

GONDWANA UNIVERSITY, GADCHIROLI
SYLLABUS OF COMPULSORY ENGLISH

To be implemented from 2017-18

Semester I

Unit I : Prose

- | | |
|-------------------------------------|--------------------|
| 1. Strong Roots | Dr.APJ Abdul Kalam |
| 2. Maintaining Democracy | Dr.B.R.Ambedkar |
| 3.Black Money and the Black Economy | C.Rammanohar Reddy |

Unit II : Poetry

- | | |
|---|----------------------|
| 1. Where the Mind is without Fear | Rabindranath Tagore |
| 2. Stopping by Woods on a Snowy Evening | Robert Frost |
| 3. Seven Ages of Man | Williams Shakespeare |

Unit III : Grammar

- A. Articles
- B. Prepositions
- C. Tenses-(Present Continuous, Past Continuous, Past Perfect)

Unit IV : Communication Skills

- A. Congratulating and Responding to Congratulations
- B. Asking for, Giving and Refusing Permission
- C. Job application.
- D. Curriculum Vitae (CV).

Semester II

Unit I : Prose

- | | |
|--------------------------------------|-------------------|
| 1.India's Message to the World | Swami Vivekanda |
| 2. Eyes are not here | Ruskin Bond |
| 3.The Birth of India's film Industry | Pamela Hutchinson |

Poetry

- | | |
|----------------------------|-----------------|
| 1. My Grand Mother's House | Kamala Das |
| 2. Ozymindias | P.B.Shelley |
| 3. To Science | Edgar Allan Poe |

Unit III : Grammar

- A.Synonyms
- B.Antonyms
- C.Tenses
 - i) Simple Present Tense
 - ii) Present Perfect Tense
 - iii) Simple Past Tense

Unit IV : Communication Skills

- A.Meeting people, Exchanging Greetings / Salutations & Taking Leave
- B.Introducing Yourself
- C. Preparing a Paragraph with the help of given points.
- D.. Formal letter.

Textbook prescribed for Sem. I & Sem. II-
Roots- Orient BlackSwan.

Gondwana University, Gadchiroli

Subject : MARATHI / आवश्यक मराठी for the Bachelor of Art
(Three year UG Course in faculty of Arts)
Course and Examination Scheme with choice base Credit system
(CBCS)

(B.A.) Semester Marathi	Area	Unique subject code (USC)	MARATHI Subject's paper	Credits Per Semester	Examination Scheme					Found ation Course s
					Maximum Marks			Minimum Marks		
					ESE/ UE	IE/ CE	Total	ESE /UE	SEC	
I	AECC	UAMAR RT1	साहित्य सविता भाग १	04	80	20	100	40		From a pool of foundation course (02) Credit
II	AECC	UAMAR RT2	साहित्य सविता भाग १	04	80	20	100	40		From a pool of foundation course (02) Credit
III	AECC	UAMAR RT3	साहित्य सविता भाग २	04	80	20	100	40	भाषा -- मानवी भाषा, मानवतरंगी भाषा(Audit)	
IV	AECC	UAMAR RT4	साहित्य सविता भाग २	04	80	20	100	40	भाषा -- प्रमाणभाषा बोलीभाषा(Audit)	
V	SECC	UAMAR RT5	मराठी भाषा आणि व्याकरण	04	80	20	100	40		(Gen eric) (02)
VI	SECC	UAMAR RT6	मराठी भाषा आणि लेखन	04	80	20	100	40		(Proje ct) (04) (Gen er) (02)

ESE : Examination Semester End/Uni. Exam
UE : Unit Exam even Semester
IE : Internal Evaluation / College Exam
CE : College Exam

Dr. P.B.BAWANKULE
Chairman
(Board of MARATHI)
Gondwana University Gadchiroli

Question Paper Pattern 80 marks

(For all Semesters)

- Q.1 Annotations (Unit 1) 4x4 questions out of 6 = 16
- Q.2 Long Answer Questions (Unit 1) 8x2 questions out of 4 = 16
- Q.3 Long Answer Questions (Unit 2) 8x2 questions out of 4 = 16
- Q.4 Short Answer Questions (Unit 3) 4x4 questions out of 6 = 16
- Q.5 (a) Short Notes (Unit 4) 4x2 questions out of 5 = 8
(b) Very Short Answer Questions (Unit 2) 4x2 questions out of 5 = 8

Internal Assessment 20 marks

Attendance, Assignment(library activity), seminar

गोंडवाना विद्यापीठ गडचिरोली
ऐच्छिक निवड श्रेयांक पद्धत (CBCS), पदवी अभ्यासक्रम बी.ए.

अभ्यासपत्रिका : मराठी आवश्यक

(Ability Enhancement Compulsory Course)

अभ्यासग्रंथ — 'साहित्य सरिता'सत्र १, २, ३, ४ (संपादित पुस्तक)

प्रश्नपत्रिकेचे स्वरूप व गुणविभागणी—सत्र १, २, ३, ४

एकूण १००गुण (गुण विभागणी ८०+२०) श्रेयांक ०४

लेखी परीक्षा ८० गुण —१, २, ३, ४ सत्रासाठी अभ्यासक्रमनिहाय
गुणविभागणी खालीलप्रमाणे.

१. दीर्घोत्तरी प्रश्न—गद्य(दोनपैकी एक सोडवा) — १६ गुण
२. दीर्घोत्तरी प्रश्न—पद्य(दोनपैकी एक सोडवा) — १६ गुण
३. लघुत्तरी चार प्रश्न—गद्य (गट 'अ' किंवागट 'ब'पैकी एक गट सोडवा)
— १६ गुण
४. लघुत्तरी चार प्रश्न—पद्य (गट 'क' किंवागट 'ड'पैकी एक गट सोडवा)
— १६ गुण
५. थोडक्यात उत्तरे लिहा.(दोन प्रश्न गद्य, दोन प्रश्न पद्य विभाग)
— १६ गुण

अंतर्गत २० गुण—१.वर्गातील नियमित उपस्थिती

२.स्वाध्याय

३.मौखिक परीक्षा/गटचर्चा/चर्चासत्र

— ०५ गुण

— १० गुण

— ०५ गुण

गोंडवाना विद्यापीठ, गडचिरोली
कला स्नातक

साहित्य सरिता भाग १

विषय : आवश्यक मराठी

(Ability Enhancement Compulsory Course)

(गुण विभागणी - लेखी गुण- ८०, अंतर्गत गुण- २०)

सत्र पहिले UAMART1

साहित्य सरिता भाग १

सत्र दुसरे UAMAR T2

साहित्य सरिता भाग १

Based Credit System (CBCS)

**Gondwana University,
Gadchiroli**

DEPARTMENT OF ECONOMICS

UNDERGRADUATE PROGRAMME

(Courses effective from Academic Year 2017-18)

**SYLLABUS OF COURSES TO BE
OFFERED**

**Core Courses, Ability Enhancement Courses , Discipline Specific Elective
Generic Elective Courses, Skill Development Courses & Foundation Courses**

Scheme of Examination for **B.A. Economics**

Syllabus to be Implemented From 2017-18

(i.e. From June - 2017) Onwards

Syllabus for B.A.I (Economics) Semester I & II

<i>BA Part -I</i>	
Semester I	Semester II
<i>Core Economics :</i>	<i>Core Economics :</i>
Fundamentals of Micro Economics – I	Fundamentals of Micro Economics – II

Syllabus for B.A (Part I) Semester I & II Examination
Fundamental of Micro Economics - I & II

Time : Three Hours Max.

Marks : 80

N.B : 1) All questions are compulsory.

2) All question carry equal marks.

- | | |
|--|--------------------|
| 1) Broad question Any One internal choice. | 16 Marks Each (16) |
| 2) Broad question Any One internal choice. | 16 Marks Each (16) |
| 3) Write Any Two question (Out of 4- ABCD) | 8 Mark Each (16) |
| 4) Write Any Two question (Out of 4- ABCD) | 8 Mark Each (16) |
| 5) Write Very Short Notes. (Solved All) | 2 Marks Each (16) |
| i) ii) iii) iv) v) vi) vii) viii) | |

Note : Question pattern from 01 to 05 shall be from any four units. For example, question No. 01 can be from any Module or unit of 01 to 04 from the syllabus. Similarly question No. 02,03,04, shall be from any module or unit of 01 to 04 & question No. 05 will be from all module or all unit 01 to 04.

B.A.I (Economics) (Nature of Internal Assessment)

SEMESTER PATTERN

1. Assignment to students by respective paper teachers - 05 marks.
2. Attendance of the students - 05 marks.
3. Seminare/presentation of the student to the respective paper (by rerspective paper teacher) - 10 marks

Model Question Paper

Model Que. Paper-I		Model Que. Paper-II		Model Que. Paper-III		Model Que. Paper-IV
Q.1 Unit No. 3	Or	Q.I Unit- No. 1	Or	Q.1 Unit No. 2	Or	Q.I Unit No. 4
Q. Unit No, I		Q.2 Unit No. 2		Q.2 U nit No. 4		Q.2 Unit No. 3
Q.3 Unit No. 2		Q.3 Unit No. 4		Q.3 Unit No. 3		Q.3 Unit- No. 1
Q.4 Unite No.4		Q.4 Unit No. 3		Q.4 Unit- No. 1		Q.4 Unit No. 2
Q.5 Unit 1,2,3,4,	Or	Q.5 Unit 1,2,3,4	Or	Q.5 Unit 1,2,3,4	Or	Q.5 Unit 1,2,3,4

GONDWANA UNIVERSITY, GADCHIROLI

Faculty of Social Science

Syllabus for B.A. I

Sociology

Semester Pattern

w.e.f. 2016-17

Scheme of Examination for

B.A.I (Sociology)

B.A.-I SOCIOLOGY

Sem-I and Sem.- II

Pattern of Question Paper

1. There will be four units in each paper
2. Question paper will consist of five questions & all questions shall be compulsory.
3. Four questions will be an four units with Internal choice (one question on each units)
4. Fifth question will be compulsory with questions from each of the four units having each of weightage & there will be no internal choice.
5. Each paper will be of 3 hours questions.
6. Minimum passing marks in each head (theory, practical & internal assessment) will be,35%.

