Management	Water Harvesting
17		Geography	Geography of Health	Physical Geography-II
18		Sociology	Sociology of social welfare-II	Sociology of Marriage & Family
19		Economics	Introductory Economics-II	Agriculture Economics –II
			Indian Economics Policy-II	Economy of Maharashtra- II
20		Hindi	प्रशासनिक और व्यावसायिक पत्र लेखन, भाग -II	हिन्दी साहित्य का इतिहास आदिकाल-भाग-II

21		Marathi	मराठी साहित्य : कविता (निवडक) अभ्यासपुस्तक : आधुनिक मराठी कविता	कविता : सर्जनात्मक लेखन आणि वाचन	
22		English	Foundation Course in Spoken English	Introduction to Basic Language Skills	
24		History	Ancient Indian Administration	Ancient Indian Economics and Economy	
24		Ambedkar Thought	Dr. Ambedkar's Approach to Social Problems of Minorities , Caste, Women, Poverty and illitracy	Dr Ambedkar and Conversion to Buddhism	
25		Pali Language	पालिभाषा पारीभाषीक शब्द	अंगुत्तरनिकाय परिचय	
26		B. A. Fashion Designing	Fabric Construction	Personality Development	
			Pattern Desiging		
27		Psychology	Biological Psychology –II	Developmental Psychology-II	
			Organizational Psychology-II	Consumer and Advertisement Psychology-II	
28		Public Administration	Public Policy	Rural Development	
29		Indian Music	Critical studies of Ragas Talas- II	Introduction of Indian Music and fine Arts –II	
30		Military Science	Indians Internal Security –II	Indian Military Operations	
31		NCC	War after Independence	External Security Threats	
32	Faculty of Commerce and Management	Commerce	Digital Marketing -II	Stock Marketing -II	
33				Labour Economics-II	Basics Insurance
				Corporate Communication-II	
34		Language in Commerce	Foundation course in Spoken English	Introduction to Basic Language Skills	

- Note :- 1) Only one, 2 credits subject other than the faculty of core subject to be chosen amongst above  
Open Elective Group – A mentioned in the above Annexure - VIII**
- 2) Only one, 2 credits subject other than the faculty of core subject to be chosen amongst above  
Open Elective Group – B mentioned in the above Annexure - VIII**

**B.Sc. SEMESTER II****ANNEXURE-IX****LIST OF SUBJECT FOR VOCATIONAL SKILL COURSES BESTED ON CORE SUBJECT - II (VSC)**

<b>Sr No</b>	<b>Name of Faculty</b>	<b>Core Group Subjects</b>	<b>Name of Papers</b>
1	Faculty of Science and Technology	Computer Science	Web designing using HTML
2		Environmental Science	Ecological Field and Applied Experiments
3		Chemistry	Organic Practical Skills-II
4		Mathematics	Python Programming
5		Microbiology	Production of Bio fertilizers and bio pesticides
6		Botany	Herbal Technology
7		Electronics	Digital Electronic Laboratory
8		Biochemistry	Analysis of Bio molecules
9		Geology	Study of Crystals, Microscopic Identification minerals and Field works (Based on Group II)
10		Biotechnology	Bio fertilizers and bio pesticides Production
11		Zoology	Advanced Lab Technique
12		Physics	Basic Electronic Instrumentation and Measurement Skills OR Advance Electromagnetism Circuit design
13		Home Science	Practical Skill related to Home Science

**Note :- 2 credits Practical / Vocational Course given against core subject is mandatory as mentioned in the above Annexure - IX**

**B.Sc. SEMESTER II****ANNEXURE- X****LIST OF SUBJECT FOR SKILL ENHANCEMENT COURSE (SEC)**

Sr No	Name of Faculty	Core Group of Subject	Name of subject
1	Faculty of Science and Technology	Computer Science	Data Analysis Using Excel
2		Environmental Science	Water Conservation System
3		Chemistry	Chemistry of Boiler Troubles
4		Mathematics	Mathematical Modelling
5		Microbiology	Vermicomposting
6		Botany	Floriculture
7		Electronics	Fundamentals of Electronics
8		Biochemistry	Bio analytical Techniques
9		Geology	Fundamental of Hydro Geology
10		Biotechnology	Fermentation Technology
11		Zoology	Clinical Instrumentation Technique
12		Physics	Electrical Circuit and Network Skill OR Applied Measurement and Instrumentation Skills
13		Home Science	Food preservation
14	Faculty of Humanities	Political Science	Human Empowerment
15		Home Economics	Banking Sector
16		Geography	Water Management
17		Sociology	Case Study
18		Economics	Banking system-II
19		Hindi	मिडीया लेखन
20		Marathi	जाहिरात मसुदा लेखन
21		English	Foundation course in English in Social Media
22		History	Museum in India
23		Ambedkar Thought	Atrocity Act
24		Pali	पालि भाषेचा आधुनिक काळात वापर
25		Fashion Designing	Jewellery Art
26		Psychology	Soft skills development-II
27		Public Administration	Personality Development
28		Indian Music	Critical Studies of Ragas and Talas II
29		Military Science	Road Safety and Traffic Management-II
30		NCC	Computer Application
31	Faculty of Commerce and Management	Commerce	Business Economics – II
32			Marketing Management – II
33			Human Resource Management – II
34			Information & Communication Technology- II
35			Principle Management-II

**Note :- Only one, 2 credits SEC to be chosen amongst subjects of three Faculties from the above Annexure-X**

**B.Sc. SEMESTER II**

**ANNEXURE- XI**

**LIST OF SUBJECT FOR VALUE ADDED COURSES (VEC)**

<b>Sr. No.</b>	<b>Name of subject</b>
1	I..P.R. (Intellectual Property Rights)
2	Environmental studies
3	Constitution of India
4	Indian Democracy, Election and Good Governance
5	D.P.R. writing

**Note :- Only one, 2 credits subject VEC to be chosen from the above Annexure - XI**

**B.Sc. SEMESTER II**

**ANNEXURE- XI**

**LIST OF ABILITY ENHANCEMENT COURSE (AEC)**

<b>Sr. No.</b>	<b>Name of subject</b>
1.	English / Supplementary English
2.	Marathi OR Hindi OR Pali OR Bengali

**Note :-** 1) Student shall opt English OR Supplementary English in Semester –I and any one from Marathi, Hindi, Pali and Bengali in Semester- II and Vice a Versa.