Gondwana University, Gadchiroli

Nature of Question Paper for Semester Pattern

Sub. : Sociology

B.A. Part-I

Introduction to Sociology

Sem. I

Time : 3 Hours

Total Marks : 80 Marks

=====

Instructions : 1. All Questions are compulsory

2. Figures to the rights indicate full marks.

Q. 1 . Answer any one long type question of the following.

(Any one out of two)

16 Marks

Q. 2. Answer any one long types question of the following

(Any one out of two)

16 Marks

Q. 3 Write short answer of the following

(Any two out of four)

08 Marks

08 Marks

Q. 4 Write short answer of the following

(Any two out of four)

08 Marks

08 Marks

Q.5 Write very short answer of the following

(Eight question are compulsory)

02 Marks

02 Marks

02 Marks

02 Marks

02 Marks

02 Marks

02 Marks

02 Marks

Total :

80 Marks



**GONDWANA UNIVERSITY,
GADCHIROLI**

FACULTY OF SOCIAL SCIENCE

**B.A. I,
(I to II Semester)**

**POLITICAL SCIENCE
SYLLABUS**

Submitted by

**Dr. R.S. Muddanwar
Chairman
Political Science Committee**

2016-2017

GONDWANA UNIVERSITY, GADCHIROLI

Proposed Course Structure for Bachelor of Arts (B.A.) Degree Level UG Program with CBCS

POLITICAL SCIENCE (CBCS) PATTERN

SESSION 2017-2018

Type of courses / (No of Courses X No of Credits)	First Year		Second Year		Third Year		Credit Value
	First Semester	Second Semester	Third Semester	Fourth Semester	Fifth Semester	Sixth Semester	
Core discipline specific course (CDSC)	Indian Democracy	Local Self Government	Political Theory	Political Analysis and Concept	-	-	16
Foundation Course (FC)	ENV	1.Introduction to Human Rights* 2.Deomcracy, Elections& Good Governance	-	-	-	-	08
Ability Enhancement Compulsory Course (AECC)	-	-	-	-	-	-	-
Skill Enhancement Course (SEC)	-	-	Population Studies	Communication Skill	-	-	-
Discipline Specific Elective Course (DSE)	-	-	-	-	Indian Political Thought	Western Political Thought	08
Generic (Inter-discipli	-	-	-	-	1. Foreign Policy	1. Tribals of India	04

nary) Elective Course (GEC)					2. International Relation. 3. State Politics in India	2. National ism in India 3. Diploma cy	
Project	-	-	-	-	-	Group project recomm ended by subject teacher	04
Total Credits per semester	06	10	04	04	06	10	40

Gondwana University, Gadchiroli

Department of History

Syllabus of Choice Based Credit
System for B.A. History

Semester and Credit Pattern for B.A.
Course

From the Session 2016-2017 on wards

B. A. History

Semester -I

Core Paper – Indian History (Earliest times to 1351A.D.)

Semester-II

Core Paper- Indian History (1526 to 1761A.D.)

Gondwana University Gadchiroli.

Question Paper Pattern

History

Examination- U.G.Level

B.A.Semester-I,II

B.A.Semester-III,IV

B.A. Semester V,VI.

Time:- Three Hours

Max.Marks- 80.

Instructions:

1. All Questions are compulsory.
2. All Question carry equal marks.
3. Give correct Question number to the answer

Que 1. One Long Answer Question out of Two. { 1x16= 16marks}

Que 2. One Long Answer Question out of Two. { 1x16= 16marks}

Que 3. Two short Answer Questions out of Four { 2x8 = 16marks}

Que 4. Two short Answer Questions out of Four { 2x8 = 16marks}

Que5. Eight very short Answer Question
(Two Questions from each Unit) { 8x2 = 16marks}

Note:-

- One Question from each unit will be asked in Question no 01 to 04.
- In Question no 05:2 Questions will be asked from each unit.

Change in Question Paper Pattern from Winter 2016.

The Question paper has been changed from Winter 2016. Group system has been removed from Question No. 3&4.

Assignment Scheme

- | | |
|------------------------|----------|
| 1. Assignment | 10 Marks |
| 2. Viva/Seminar | 05Marks |
| 3. Overall Performance | 05Marks |

Total Marks	20 Marks
--------------------	-----------------

Marks Scheme

Passing Theory and Internal Assessment.

Maximum Marks		Minimum Marks		Passing Marks
Theory	Internal Assessment	Theory	Internal Assessment	
80	20	32	08	40

GONDWANA UNIVERSITY, GADCHIROLI
COURSE AND EXAMINATION SCHEME WITH CHOICE BASED CREDIT SYSTEM (CBCS)

FACULTY OF HUMANITIES

SUBJECT: GEOGRAPHY

SEM	AREA	UNIQUE SUBJECT CODE	PAPERS	EXAMINATION SCHEME							CREDIT PER SEMESTER	
				MAXIMUM MARKS				MINIMUM MARKS				
				ESE/UE	IE/CE	P* CA / UA I, III, V / II, IV, VI	TOTAL	ESE + IE 24 + 6 = 30	P	TOTAL		
I	CORE COURSE	UAGEOT1 UAGEOP1	INTRODUCTION TO GEOGRAPHY PRACTICAL 1*	60	15	25	100	30	10	40	04	
II	CORE COURSE	UAGEOT2 UAGEOP2	CLIMATOLOGY PRACTICAL 2*	60	15	25	100	30	10	40	04	
III	CORE COURSE	UAGEOT3 UAGEOP3	GEOGRAPHY PRACTICAL 3*	60	15	25	100	30	10	40	04	
IV	CORE COURSE	UAGEOT4 UAGEOP4	GEOGRAPHY AND OCEANOGRAPHY PRACTICAL 4*	60	15	25	100	30	10	40	04	
V	DSE ANY ONE FROM THREE	UAGEOT5 UAGEOP5 UAGEOP1	GEOGRAPHY OF MAHARASHTRA PRACTICAL 5 PROJECT 01	60	15	25	PROJECT 150	30	10	20	60	06

		OR UAGEBT5 UAGEOP5 UAGEPR2	OR BIO-GEOGRAPHY PRACTICAL 05 PROJECT 02				50						
		OR UAGEOT5 UAGEOP5 UAGEPR3	OR GEOGRAPHY OF TOURISM PRACTICAL 05 PROJECT 03										
VI	DSE ANY ONE FROM 3	UAGEOT6 UAGEOP6 UAGFWR1 OR UAGET6 UAGEOP6 UAGFWR1 OR UAGEHT6 UAGEOP6 UAGFWR1	GEOGRAPHY OF INDIA PRACTICAL 06 FIELD WORK REPORT OR CULTURAL GEOGRAPHY PRACTICAL 06 FIELD WORK REPORT OR GEOGRAPHY OF HEALTH PRACTICAL 06 FIELD WORK REPORT	60	15	25	50	150	30	10	20	60	06
TOTAL				360	90	150	100	700	180	60	40	280	28

ESE: EXAMINATION SEMESTER END, CA: COLLEGE ASSESSMENT, UA: UNIVERSITY ASSESSMENT,

PROJECT 01: ANALYSIS OF GEOGRAPHIC FEATURES WITH GOOGLE EARTH, REMOTE SENSING & GPS Etc.

PROJECT 02: PREPARATION OF MAP OF AGRICULTURE FIELD, RIVERBED, CANAL Etc. WITH THE HELP OF SURVEYING INSTRUMENTS

PROJECT03: LOCAL GEO- ENVIRONMENTAL ISSUES.

Foundation Course

CBCS Pattern for B.A. Sem. - I Challenges of globalization

Marks: 50

(02 credits)

Globalization Meaning – Definition , Significance Bases of globalization . Historical background of globalization.

Responsible factors of globalization – free trade policy, high speed transportation and communication , free frontier, Govt. add. Extension of MNC. Transformation of eco-centers from to developing country.

Impact of globalization on Indian economy.

W.T.O. and globalization . Impact on Indian agriculture and impact on manufacturing and employment. Role of W.T.O. in international trade.

References;-

1. Babita Agrawal ; Globalization and Indian society
2. Ramanuj Ganguli; Globalization in India(2010)PHI learning

- Pvt,Ltd.
3. Gumma, Vijay Nagesh:The Impact of Globalization on Small Scale Industries. (2009) Regal Publications, New Delhi.
 4. Phogat, Malati: Globalization and the Farmers' (2010) Abhijit Publication, New Delhi.

Foundation Course
CBCS Pattern for B.A. Sem. – II

Environmental studies / Awareness / Concerns

Marks: 50

(02 credits)

Environment meaning, definition , its nature and scope, components of environment, man environment relationship, ecology and eco-system, types of ecosystem, environmental degradation and conservation, environmental laws, environmental impact assessment / evolution, concept of Sustainable development . Pollution - types causes and effect on biodiversity.

References:

1. Gharpure Vitthal; Paryavaranshastra,pimpalapur pub,Nagpur.
2. Harvey B & Hallar;Environment & Society,macmillan pub,

3. Jadhav V.H.;Principles of Environmental Science,Himalaya Pub,Mumbai

4. Wagner & Richard;Environment and man,W.W.Norton &co.

५. विश्वकर्मा, कनकलता: मानव जीवन और पर्यावरण, (२००७), युनिवर्सल वाईस, नई दिल्ली.

GONDWANA UNIVERSITY GADCHIROLI
CHOICE BASED CREDIT SYSTEM SEMESTER PATTERN SYLLABUS
B.A. GEOGRAPHY

SEM	CORE COURSES 3 CORE COURSES WITH 4 CREDITS / COURSE	Ability Enhancement Compulsory Courses (AECC)	Skill Enhancement Courses (SEC)	Discipline Specific Elective Cours	Generic Elective Course	Foundation Courses
I	GEOGRAPHY CORE (01) INTRODUCTION TO GEOGRAPHY AND PRACTICAL I (3+1=4 Credits)					
I	GEOGRAPHY CORE (02) CLIMATOLOGY AND PRACTICAL II (3+1=4 Credits)					

III	GEOGRAPHY CORE (03) GEOMORPHOLOGY AND PRACTICAL III(3+1=4 Credits)				
IV	GEOMORPHOLOGY AND (04) OCEANOGRAPHY AND PRACTICAL IV(3+1=4 Credits)				
V				<p>GEOGRAPHY OF MAHARASHTRA</p> <p>OR</p> <p>BIO- GEOGRAPHY</p> <p>OR</p> <p>GEOGRAPHY OF TOURISM</p> <p>AND</p> <p>Practical V (3+1=4 Credits)</p>	<p>1.GOOGL EARTH)COMPUT ER APPLICATION for GEOGRAPHICAL ANALYSIS</p> <p>2 .LOCAL ISSUES IDENTIFICATION OF MEDICINAL PLANTS</p> <p>BIODIVERSITY/CHANGING LAND USE(2 Credits)Travel & Tourism</p>
VI				<p>GEOGRAPHY OF INDIA</p> <p>OR</p> <p>CULTURAL GEOGRAPHY</p> <p>OR</p> <p>GEOGRAPHY OF HEALTH</p>	<p>FIELD WORK REPORT/ PROJECT ON SOCIO ECONOMIC SURVEY OF VILLAGE / INDUSTRIAL AREA / MINING AREA / TRIBAL SURVEY (04)</p> <p>INSRUMENTALSURVEYING</p> <p>GPS/PTS/PCS/DLS etc,(02)</p>

				AND Practical VI (3+1=4 Credits)		
--	--	--	--	---	--	--

PROJECT 01: ANALYSIS OF GEOGRAPHIC FEATURES WITH GOOGLE EARTH, REMOTE SENSING & GPS Etc.

PROJECT 02: PREPARATION OF MAP OF AGRICULTURE FIELD, RIVERBED, CANAL Etc. WITH THE HELP OF SURVEYING INSTRUMENTS

PROJECT03: LOCAL GEO- ENVIRONMENTAL ISSUES.

B. A. (Semester - I)

(English Literature)

UNIT -1:

- (i) William Shakespeare : *Mark Antony's Speech*
- (ii) John Milton : *On His Blindness*
- (iii) John Donne : *Lovers' Infiniteness*
- (iv) Alexander Pope : *Ode on Solitude*
- (v) William Wordsworth : *The Solitary Reaper*
- (vi) Robert Browning : *My Last Duchess*

UNIT -2

- (i) Renaissance
- (ii) The Metaphysical School of Poets.
- (iii) Augustan Age

UNIT -3

- (i) The Lyric
- (ii) The Ode
- (iii) The Sonnet
- (iv) The Elegy
- (v) The Epic
- (vi) Idyll
- (vii) Satire

UNIT -4

- (i) Allusion
- (ii) Antithesis
- (iii) Blank Verse
- (iv) Conceit
- (v) Epithet

B. A. (Semester – II)

(English Literature)

UNIT – 1 :

- (i) Toru Dutt : *The Lotus*
- (ii) Sarojini Naidu : *Summer Woods*
- (iii) Aurobindo Ghose : *Who*
- (iv) Dilip Chitre : *Father Returning Home*
- (v) Emily Dickinson: *Because I Could Not Stop for Death*
- (vi) Roy Campbell: *Zulu Girl*

UNIT – 2 :

- (i) Victorian Poets
- (ii) The Pre-Raphaelites
- (iii) Indian Poetry in English
- (iv) African Poetry

UNIT – 3 :

- (i) The Heroic Couplet
- (ii) The Terza Rima
- (iii) The Chaucerian Stanza or Rhyme Royal
- (iv) The Ottava Rima
- (v) The Spenserian Stanza
- (vi) The Ballad Stanza

UNIT – 4 :

- (i) Caesura
- (ii) Paradox
- (iii) Wit
- (iv) Free Verse
- (v) Imagery

Textbook prescribed for Sem. I & Sem. II-

Footprints- Orient Blackswan.

सुधारित अभ्यासक्रम (सत्र २०१८-१९ ते पुढे)

गोंडवाना विद्यापीठ, गडचिरोली

ऐच्छिक निवड श्रेयांक पद्धत (CBCS)

पदवी अभ्यासक्रम बी.ए. — सत्र १, २, ३, ४

विषय — मराठी वाङ्मय (ऐच्छिक मराठी)

सत्र पहिले

अभ्यासपत्रिका (CORE COURSE)- UAMLT1 'मराठी कथा' आणि 'साहित्यविचार'

अभ्यासग्रंथ — १) 'सहा कथाकार' संपादक : भालचंद्र फडके

२) 'साहित्यविचार' : अरविंद वामन कुलकर्णी

प्रकरण — १ साहित्याचे स्वरूप, प्रकरण — २ साहित्याचे प्रयोजन

प्रश्नपत्रिकेचे स्वरूप व गुणविभागणी — (गुण विभागणी ८० + २०) एकूण १०० गुण

लेखी परिक्षा — ८० गुण

श्रेयांक — ०४

प्रश्न १ दीर्घोत्तरी दोन पैकी एक प्रश्न सोडवा (सहा कथाकार) — गुण १६

प्रश्न २ दीर्घोत्तरी दोन पैकी एक प्रश्न सोडवा (सहा कथाकार) — गुण १६

प्रश्न ३. संदर्भासह आशयसौंदर्य स्पष्टीकरण (कोणताही एक गट सोडविणे) — गुण १६

दोन गट — गट — 'अ' किंवा गट — 'आ'

प्रत्येक गटात चार संदर्भ (सहा कथाकार)

प्रश्न ४. लघुत्तरी प्रश्न (दोन गट पैकी एक गट सोडविणे) — गुण १६

दोन गट — गट — 'क' किंवा गट — 'ख'

प्रत्येक गटात चार प्रश्न

दोन प्रश्न 'सहा कथाकार', दोन प्रश्न 'साहित्यविचार'

प्रश्न ५. लघुत्तरी प्रश्न (सर्व प्रश्न अनिवार्य) — गुण १६

दोन प्रश्न 'सहा कथाकार', दोन प्रश्न 'साहित्यविचार'

अंतर्गत गुण — २० : १) वर्गातील नियमित उपस्थिती — गुण ०५

२) स्वाध्याय — गुण १०

३) मौखिक चाचणी — गुण ०५

अभ्यासपत्रिका (FOUNDATION COURSE) C.F. —

पर्यावरणशास्त्र

गुणविभागणी एकूण गुण ५०, श्रेयांक ०२

(परिक्षा महाविद्यालय पातळीवर घेऊन विद्यापीठास निकाल द्यावा.)

सुधारित अभ्यासक्रम (सत्र २०१८-१९ ते पुढे)

विषय — मराठी वाङ्मय (ऐच्छिक मराठी)

सत्र दुसरे

अभ्यासपत्रिका (CORE COURSE)- UAMLT2 'मराठी कादंबरी' आणि 'साहित्यविचार'

अभ्यासग्रंथ — १) 'गारंबीचा बापू' : श्री. ना. पेंडसे

२) 'साहित्यविचार' : अरविंद वामन कुलकर्णी

प्रकरण—३ साहित्याची निर्मितीप्रक्रिया, प्रकरण — ४ साहित्याची भाषा

प्रश्नपत्रिकेचे स्वरूप व गुणविभागणी — (गुण विभागणी ८० + २०) एकूण १०० गुण

लेखी परिक्षा — ८० गुण

श्रेयांक — ०४

प्रश्न १ दीर्घोत्तरी दोन पैकी एक प्रश्न सोडवा (गारंबीचा बापू) — गुण १६

प्रश्न २ दीर्घोत्तरी दोन पैकी एक प्रश्न सोडवा (गारंबीचा बापू) — गुण १६

प्रश्न ३. संदर्भासह आशयसौंदर्य स्पष्टीकरण (कोणताही एक गट सोडविणे) — गुण १६

दोन गट — गट 'अ' किंवा गट 'आ'

प्रत्येक गटात चार संदर्भ (गारंबीचा बापू)

प्रश्न ४. लघुत्तरी प्रश्न (दोन गट पैकी एक गट सोडविणे) — गुण १६

दोन गट — गट 'क' किंवा गट 'ख'

प्रत्येक गटात चार प्रश्न

दोन प्रश्न 'गारंबीचा बापू', दोन प्रश्न 'साहित्यविचार'

प्रश्न ५. लघुत्तरी प्रश्न (सर्व प्रश्न अनिवार्य) — गुण १६

दोन प्रश्न 'गारंबीचा बापू', दोन प्रश्न साहित्यविचार

अंतर्गत गुण — २० : १) वर्गातील नियमित उपस्थिती — गुण ०५

२) स्वाध्याय — गुण १०

३) मौखिक चाचणी — गुण ०५

अभ्यासपत्रिका (FOUNDATION COURSE) C.F. — ग्रुप मधून निवडावा

गुणविभागणी एकूण गुण ५०, श्रेयांक ०२

(परिक्षा महाविद्यालय पातळीवर घेऊन विद्यापीठास निकाल द्यावा.)

*Gondwana University,
Gadchiroli*

SYLLABUS for UNDERGRADUATE LEVEL

[B. A.] HOME ECONOMICS

**CHOICE - BASED GRADE CREDIT SEMESTER
PATTERN SYLLABUS**

Session : 2017 -18

Onwards

*Gondwana University,
Gadchiroli*

SYLLABUS for UNDERGRADUATE LEVEL

[B. A.] HOME ECONOMICS

**CREDIT BASED SEMESTER SYSTEM
PATTERN SYLLABUS**

COURSE PLAN

SN	COURSE	SEMESTER	EVALUTION BY CREDIT BASE
01	B.A.I –	SEMESTER I, II	EDS <ul style="list-style-type: none">- ONE THEORY PAPER- ONE PRACTICAL- INTERNAL ASSESSMNT
02	B.A.II –	SEMESTER III, IV	EDS <ul style="list-style-type: none">- ONE THEORY PAPER- ONE PRACTICAL- INTERNAL ASSESSMNT
03	B.A.III –	SEMESTER IV, VI	EDS <ul style="list-style-type: none">- ONE THEORY PAPER- ONE PRACTICAL- INTERNAL ASSESSMNT

GONDWANA UNIVERSITY GADCHIROLI

B.A. HOME ECONOMICS

Semester- I

PAPER – RESOURCE MANAGEMENT

FULL MARKS -100

Marks

Semester Exam: 60

Practical Exam: 25 Marks

TIME- 3 Hrs.

Internal Assessment: 15

Marks

[TH – 60 + Pr. -25

+ IA -15]

OBJECTIVES:

To achieve the aim of quality education and model role in competitive global era, to acquire efficacy to cope with world-wide challenges, the following objectives are decided of Credit Based Grade System for B.A.I / Semester I / Home Economics / Program.

1. To recognize resources and their importance to gain personal, family and social goals.
2. To develop rational decision ability.
3. To realize the importance of management in daily routine.
4. To apply principals of work – Simplification, management and decision making in house for day to day life.
5. To develop the skill in use of colours with different colour schemes
6. To aware of basic elements and principles of arts.

COURSE CONTENT

UNIT- I - INTRODUCTION OF HOME ECONOMICS.

- 1.1 A brief Historical overview as a discipline
- 1.2 Definition & their Importance
- 1.3 Branches of Home Economics
 - a. Resource Management
 - b. Housing & Home furnishing
 - c. Human Development
 - d. Food Science and Nutrition
 - e. Textile and Clothing
 - f. Extension Education.
- 1.4 Contribution of Home Economics education to good home maker.
- 1.5 Decision Making
- 1.6 Type of decisions
- 1.7 Steps involved in decision making

UNIT – II

2.1 Resource Management

Family Resources - Definition, Type & Characteristics, factors affecting family resources.

2.2 Home Management

- Definition
- Process of Home Management
Planning, Controlling, Evaluation

PRACTICAL WORK

Time -3 Hrs

Marks- 25

1. Colour

Preparing Colour schemes

Monochromatic

Analogue

Complimentary

Triad

1.2 Computer application - Use of Brush and Colour.

2. Embroidery - (any one)

Stem stitch, Chain, Lazy-daisy, Feather stitch, Satin stitch, Button hole, Jarrazi,

Cross stitch, Open work, Aari work, Long and short, Badia work

3. Visit to cottage Industry

4. Make any one article

Table cloth, Wall hanging, Apron, Ceramic, fancy bag.

Practical Examination

Distribution of Marks

Marks

- 25

1) Colour scheme –any one	05
2) Embroidery Sample -one- two stitches	10
4) Viva-voice	05
5) Records Book & Visit report	05

Total - 25

Internal Assessment**15 Marks**

1) Attendance	05
2) Home Assignment	05
3) Unit Test	05

Suggested books

1. Home management
2. Gruh kala ani Vyavastha
3. Embroidery
4. Design in art
5. Home Decoration
6. Home Economics part-I
7. Resource Management

GONDWANA UNIVERSITY, GADCHIROLI.

SUBJECT- HOME ECONOMICS

FIRST B. A. / SEMESTER II

PAPER – HOUSING AND INTERIOR DECORATION

FULL MARKS - 100.

60

Semester Theory Exam:

25

Practical Exam:

TIME- 3 Hrs.

15

Internal Assessment:

[TH – 60 + Pr. -25 + IA -15]

A] OBJECTIVES: The following objectives are decided for First B.A. / Semester II / Home Economics / Program in paper- Housing and Interiors enables the students.

1. To recognize the importance of the housing needs principles and planning to gain personal, family and social goals.
2. To gain basic knowledge of the role in furnishing of residential houses for daily family life satisfaction.
3. To provide skills regarding methods of interior decoration.
4. To introduction job potentials in Home economics education to the students.
5. To motivate and train the students for self employment.
6. To develop skills of preparing flower bouquets/ baskets /arrangements, artificial flowers and other useful items for decoration, selling to enhance employability.

COURSE CONTENT:

THEORY

UNIT-I –

Gondwana University, Gadchiroli

Syllabus for F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

(CBCS)

Semester-I

Compulsory English

Core Course-UCA1C02

(To be implemented from June 2017)

And

Semester-II

Compulsory English

Core Course-UCA2C02

(To be implemented from November 2017)

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

**Compulsory English
Core Course**

This Syllabus has been designed as per the instructions from the Ministry of Human Resource Development and University Grants Commission.

Objectives:-

- i) To enable and inspire the students to read and learn various types of texts and discuss among them about great achievers.
- ii) To instill poetic sense among students through reading of poetry.
- iii) To equip students with the practical business communication skills and to develop among them the ability to communicate effectively in English.
- iv) To inspire students to learn various soft skills regarding use of English in business and competitive world.
- v) To upgrade students' grammatical sense and master the basic grammatical aspects of English language.

Books Prescribed for Semester I and II:

Prelude: A Text Book for College Students, edited by the Board of Editors
(Published by OrientBlackSwan)

Recommended reading for Grammar, Writing Skills and Soft Skills:

- i) English Grammar and Composition, R. C. Jain, Macmillan India Limited, Chennai, 2003.
- ii) *A Course in English Grammar* by R. N. Bakshi, Orient Black Swan.
- iii) *The Communicator*, Orient BlackSwan, 2013.
- iv) *A Course in English Grammar* by R. N. Bakshi, Orient Black Swan.
- v) *Macmillan Foundation English* by R. K. Dwivedi & A. Kumar (Macmillan).
- vi) *Contemporary English Grammar & Composition* by David Green (Macmillan).

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

Compulsory English-

Core Course

Course Code- UCA1C02

Semester-I

Unit Wise Allotment of Marks

Sr. No.	Unit	Portion	Marks Allotted
1	I	Prose	25
2	II	Poetry	15
3	III	Grammar	20
4	IV	Writing Skills, Communication Skills and Personality Development Skills	20

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

Semester- I

Compulsory English

Pattern of Question Paper-

Time : Three Hours

Total Marks :80

- Que. 1. A) One Long Answer Question out of Two to be answered in about 150 words
(Based on Prescribed Prose) 10
- B) One Long Answer Question out of Two to be answered in about 150 words
(Based on Prescribed Poems) 10
- Que. 2. A) Three Short Answer Questions out of Four to be answered in about 75 wordseach
(Based on Prescribed Prose) 3X5=15
- B) One Short Answer Question out of Two to be answered in about 75 words each
(Based on Prescribed Poems) 1X5=5
- Que. 3. A) Fill in the Blanks with appropriate Articles 3X1 = 3
- B) Fill in the Blanks with appropriate Prepositions 3X1 = 3
- C) Fill in the Blanks with appropriate Tense forms of Verbs 4X1 = 4
- D) Correction of Sentences 4X1= 4
- E) i) Synonyms 3X1 = 3
- ii) Antonyms 3X1 = 3
- Que. 4. A) Paragraph Writing with the help of given points 10
- Que. 5. A) Two Short Answer Questions out of Four with internal choice on Leadership Skills
, Team Work Skills, Time Management and Goal Setting. 2X5= 10

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

Semester- I

Compulsory English

Internal Assessment (20 Marks)

The criteria for the award of Internal Assessment Marks will be as given below:

- | | | | |
|------|--|---|----------|
| i) | Unit Test Performance and Assignment Submission | : | 10 Marks |
| ii) | Oral Test | : | 05 Marks |
| iii) | Attendance/Overall Performance and Responsible Behaviour | : | 05 Marks |

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

Compulsory English-

Core Course

Course Code- UCA2C02

Semester-II

Unit Wise Allotment of Marks

Sr. No.	Unit	Portion	Marks Allotted
1	I	Prose	25
2	II	Poetry	15
3	III	Grammar	10
4	IV	Writing Skills, Communication Skills and Personality Development Skills	30

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

Semester- II

Compulsory English

Pattern of Question Paper-Sem-II

Time : Three Hours

Total Marks :80

- Que. 1. A) One Long Answer Question out of Two to be answered in about 150 words
(Based on Prescribed Prose) 10
- B) One Long Answer Question out of Two to be answered in about 150 words
(Based on Prescribed Poems) 10
- Que. 2. A) Three Short Answer Questions out of Four to be answered in about 75 words
each (Based on Prescribed Prose) 3X5=15
- B) One Short Answer Question out of Two to be answered in about 75 words
(Based on Prescribed Poems) 1X5=5
- Que. 3. A) Question Tags 2X2=4
- B) Change the Voice (Three out of Five) 3X2= 6
- Que. 4. A) Writing Advertisements (One out of Two) 10
- B) Dialogue Writing (One Long Answer Question out of Two) 10
- Que. 5. A) Giving Personal Information or Describing Daily Routine (Any One) 5
- B) One Short Answer Question out of Two on Notices, Agenda & Minutes 5

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

Semester- II

Compulsory English-

Internal Assessment (20 Marks)

The criteria for the award of Internal Assessment Marks will be as given below:

- | | | | |
|-----|--|---|----------|
| iv) | Unit Test Performance and Assignment Submission | : | 10 Marks |
| v) | Oral Test | : | 05 Marks |
| vi) | Attendance/Overall Performance and Responsible Behaviour | : | 05 Marks |

Gondwana University, Gadchiroli

Syllabus for F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

(CBCS)

Semester-I

Compulsory Marathi-

Foundation Course- UCA1F01

(To be implemented from June 2017)

And

Semester-II

Compulsory Marathi-

Foundation Course- UCA2F01

(To be implemented from November 2017)

गोंडवाना विद्यापीठ, गडचिरोली

बी. कॉम / बी. एससी / बी. एससी. (I. T.) / बी. सी. ए. भाग १

मराठी आवश्यक : प्रथम सत्र

'अक्षरशास्त्र'

अभ्यासक्रम वर्ष जून २०१७ पासून पुढे

गद्य विभाग:-

१. अखेरचे कीर्तन- गाडगेबाबा
२. लोकशाहीचे भवितव्य- डॉ. बाबासाहेब आंबेडकर
३. विज्ञानयुगात भारत. जयंत नारळीकर
४. भटक्या- कचरू जनार्दन गिन्हे
५. माणूस- उत्तम कांबळे

पद्य विभाग:-

१. पसायदान- ज्ञानेश्वर
२. विद्यार्थ्यांप्रति- केशवसुत
३. भंगू दे काठीण्य माझे- बा. सी. मढेंकर
४. स्वप्नांची समाप्ती- कुसुमाग्रज
५. लेखनीच्या तलवारी- उषाकिरण आत्राम

व्यावहारिक मराठी व व्याकरण:-

१. भाषिक कौशल्य आणि व्यक्तीमत्त्व विकास
२. भाषा, लिपी आणि वर्णविचार

गोंडवाना विद्यापीठ, गडचिरोली

बी. कॉम / बी. एससी / बी. एससी. (I. T.) / बी. सी. ए. भाग १

मराठी आवश्यक : प्रथम सत्र

विद्यापीठ परीक्षा: एकूण गुण: ८०

गुणविभाजन

प्रश्न १: गद्य विभागावर आधारित एक दीर्घोत्तरी प्रश्न (पर्यायासह)	१५ गुण
प्रश्न २: पद्य विभागावर आधारित एक दीर्घोत्तरी प्रश्न (पर्यायासह)	१५ गुण
प्रश्न ३: तीन लघुत्तरी उपप्रश्नांचा एक गट (गद्य विभाग— पर्यायासह)	१५ गुण
प्रश्न ४: तीन लघुत्तरी उपप्रश्नांचा एक गट (पद्य विभाग— पर्यायासह)	१५ गुण
प्रश्न ५. अ: व्यावहारिक मराठी विभागावार दोन प्रश्न (पर्यायासह)	१० गुण
ब: मराठी व्याकरणावर सात पैकी पाच प्रश्न अनिवार्य	१० गुण

अंतर्गत मुल्यमापन : एकूण गुण: २०

१. वर्गातील उपस्थिती	: ५ गुण
२. गृहपाठ	: ५ गुण
३. महाविद्यालयीन उपक्रमांत सहभाग	: ५ गुण
४. मौखिक परीक्षा	: ५ गुण

गोंडवाना विद्यापीठ, गडचिरोली
बी. कॉम / बी. एससी / बी. एससी. (I. T.) / बी. सी. ए. भाग १

मराठी आवश्यक : द्वितीय सत्र

'अक्षरधार'

अभ्यासक्रम नोव्हेंबर २०१७ पासून पुढे

गद्य विभाग:-

१. तोडून टाका हया सात स्वदेशी बेडया- स्वा. वि. दा. सावरकर
२. शिक्षक हाच राष्ट्राचा भाग्यविधाता- राष्ट्रसंत तुकडोजी महाराज
३. संकुचित प्रांतियतेचे धोके- पु. ल. देशपांडे
४. भरती- वसंत वन्हाडपांडे
५. पाणी अडवा, पाणी जिरवा- बाबा भांड

पद्य विभाग:-

१. तुकारामाचे अभंग- तुकाराम
२. खरा धर्म- साने गुरूजी
३. प्रेमाचा गुलकंद- प्र. के. अत्रे
४. आडवेळ्या पाऊस- शांता शेळके
५. जहर खाऊ नका- ज्ञानेश वाकुडकर

व्यावहारिक मराठी व व्याकरण:-

१. पत्रव्यवहार - व्यक्तीगत व कार्यालयीन
२. संधी - स्वरसंधी, व्यंजनसंधी व विसर्गसंधी

गोंडवाना विद्यापीठ, गडचिरोली

बी. कॉम / बी. एससी / बी. एससी. (I. T.) / बी. सी. ए. भाग १

मराठी आवश्यक : द्वितीय सत्र

विद्यापीठ परीक्षा: एकूण गुण: ८०

गुणविभाजन

प्रश्न १: गद्य विभागावर आधारित एक दीर्घोत्तरी प्रश्न (पर्यायासह)	१५ गुण
प्रश्न २: पद्य विभागावर आधारित एक दीर्घोत्तरी प्रश्न (पर्यायासह)	१५ गुण
प्रश्न ३: तीन लघुत्तरी उपप्रश्नांचा एक गट (गद्य विभाग— पर्यायासह)	१५ गुण
प्रश्न ४: तीन लघुत्तरी उपप्रश्नांचा एक गट (पद्य विभाग— पर्यायासह)	१५ गुण
प्रश्न ५. अ: व्यावहारिक मराठी विभागावार दोन प्रश्न (पर्यायासह)	१० गुण
ब: मराठी व्याकरणावर सात पैकी पाच प्रश्न अनिवार्य	१० गुण

अंतर्गत मुल्यमापन : एकूण गुण: २०

५. वर्गातील उपस्थिती	: ५ गुण
६. गृहपाठ	: ५ गुण
७. महाविद्यालयीन उपक्रमांत सहभाग	: ५ गुण
८. मौखिक परीक्षा	: ५ गुण

BACHELOR OF COMMERCE
(THREE YEARS UG COURSE IN FACULTY OF COMMERCE AND MANAGEMENT)
COURSE AND EXAMINATION SCHEME WITH CHOICE BASED CREDIT SYTSEM
(Semester – 1)

Sr. No.	Area	Unique Subject Code	Subject	Course Scheme			No. of Credits	Examination Scheme (Maximum Marks)				Examination Scheme (Minimum Marks)			
				L	T	P		ESE	IA	P	Total	ESE	IA	P	Total
01	AECC (Foundation Course)	UCA1F01	Marathi/Hindi/Supplementary English	4	-	-	2	80	20	-	100	40	-	-	40
02	Core (Core Course)	UCA1C02	Compulsory English	4	-	-	4	80	20	-	100	40	-	-	40
		UCA1C03	Financial Accounting - I	5	-	-	3	60	15	-	75	30	-	-	30
		UCA1C04	Business Economics – I	4	-	-	3	60	15	-	75	30	-	-	30
		UCA1C05	Principle of Management –I	4	-	-	3	60	15	-	75	30	-	-	30
		UCA1C06	Statistics Techniques and Business Mathematics – I	5	-	-	3	60	15	-	75	30	-	-	30
03	DSE	UCA1EM1	Group A Marketing Management (Basic Marketing Management- I)	4	-	-	4	80	20	-	100	40	-	-	40
		UCA1EH1	Group B Human Resource Development (Human Resource Management- I)	4	-	-	4	80	20	-	100	40	-	-	40
		UCA1EB1	Group C Banking and Insurance (Principle of Banking and Insurance-I)	4	-	-	4	80	20	-	100	40	-	-	40
		UCA1EH	Group D Information Technology (Information Communication Technology)	4	-	4/ Batch	4	60	15	25	100	30	10	-	40

Note : ESE = END SEMESTER EXAMINATION IE = INTERNAL EVALUATION

1.1.- Lecture T - Tutorial , P- Practical. IA- Internal Assessment.

2 For Compulsory English Tutorial week will be 1 for every batch of 20 Students.

3 Practical Periods for subject I/T 04 Periods/week/batch of 30 students.

4 For DSE subject Codes please refer note number 8 given below.

5 The Question Papers in the subjects Financial Accounting, Statistics Techniques and Business, Mathematics will be set in English/Marathi. However, the Practical/Numerical will be set in English only. The students of Marathi Medium will have the option to attempt the theory part in Marathi/Hindi and Practical Problems/Numerical in English only.

6 The Students shall opt for any one group of DSE. Once a group is selected in semester I, the same group shall have to be continued in all the semester.No change of group will be allowed.

7 The students shall opt for any one of the language Marathi/Hindi/Supplementary English in semester I.The same shall have to be continued upto semester IV.

8. Codes for DSE Subjects- Marketing- M, HRM-H, Banking & Insurance – B, Information Technology - I

Sr. No.	Area	Unique Subject Code	Subject	Course Scheme			No. of Credits	Examination Scheme (Maximum Marks)				Examination Scheme (Minimum Marks)			
				L	T	P		ESE	IA	P	Total	ESE	IA	P	Total
01	AECC (Foundation Course)	UCA2F01	Marathi/Hindi/Supplementary English	4	-	-	2	80	20	-	100	40	-	-	40
02	Core (Core Course)	UCA2C02	Compulsory English	4	-	-	4	80	20	-	100	40	-	-	40
		UCA2C03	Financial Accounting - II	5	-	-	3	60	15	-	75	30	-	-	30
		UCA2C04	Business Economics - II	4	-	-	3	60	15	-	75	30	-	-	30
		UCA2C05	Principle of Management - II	4	-	-	3	60	15	-	75	30	-	-	30
		UCA2C06	Statistics Techniques and Business Mathematics - II	5	-	-	3	60	15	-	75	30	-	-	30
03	DSE	UCA2EM2	Group -A Marketing Management (Basic Marketing Management-I I)	4	-	-	4	80	20	-	100	40	-	-	40
		UCA2EH2	Group -B Human Resource Development (Human Resource Management- II)	4	-	-	4	80	20	-	100	40	-	-	40
		UCA2EB2	Group -C Banking and Insurance (Principle of Banking and Insurance-II)	4	-	-	4	80	20	-	100	40	-	-	40
		UCA2EI2	Group -D Information Technology [Office Automation]	4	-	4/ Batch	4	60	15	25	100	30	10	-	40

Gondwana University, Gadchiroli

Syllabus for F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

(CBCS)

Semester-I

Compulsory English

Core Course-UCA1C02

(To be implemented from June 2017)

And

Semester-II

Compulsory English

Core Course-UCA2C02

(To be implemented from November 2017)

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

Compulsory English

Core Course

This Syllabus has been designed as per the instructions from the Ministry of Human Resource Development and University Grants Commission.

Objectives:-

- v) To enable and inspire the students to read and learn various types of texts and discuss among them about great achievers.
- vi) To instill poetic sense among students through reading of poetry.
- vii) To equip students with the practical business communication skills and to develop among them the ability to communicate effectively in English.
- viii) To inspire students to learn various soft skills regarding use of English in business and competitive world.
- ix) To upgrade students' grammatical sense and master the basic grammatical aspects of English language.

Books Prescribed for Semester I and II:

Prelude: A Text Book for College Students, edited by the Board of Editors

(Published by Orient BlackSwan)

Recommended reading for Grammar, Writing Skills and Soft Skills:

- vii) *English Grammar and Composition*, R. C. Jain, Macmillan India Limited, Chennai, 2003.
- viii) *A Course in English Grammar* by R. N. Bakshi, Orient Black Swan.
- ix) *The Communicator*, Orient BlackSwan, 2013.
- x) *A Course in English Grammar* by R. N. Bakshi, Orient Black Swan.
- xi) *Macmillan Foundation English* by R. K. Dwivedi & A. Kumar (Macmillan).
- xii) *Contemporary English Grammar & Composition* by David Green (Macmillan).

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

Compulsory English-

Core Course

Course Code- UCA1C02

Semester-I

Unit Wise Allotment of Marks

Sr. No.	Unit	Portion	Marks Allotted
1	I	Prose	25
2	II	Poetry	15
3	III	Grammar	20
4	IV	Writing Skills, Communication Skills and Personality Development Skills	20

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

**Semester- I
Compulsory English**

Pattern of Question Paper-

Time : Three Hours	Total Marks :80
Que. 1. A) One Long Answer Question out of Two to be answered in about 150 words (Based on Prescribed Prose)	10
B) One Long Answer Question out of Two to be answered in about 150 words (Based on Prescribed Poems)	10
Que. 2. A) Three Short Answer Questions out of Four to be answered in about 75 words each (Based on Prescribed Prose)	3X5=15
B) One Short Answer Question out of Two to be answered in about 75 words each (Based on Prescribed Poems)	1X5=5
Que. 3. A) Fill in the Blanks with appropriate Articles	3X1 = 3
B) Fill in the Blanks with appropriate Prepositions	3X1 = 3
C) Fill in the Blanks with appropriate Tense forms of Verbs	4X1 = 4
D) Correction of Sentences	4X1= 4
E) i) Synonyms	3X1 = 3
ii) Antonyms	3X1 = 3
Que. 4. A) Paragraph Writing with the help of given points	10
Que. 5. A) Two Short Answer Questions out of Four with internal choice on Leadership Skills , Team Work Skills, Time Management and Goal Setting.	2X5= 10

F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

Semester- I

Compulsory English

Internal Assessment (20 Marks)

The criteria for the award of Internal Assessment Marks will be as given below:

vii)	Unit Test Performance and Assignment Submission	: 10 Marks
viii)	Oral Test	: 05 Marks
ix)	Attendance/Overall Performance and Responsible Behaviour	: 05 Marks

Gondwana University, Gadchiroli

Syllabus for F. Y. B. Com. / B. Sc./B. Sc. (I.T.)/B. C. A. (Sci.)

(CBCS)

Semester-I

Compulsory Marathi-

Foundation Course- UCA1F01

(To be implemented from June 2017)

And

Semester-II

Compulsory Marathi-

Foundation Course- UCA2F01

(To be implemented from November 2017)

गोंडवाना विद्यापीठ, गडचिरोली

बी. कॉम / बी. एससी / बी. एससी. (I. T.) / बी. सी. ए. भाग १

मराठी आवश्यक : प्रथम सत्र

'अक्षरधारा'

अभ्यासक्रम वर्ष जून २०१७ पासून पुढे

गद्य विभाग:-

१. अखेरचे कीर्तन- गाडगेबाबा
२. लोकशाहीचे भवितव्य- डॉ. बाबासाहेब आंबेडकर
३. विज्ञानयुगात भारत. जयंत नारळीकर
४. भटक्या- कचरू जनार्दन गिन्हे
५. माणूस- उत्तम कांबळे

पद्य विभाग:-

१. पसायदान- ज्ञानेश्वर
२. विद्यार्थ्यांप्रत- केशवसुत
३. भंगू दे काठीण्य माझे- बा. सी. मढेंकर
४. स्वप्नांची समाप्ती- कुसुमाग्रज
५. लेखनीच्या तलवारी- उषाकिरण आत्राम

व्यावहारिक मराठी व व्याकरण:-

१. भाषिक कौशल्य आणि व्यक्तीमत्व विकास
२. भाषा, लिपी आणि वर्णविचार

गोंडवाना विद्यापीठ, गडचिरोली
बी. कॉम / बी. एससी / बी. एससी. (I. T.) / बी. सी. ए. भाग १

मराठी आवश्यक : प्रथम सत्र

विद्यापीठ परीक्षा: एकूण गुण: ८०

गुणविभाजन

प्रश्न १: गद्य विभागावर आधारित एक दीर्घोत्तरी प्रश्न (पर्यायासह)	१५ गुण
प्रश्न २: पद्य विभागावर आधारित एक दीर्घोत्तरी प्रश्न (पर्यायासह)	१५ गुण
प्रश्न ३: तीन लघुत्तरी उपप्रश्नांचा एक गट (गद्य विभाग— पर्यायासह)	१५ गुण
प्रश्न ४: तीन लघुत्तरी उपप्रश्नांचा एक गट (पद्य विभाग— पर्यायासह)	१५ गुण
प्रश्न ५. अ: व्यावहारिक मराठी विभागावार दोन प्रश्न (पर्यायासह)	१० गुण
ब: मराठी व्याकरणावर सात पैकी पाच प्रश्न अनिवार्य	१० गुण

अंतर्गत मुल्यमापन : एकूण गुण: २०

१. वर्गातील उपस्थिती	: ५ गुण
२. गृहपाठ	: ५ गुण
३. महाविद्यालयीन उपक्रमांत सहभाग	: ५ गुण
४. मौखिक परीक्षा	: ५ गुण

गोंडवाना विद्यापीठ, गडचिरोली
बी. कॉम / बी. एससी / बी. एससी. (I. T.) / बी. सी. ए. भाग १

मराठी आवश्यक : द्वितीय सत्र

'अक्षरघार'

अभ्यासक्रम नोव्हेंबर २०१७ पासून पुढे

पद्य विभाग:-

१. तोडून टाका हया सात स्वदेशी बेडया- स्वा. वि. दा. सावरकर
२. शिक्षक हाच राष्ट्राचा भाग्यविधाता- राष्ट्रसंत तुकडोजी महाराज
३. संकुचित प्रांतियतेचे धोके- पु. ल. देशपांडे
४. भरती- वसंत वन्हाडपांडे
५. पाणी अडवा, पाणी जिरवा- बाबा भांड

पद्य विभाग:-

१. तुकारामाचे अभंग- तुकाराम
२. खरा धर्म- साने गुरूजी
३. प्रेमाचा गुलकंद- प्र. के. अत्रे
४. आडवेळ्या पाऊस- शांता शेळके
५. जहर खाऊ नका- ज्ञानेश वाकुडकर

व्यावहारिक मराठी व व्याकरण:-

१. पत्रव्यवहार - व्यक्तीगत व कार्यालयीन
२. संधी - स्वरसंधी, व्यंजनसंधी व विसर्गसंधी

गोंडवाना विद्यापीठ, गडचिरोली

बी. कॉम / बी. एससी / बी. एससी. (I. T.) / बी. सी. ए. भाग १

मराठी आवश्यक : द्वितीय सत्र

विद्यापीठ परीक्षा: एकूण गुण: ८०

गुणविभाजन

प्रश्न १: गद्य विभागावर आधारित एक दीर्घोत्तरी प्रश्न (पर्यायासह)	१५ गुण
प्रश्न २: पद्य विभागावर आधारित एक दीर्घोत्तरी प्रश्न (पर्यायासह)	१५ गुण
प्रश्न ३: तीन लघुत्तरी उपप्रश्नांचा एक गट (गद्य विभाग— पर्यायासह)	१५ गुण
प्रश्न ४: तीन लघुत्तरी उपप्रश्नांचा एक गट (पद्य विभाग— पर्यायासह)	१५ गुण
प्रश्न ५. अ: व्यावहारिक मराठी विभागावर दोन प्रश्न (पर्यायासह)	१० गुण
ब: मराठी व्याकरणावर सात पैकी पाच प्रश्न अनिवार्य	१० गुण

अंतर्गत मुल्यमापन : एकूण गुण: २०

५. वर्गातील उपस्थिती	: ५ गुण
६. गृहपाठ	: ५ गुण
७. महाविद्यालयीन उपक्रमांत सहभाग	: ५ गुण
८. मौखिक परीक्षा	: ५ गुण

GONDWANA UNIVERSITY, GADCHIROLI



FACULTY OF SCIENCE AND TECHNOLOGY BOARD OF STUDIES IN ZOOLOGY

**SUBMISSION OF
CHOICE BASED CREDIT SYSTEM (CBCS)
SYLLABUS FOR UNDER GRADUATE (B. Sc.)
PROGRAMME OF SEMESTER I AND SEMESTER II
FROM SESSION 2017 - 18**

Discipline Core Courses

1. Animal Diversity
2. Cell Biology
3. Genetics and Evolutionary Biology
4. Comparative Anatomy and Developmental Biology of Vertebrates
5. Physiology and Biochemistry

Discipline Specific Electives (DSE) (Any two)

1. Parasitology
2. Applied Zoology
3. Insect, Vector and Diseases
4. Aquatic Biology
5. Immunology
6. Animal Biotechnology
7. Microtechnique, Bioinformatics and Biostatistics
8. Reproductive Biology

Skill Enhancement Courses (SEC)

1. Apiculture
2. Sericulture
3. Medical Diagnostics
4. Public Health and Hygiene

**SCHEME AND SYLLABUS UNDER
CHOICE BASED CREDIT SYSTEM
B.Sc. WITH ZOOLOGY**

Sem	Core Course (12)	Ability Enhancement Compulsory Courses AEC(2)	Skill Enhancement (Foundation) Courses SEC(4)	Discipline Specific Elective
I	CC - Chemistry P -I CC - Chemistry P -II CC - Botany P -I CC - Botany P -II CC - Zoology P -I CC - Zoology P -II	English (1) Marathi (1)		
II	CC - Chemistry P -III CC - Chemistry P -IV CC - Botany P -III CC - Botany P -IV CC - Zoology P -III CC - Zoology P -IV	English (1) Marathi (1)		
III	CC - Chemistry P -V CC - Chemistry P -VI CC - Botany P -V CC - Botany P -VI CC - Zoology P -V CC - Zoology P -VI		Environmental Studies	
IV	CC - Chemistry P -VII CC - Chemistry P -VIII CC - Botany P -VII CC - Botany P -VIII CC - Zoology P -VII CC - Zoology P -VIII		Environmental Studies	

V			SEC(Any one) 1. Apiculture 2. Sericulture	DSE (Any Two) 1.Parasitology 2.Applied Zoology 3. Insect Vectors and disease 4 Aquatic Biology
VI			SEC(Any One) 1. Medical diagnosis 2. Public Health & Hygiene	DSE (Any Two) 1. Immunology 2.Animal Biotechnology 3.Micro-technique, Bioinformatics and Biostatistics 4.Reproductive Biology

CBCS Syllabus in Zoology
Gondwana University, Gadchiroli

Sem - I

- Paper: I - Nonchordate - Protozoa to Annelida (Core Paper - I)
Paper : II - Cell Biology (Core Paper - II)

Sem - II

- Paper : I - Nonchordate - Arthropoda to Hemichordate(Core Paper - III)
Paper : II- Genetics & Evolution (Core Paper - IV)

Sem- III

- Paper : I Animal Diversity (Chordata) and Comparative Anatomy
(Core Paper – V)
Paper : II Physiology and Biochemistry – I (Core Paper - VI)

Sem- IV

- Paper : I Developmental Biology (Core Paper - VII)
Paper : II Physiology and Biochemistry – II (Core Paper -VIII)

Sem -V Skill Enhancement Course(SEC) Paper (Any One)

1. Apiculture
2. Sericulture

Sem -V Discipline Specific Elective (DSE) Paper (Any Two)

1. Parasitology
2. Applied Zoology
3. Insect, Vector and Diseases
4. Aquatic Biology

Sem- VI Skill Enhancement Course(SEC) Paper (Any One)

1. Medical Diagnosis
2. Public Health and Hygiene

Sem -VI Discipline Specific Elective (DSE) Paper (Any Two)

1. Immunology
2. Animal Biotechnology
3. Microtechnique, Bioinformatics and Biostatistics
4. Reproductive Biology

GONDWANA UNIVERSITY, GADCHIROLI
PROGRAMME- BACHELOR OF SCIENCE (B.Sc.), SEMESTER-I&II

SUBJECT- ZOOLOGY,
CORE PAPER I/II/III/IV

USZOT01/02/03/04

Question Paper Pattern

Maximum Marks - 50

Time - 3 Hours

All questions carry equal marks

Q.1 (10 Marks) Unit I

OR

a. Unit I (5 Marks)

b. Unit I (5 Marks)

Q.2 (10 Marks) Unit II

OR

a. Unit II (5 Marks)

b. Unit II (5 Marks)

Q.3 (10 Marks) Unit III

OR

a. Unit III (5 Marks)

b. Unit III (5 Marks)

Q.4 (10 Marks) Unit IV

OR

a. Unit IV (5 Marks)

b. Unit IV (5 Marks)

Q.5 (10 Marks - 1Mark each)

Solve any 10 out of 12 (3 Questions from each unit)

**GONDWANA UNIVERSITY
GADCHIROLI**

SYLLABUS

For

B. Sc.

BOTANY

SEMESTER I & II

Under

Choice Based Credit System

(CBCS)

(With effect from : 2016-17)

GONDWANA UNIVERSITY
GADCHIROLI

SYLLABUS

For

B. Sc.

BOTANY

SEMESTER I & II

Under

Choice Based Credit System

(CBCS)

(With effect from: 2016-17)

SEMESTER – I:

Papers	Title of the Paper	Th/Pr	Int.Assessment	Total Marks
Paper – I USCBOTT01	Plant Diversity I (Micro-organisms, Algae, Fungi and Plant Pathology)	50 Marks	10 Marks	60 Marks
Paper – II USCBOTT02	Plant Diversity II (Bryophyta, Pteridophyta, Gymnosperm and Paleobotany)	50 Marks	10 Marks	60 Marks
Practical USCBOTP01	Based on Theory Paper –I & II of Semester – I	30 Marks	-----	30 Marks
Internal Assessment: Based on Assignment, Seminar, Unit Test & Overall Attendance and P erformance of the student				

SEMESTER – II:

Papers	Title of the Paper	Th/Pr	Int.Assessment	Total Marks
Paper – I USCBOTT03	Morphology and Anatomy of Angiosperms	50 Marks	10 Marks	60 Marks
Paper – II USCBOTT04	Taxonomy & Diversity of Angiosperms	50 Marks	10 Marks	60 Marks
Practical USCBOTP02	Based on Theory Paper –I & II of Semester – II	30 Marks	-----	30 Marks
Internal Assessment: Based on Assignment, Seminar, Unit Test & Overall Attendance and Performance of the student				

GONDWANA UNIVERSITY, GADCHIROLI

CBCS Semester Pattern Syllabus

For

B.Sc. BOTANY

SEMESTER – I

PRACTICAL

USCBOTP01

Based on Theory Paper - I & II of Semester – I

[Time 5 Hours]

[Max. Marks – 30]

- Que. 1: Gram-stain the **Bacterial** strain/stain the **Cyanobacterial** material [A] and identify?
[Writing not necessary] 03 Marks
- Que. 2: Prepare temporary mount, Identify and classify the given **Algal** material [B]
[Slide preparation 2 marks, writing 1 mark] 03 Marks
- Que. 3: Prepare temporary mount, Identify and classify the given **Fungal** material [C]
[Slide preparation 2 marks, writing 1 mark] 03 Marks
- Que. 4: Prepare temporary mount, Identify and classify the given **Bryophytic** material [D]
[Slide preparation 2 marks, writing 1 mark] 03 Marks
- Que. 5: Prepare temporary mount, Identify and classify the given **Pteridophytic** material [E]
[Slide preparation 2 marks, writing 1 mark] 03 Marks
- Que. 6: Prepare temporary mount, Identify and classify the given **Gymnospermic** material [F]
[Slide preparation 2 marks, writing 1 mark] 03 Marks
- Que. 7: SPOTTING:
SPOT-G: **Algae**
SPOT-H: **Fungi/ Lichens**
SPOT-I: **Plant Pathology**
SPOT-J: **Bryophyta/Pteridophyta**
SPOT-K: **Gymnosperms**
SPOT-L: **Fossils** 06 Marks
- Que. 8: Practical Record (2 Marks)
Excursion Report (2 Marks)
Viva-voce (2 Marks) 06 Marks

NOTE: Well labeled diagrams are expected wherever necessary.

GONDWANA UNIVERSITY, GADCHIROLI
CBCS Theory Question Paper
Pattern For
B.Sc. BOTANY SEMESTER – I
Theory

All questions are compulsory and carry equal marks
Draw well labelled diagram where ever necessary

[Time 3 Hours]

[Max. Marks – 50]

Question 1. Based on Unit - I

05 x 2 = 10

- a. Unit - I
- b. Unit - I
- OR
- c. Unit - I
- d. Unit - I
- e. Unit - I
- f. Unit - I

02½ x4 = 10

Question 2. Based on Unit - II

05 x 2 = 10

- a. Unit II
- b. Unit II
- OR
- c. Unit II
- d. Unit II
- e. Unit II
- f. Unit II

02½ x4 = 10

Question 3. Based on Unit - III

05 x 2 = 10

- a. Unit III
- b. Unit III
- OR
- c. Unit III
- d. Unit III
- e. Unit III
- f. Unit III

02½ x4 = 10

Question 4. Based on Unit - IV

05 x 2 = 10

- a. Unit IV
- b. Unit IV
- OR
- c. Unit IV
- d. Unit IV
- e. Unit IV
- f. Unit IV

02½ x4 = 10

Question 5. Write any Ten questions in one or two lines only
(Diagrams are NOT necessary)

1 x 10 =10

- a. Unit I
- b. Unit I
- c. Unit I
- d. Unit II
- e. Unit II
- f. Unit II
- g. Unit III
- h. Unit III
- i. Unit III
- j. Unit IV
- k. Unit IV
- l. Unit IV

GONDWANA UNIVERSITY, GADCHIROLI

B.Sc.-I Semester I (Chemistry)

(Effective from 2017-18)

1) There will be two theory papers in every semester which carry 50 marks each and duration of paper is 3 hrs.

2) There will be internal assessment of 10 marks per paper per semester.

3) There will be practical examination of 4-5 hours duration and carries 30 marks.

So, the total marks allotted to the chemistry subject per semester is 150 marks.

Theory (100 marks) + Internal assessment (10+10 marks) + Practical (30 Marks) = 150 marks (total)

4) The internal assessment will be based on Attendance, Home assignment, Unit test, Terminal test and participation in departmental activities.

The following syllabi are prescribed on the basis of six lectures per week and six practical periods per batch per week. Each theory paper consists of four units of twelve lectures per unit.

THEORY PAPER PATTERN FOR VARIOUS SEMESTER

Semester No.	Paper –I	Paper-II	Practical
Semester I	Inorganic Chemistry (USCChT01)	Organic Chemistry (USCChT02)	PRACTICAL(USCChP01)
Semester II	Organic Chemistry (USCChT03)	Physical Chemistry (USCChT04)	PRACTICAL(USCChP02)
Semester III	Inorganic Chemistry (USCChT05)	Physical Chemistry (USCChT06)	PRACTICAL(USCChP03)
Semester IV	Inorganic Chemistry (USCChT07)	Organic Chemistry (USCChT08)	PRACTICAL(USCChP04)
Semester V	DSE I	DSE II	PRACTICAL
Semester V	DSE I	DSE II	PRACTICAL

Question Paper Pattern

Que.-1 (From Unit I) – (A-5 Marks + B-5 Marks) = 10 Marks or (a-2.5 + b-2.5 + c-2.5 + d-2.5) = 10 Marks

Que.-2 (From Unit II) – (A-5 Marks + B-5 Marks) = 10 Marks or (a-2.5 + b-2.5 + c-2.5 + d-2.5) = 10 Marks

Que.-3 (From Unit III) – (A-5 Marks + B-5 Marks) = 10 Marks or (a-2.5 + b-2.5 + c-2.5 + d-2.5) = 10 Marks

Que.-4 (From Unit IV) – (A-5 Marks + B-5 Marks) = 10 Marks or (a-2.5 + b-2.5 + c-2.5 + d-2.5) = 10 Marks

Que.-5 Solve any 10 out of 12 short answer question each carry one mark (3 short question from each unit)

B.Sc. Part I (Semester - I)

USCHT01

Paper - I (Inorganic Chemistry)

Total marks: 50 Total Lectures: 48

Note: Figures to the right hand side indicate number of lectures

UNIT I

- (A) **Atomic Structure** : Review of Bohr's Theory and its Limitations, Idea of de-Broglie matter waves, Heisenberg's uncertainty principle, Schrodinger wave equation, significance of Ψ and Ψ^2 , quantum numbers, radial and angular wave functions and probability distribution curves, atomic orbital, shapes of s, p and d-orbital, Aufbau and Pauli's exclusion principle, Hund's multiplicity rule, electronic configuration of the elements and ions. [6 L]
- (B) **Periodic Properties**: Atomic and ionic radii, ionization energy, electron affinity and electronegativity - definition, trends in periodic table and applications in predicting and explaining the chemical behavior, factors affecting ionization potential. Pauling's and Mulliken's scales of electronegativity, effective nuclear charge and Slater's rules with some exercise. [6 L]

UNIT II

- (A) **Covalent Bond**: Valence bond theory and its limitations, directional of covalent bond, overlap criteria of bond strength, Bond energy, bond strength, bond order and bond angle. Various types of hybridization and shapes of simple inorganic molecules and ions. Valence shell electron pair repulsion (VSEPR) theory to NH_3 , H_3O^+ , SF_4 , ClF_3 , ICl_3 and H_2O . [6 L]
- (B) **Molecular Orbital Theory**: LCAO approximation, wave equation for molecular orbitals, difference between bonding and antibonding MOs in terms of energy and electron density distribution curves, order of energy levels in MOs. MO diagrams for homonuclear diatomic molecules of hydrogen, helium and second row of periodic table. Concept of non-bonding MOs in HF molecule, Coulson's MO diagram of CO and NO. [6 L]

Distribution of Marks for Practical Examination

Time 4-5 hours (One Day Examination)	Marks 30
Inorganic Chemistry (Exercise)	12
Organic Chemistry (Exercise)	
(Element : 4 M, Functional group: 4 M. & M. Pt./ B. Pt. 4 M)	12
Viva-Voce	03
Record	03
<hr/>	
Total:	30

GONDWANA UNIVERSITY

GADCHIROLI

Proposed Syllabus For

B.Sc. Mathematics

Semester-I & Semester-II

Under Choice Based Credit System

(C.B.C.S.)

with effect from

Academic Year :2017-18

(Considered and approved in B.O.S.)

B.Sc. (MATHEMATICS)

SEMESTER WISE DISTRIBUTION OF MARKS AND CREDITS

Sr. No.	Class	Semester	Theory Paper Marks		Internal Assessment Marks	Total Marks
			Paper I	Paper II		
1	B. Sc	I	60	60	15+15	150
2	B. Sc	II	60	60	15+15	150
			100	100	100	300

Semester	Papers	University Exam.	Internal Assessment	Total
		Marks - Credits	Marks - Credits	Marks - Credits
I	2(Core Course)	$2 \times 60 - 2 \times 2$	$2 \times 15 - 2 \times 1 = 2$	150-6
II	2(Core Course)	$2 \times 60 - 2 \times 2$	$2 \times 15 - 2 \times 1 = 2$	150-6

DISTRIBUTION OF MARKS FOR INTERNAL ASSESSMENT

Sr. No.	Activities	Max. Marks
1	Attendance	05(Compulsory)
	Any Two of the Following Activities	
1	Seminar	05
2	Unit Tests	05
3	Home Assignments	05

Total Marks -15

Minimum Passing Marks -06

Board of Studies in Physics
FACULTY OF SCIENCE
GONDWANA UNIVERSITY, GADCHIROLI

Syllabus of

B.Sc. First Year (Semester pattern)
(Choice Based Credit System)

SUBJECT - PHYSICS

Semester I & Semester II

7. The distribution of marks for practical examination is as follows.

Record Book	----	6
Viva-voce	----	6
Experiment	----	18
TOTAL	----	30

8. Evaluation of the student during the semester for internal assessment:-

i) For Theory internal

S.N.	Work Assigned	Marks	Marks Obtained
1	Assignment	02	
2	Class Test	05	
3	Active Participation/Seminar/Routine Activity etc.	03	

Signature of teacher in-charge

Head of Department

9. The internal assessment shall be done by respective college and the marks shall be sent to the university one month prior to the final examination of each semester.

10. All theory papers shall be divided into four units. Each unit shall be cover in 15 periods of 48 minutes.

11. The theory question paper shall be of 3 hours duration and comprise of 5 questions with internal choice and with equal weightage to all units. The pattern of question paper shall be as follows.

Pattern of Question Paper

Subject – Physics

Time: 3 Hours

Maximum
marks :50

Question No.		Marks Allotted
Qu. 1	EITHER	
	A (From Unit – I) (i, ii, iii, two or three bits including numerical)	10
	OR	
	B (From Unit – I) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 2	EITHER	
	A (From Unit – II) (i, ii, iii, two or three bits including numerical)	10
	OR	
	B (From Unit – II) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 3	EITHER	
	A (From Unit – III) (i, ii, iii, two or three bits including numerical)	10
	OR	
	B (From Unit – III) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 4	EITHER	
	A (From Unit – IV) (i, ii, iii, two or three bits including numerical)	10
	OR	
	B (From Unit – IV) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 5	Attempt any TEN questions from the following.	
a)	From Unit I	1
b)	From Unit I	1
c)	From Unit I	1
d)	From Unit II	1
e)	From Unit II	1
f)	From Unit II	1
g)	From Unit III	1
h)	From Unit III	1
i)	From Unit III	1
j)	From Unit IV	1
k)	From Unit IV	1
l)	From Unit IV	1

The above pattern is for all two papers of each semester of B.Sc. I (CBCS pattern) & B.Sc. II (CBCS pattern) w.e.f. 2018-19 and B.Sc. III from next subsequent years

Proposed Syllabus for B.Sc. I CBCS (Semester Pattern) Subject – Physics

The syllabus of Physics as per semester system for the B.Sc. I will be implemented from the Academic year 2017-2018.

Name of Programme	Duration	Semester	Subject :- Physics	Code	Title
B.Sc. I	Two semesters	I	Theory	USPHT01	Mechanics and Relativity
				USPHT02	Gravitation, Oscillation and Properties of Matter
			Practical	USPHP01	10 experiments
		II	Theory	USPHT03	Vector Analysis and Electrostatics
				USPHT04	Magnetostatics and Electromagnetic Waves
			Practical	USPHP02	10 experiments

Gondwana University, Gadchiroli

Choice Based Credit System (CBCS) Syllabus

B. Sc. I

Subject: Electronics

Semester-I & II

Board of Studies - Electronics

Gondwana University Gadchiroli

Scheme of Bachelor of Science for CBCS Semester Examination

Gondwana University, Gadchiroli

Subject: Electronics

Class	Semester	Paper	Teaching Scheme Per Week			Examination Scheme				
			Theory	Total	Practical	Theory Marks			Practical Marks	Total Marks
						Paper	Internal Assessment	Total		
B.Sc.I	I	I	3	6 + 1T*	6	50	10	120	30	150
		II	3			50	10			
	II	I	3	6 + 1T*	6	50	10	120	30	150
		II	3			50	10			
B.Sc. II	III	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			
	IV	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			
B.Sc.III	V	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			
	VI	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			

* Periods for Tutorials per batch.

** The student should appear in the University practical examination otherwise he/she will be treated as a failed. However their internal marks will be carried forward.

Pattern of Question Papers (UG)

Time : 3 Hours

Maximum marks : 50

Question No. Marks Allotted

Qu. 1 Either

From Unit - I 10

Or

From Unit - I 10

Qu. 2 Either

From Unit - II 10

Or

From Unit - II 10

Qu. 3 Either

From Unit - III 10

Or

From Unit - III 10

Qu. 4 Either

From Unit - IV 10

Or

From Unit - IV 10

Q.5 Solve any 10 out of 12 questions 10 marks
(3 questions from each unit) 1 mark each

The above pattern is for all papers of each semester of B. Sc. I, w.e.f. 2016-2017 and for B.Sc. II and B.Sc. III from subsequent years.

Details of the Syllabus

B.Sc. (First Year)

Subject: Electronics

Scheme for Semester-I

W.E.F. 2016-17

Paper	No. of Periods per week (48 minutes each)			Marks				
	Lecture	Practical	Tutorial	Theory	Internal Assessment	Theory Total	Practical	Total
Paper – I (USELT01) Network Analysis and Digital Fundamentals	3	6	1	50	10	120	30	150
Paper – II (USELT02) Semiconductor Diodes and Analog Electronics	3			50	10			

Details of the Syllabus
B.Sc. (First Year)
Subject: Electronics
Scheme for Semester-II
W.E.F. 2016-17

Paper	No. of Periods per week (48 minutes each)			Marks				
	Lecture	Practical	Tutorial	Theory	Internal Assessment	Theory Total	Practical	Total
Paper – I (USELT03) Unipolar Devices and Linear Integrated Circuits	3	6	1	50	10	120	30	150
Paper – II (USELT04) Digital Integrated Circuit	3			50	10			

CHOICE BASED CREDIT SYSTEM
B. Sc. SEM-II
ELECTONICS

Paper-I (USELT03)
(Unipolar Devices and Linear Integrated Circuits)

Theory: 48Lectures

Credit 2

UNIT-I: Unipolar Devices: JFET: Construction, working and I-V characteristics (output and transfer), Pinch-off voltage, comparison of BJT and FET, parameters of JFET, JFET as an amplifier (common source), Construction and working of MOSFET (depletion and enhancement), advantages and disadvantages of MOSFET, UJT: basic construction, working, equivalent circuit and I-V characteristics. **12L**

Theory Internal Assessment (20 marks)

Sr.No.	Internal Assessment	P-I	P-II	T (20)
01	Assignment	02	02	04
02	Class test	05	05	10
03	Active participation in routine class activities / seminars etc.	03	03	06
	Total	10	10	20

PRACTICALS (conducted by internal and external examiners) (USELP02):

It is divided into two sections i.e. Section-A and Section-B. At least five experiments from each section must be performed and the practical record book duly signed should be submitted at the time of examination. Each student is expected to perform one experiment from each section, in the University Examination. The duration of practical examination is six hours.

Marks Distribution:

	Record	Experiment	Viva	Total
Section – A	3	9	3	15
Section – B	3	9	3	15
		Total		30

Section-A: List of Experiments:

1. Study of the output and transfer I-V characteristics of common source JFET.
2. Study of the I-V Characteristics of UJT.
3. Study of the RC Phase Shift Oscillator.
4. Study of RC coupled amplifier (frequency response).
5. Study of the Colpitt's Oscillator.
6. Study of an inverting amplifier using Op-amp (741) for dc voltage.
7. Study of non-inverting amplifier using Op-amp (741) for dc voltage.
8. Study of adder using Op-amp (for dc).
9. Study of subtractor using Op-amp (for dc).
10. Study of an op-amp as an Integrator.
11. Study of op-amp as differentiator
12. Study of zero-crossing detector and comparator using op-amp.

Gondwana University, Gadchiroli



Choice Based Credit System (CBCS)

**Syllabus
of**

**B.Sc. (Computer Science) - I
Optional Subject
(Three Years Degree Course)**

Submitted by

Dr. S. B. Kishor

Chairman, BOS Computer Science

2017-2018

B.Sc. (Computer Science) is one of the optional subjects along with other two subjects offered/selected by student among the groups offered by respective college.

B.Sc. (Computer Science)- I(Semester - I)											
Subject	Paper Code	Paper Name	Total Period /Week	Credit	Theory (Th) Assessment				Practical (Prac.) Assessment		Total (Th +Prac)
					IA	UE	Total	Min. Passing (35%)	UE	Min. Passing (35)	
Core Course	USCST01	INFORMATION AND COMMUNICATION TECHNOLOGY	6T + 1Tu (Per Batch)	6	10	50	60	42 Marks	30	11	150
	USCST02	PROGRAMMING TECHNIQUES & INTRODUCTION TO 'C'			10	50	60				

*Student must appear for University Practical Examination otherwise he/she will be treated as fail. However their Internal marks will be carried forward.

- **Core:** Major theory papers in the concerned subject.
- T represents Theory while TU represent Tutorial.
- **IA(Internal Assessment)** :It will be evaluated by Internal Examiner appointed by College in consultation with the University. (Refer Appendix 1)
- **UE(University Examination):** It will be evaluated by External Examiner appointed by University. (Refer Appendix 1 & 3)
- **Period:** Each period is of 48 minutes or as per Government direction from time to time.
- **In Paper Code**
 - 1st Letter (U) : Represent it a Under Graduate Course.
 - 2nd Letter (S) : Represent it is Science Faculty
 - Next 2 Letter (CS) : Represent the subject Computer Science
 - Next Letter (T/P) : T : Represent Theory Paper (Refer Appendix 1)
P : Represent Practical (Refer Appendix 1 & 2)
 - Last two letter : Represent Paper No. for Ex. 01 Represent Paper no. 1
- **Lab* : 1)** Not more than two students should be allowed to do practical on one machine.2)Wherever possible Practical's should be perform using Open Source Software.
- **Batch:** Each batch can be of Maximum 16 students.

B.Sc. (Computer Science)– I(Semester - II)

Subject	Paper Code	Paper Name	Total Period /Week	Credit	Theory (Th) Assessment			Practical (Prac.) Assessment		Total (Th +Prac)	
					IA	UE	Total	Min. Passing (35%)	UE		Min. Passing (35%)
Core Course	USCST03	OPERATING SYSTEM & LINUX	6T + 1Tu (Per Batch)	6	10	50	60	42	30	11	150
	USCST04	STRUCTURED Programming With 'C'			10	50	60				



**GONDWANA
UNIVERSITY**

GADCHIROLI

CHOICE BASE CREDIT SYSTEM

(CBCS)

SYLLABUS FOR

B.Sc. I Sem I & II

THREE-YEARS DEGREE COURSE

IN

MICROBIOLOGY

From

Academic Year

2017-2018

GONDWANA UNIVERSITY, GADCHIROLI

CHOICE BASED CREDIT SYSTEM

FOR B.Sc. PROGRAM

MICROBIOLOGY

B.Sc.I (Sem I &II)

- There shall be two semesters in B.Sc. Part I. Each semester comprise of two theory papers, practical and internal assessment.
- The syllabus is based on six theory periods and six practical periods per week.
- Each theory paper divided into four units.
- **Scheme of examination:** It is divided into two parts- Internal assessment (college assessment) and external assessment (semester end examination conducted by university).

The internal assessment marks assigned to each theory paper shall be awarded on the basis of Based on Assignment, Seminar, Unit Test & overall attendance and performance of the student

- **The Semester End Examination for Microbiology course will be as follows:**
50 marks Paper I + 50 marks Paper II (External assessment- University examination)
10 marks Paper I + 10 marks Paper II (Internal assessment/College Assessment)
Total - 120 Marks Theory.
- One practical course: 30 marks
- Duration of examination for each theory paper will be 3 hours.
- The practical examination shall be of 6 hours duration for 2 days.
- Question paper will consist of five questions and each question will be of 10 marks.
- All questions will be compulsory and with internal choice.
- Fifth question will be compulsory with questions from each of the four units having equal weightage and there will be no internal choice.
- Practical examination for odd semester will be at college level and for even semester at university level with external examiner.

- The marks will be given for all examinations and they will be converted into grade points. The final grade card will have marks, credits, grades, grade points, SGPA& CGPA

Scheme of Teaching and Examination: B.Sc. Microbiology CBCS (Sem. I & II)

Semester	Paper No	Paper code	Title of Paper	Periods/week	Max Marks		Total Marks	Credit	Total: Th+Pract
					External(U.A.)	Internal(C.A.)			
I	I	USMBT01	Fundamentals of Microbiology	03	50	10	60	2	150
	II	USMBT02	Microbial Techniques	03	50	10	60	2	
	Practical	USMBP01		06	30	-	30	2	
II	I	USMBT03	General Biochemistry	03	50	10	60	2	150
	II	USMBT04	Applied Microbiology	03	50	10	60	2	
	Practical	USMBP02		06	30	-	30	2	

QUESTION PAPER PATTERN

F.Y. B.Sc. Semester I&II

MICROBIOLOGY

Time: 3 Hours

Max. Marks: 50

Note: All questions are compulsory and carry equal marks Draw well labeled diagrams wherever necessary

Q 1 Long answer type question from Unit I

10 Marks

OR

a) Short answer type question from Unit I

2½ Marks each

b) Short answer type question from Unit I

c) Short answer type question from Unit I

d) Short answer type question from Unit I

Q 2 Long answer type question from Unit II

10 Marks

OR

a) Short answer type question from Unit II

2½ Marks each

b) Short answer type question from Unit II

c) Short answer type question from Unit II

d) Short answer type question from Unit II

Q 3 Long answer type question from Unit III

10 Marks

OR

a) Short answer type question from Unit III

2½ Marks each

b) Short answer type question from Unit III

c) Short answer type question from Unit III

d) Short answer type question from Unit III

Q 4 Long answer type question from Unit IV

10 Marks

OR

a) Short answer type question from Unit IV

2½ Marks each

b) Short answer type question from Unit IV

c) Short answer type question from Unit IV

d) Short answer type question from Unit IV

Q 5 Solve any 10 out of 12 questions (3 questions from each unit)

10 Marks

GONDWANA UNIVERSITY, GADCHIROLI

S. Y. B. A. Sem- III- CBCS

COMPULSORY ENGLISH

For the session 2019-20 and onwards

Content		Marks Allotted
Unit- I : Prose-		(20)
1. Speech on Indian Independence	Jawaharlal Nehru	
2. The Human Environment	Indira Gandhi	
3. TV as Babysitter	Jerzy Kosinski	
Unit- II : Poetry-		(20)
1. Sonnet 29	William Shakespeare	
2. Ecology	A. K. Ramanujan	
3. An Old Woman	Arun Kolatkar	
Unit- III : Grammar-		(10)
A. One word Substitution		
B. Question Tags		
C. Formation of Noun, Adjective, Verb, Adverb		
Unit- IV : Communication / Writing Skills-		(30)
A. Asking for Directions and Giving Directions		
B. Thanking Someone and Responding to Thanks		
C. Comprehension		
D. Understanding Advertisements		

QUESTION PAPER PATTERN FOR SEMESTER-III

Total Marks: 80

Que. 1. Answer the following questions in about 150 words each.

(Any Two out of Three Based on Unit I-Prose) 2x10= 20

Que. 2. Answer the following questions in about 150 words each.

(Any Two out of Three Based on Unit II-Poetry) 2x10= 20

Que. 3. A) One Word Substitution (Based on Unit III-A) 3x1= 03

B) Question Tags (Based on Unit III-B) 3x1= 03

C) Do as directed (Based on Unit III-B) 4x1= 04

Que. 4. A) Do as Directed with Internal Choice

(Based on Unit IV- Communication Skills) 1x5= 05

B) Do as Directed with Internal Choice

(Based on Unit IV- Communication Skills) 1x5= 05

Que. 5. A) Read the passage carefully and answer the questions given below

(Based on Unit IV- Writing Skills) 1x10=10

B) Understanding Advertisements

(Based on Unit IV- Writing Skills) 1x10=10

The Internal Assessment will be of 20 marks out of which 5 marks will be for Attendance and overall performance, 5 marks for Home Assignments, and 10 marks for Unit Test and Oral Test.

अभ्यासपत्रिका-आवश्यक मराठी

(Ability Enhancement Compulsory Course)

अभ्यासग्रंथ - 'साहित्य सरिता' भाग - २ (संपादित ग्रंथ)

सत्र तिसरे

गद्य विभाग

- १) उद्योग करण्याची आवश्यकता- लोकहितवादी
- २) सार्वजनिक सत्यधर्म - महात्मा फुले
- ३) अंधश्रद्धा निर्मूलन चळवळीची वाटचाल - नरेंद्र दाभोळकर
- ४) अन्वशशा फकीर - मधुकर वाकोडे
- ५) स्त्री प्रतिमेची संकल्पना : स्वरूप आणि वास्तव - भा.ल. भोळे
- ६) पुस्तकाची पाने चाळताना - इसादास भडके

पद्य विभाग

- १) नमो पूर्ण कृपाळ - सगनभाऊ
- २) काही काव्यरचना - सावित्रीबाई फुले
- ३) निमित्ताची ठिणगी - यशवंत मनोहर
- ४) आईच्या पदराखालून - कल्पना दुधाळ
- ५) अल्बम - पी. विठ्ठल
- ६) तोरण - इरफान शेख

सत्र चवथे

गद्य विभाग

- १) दलित वाङ्मय : एक विचार - शरच्चंद्र मुक्तिबोध
- २) सांगावा - शंकरराव खरात
- ३) धूमकेतू - जयंत नारळीकर
- ४) अस्पृश्यांचा आधारवड - शिवाजी सावंत
- ५) झाडीपट्टीची दंडार : दशा आणि दिशा - हरिश्चंद्र बोरकर
- ६) सेवाग्राम ते शोधग्राम - अभय बंग

पद्य विभाग

- १) अखेर कमाई - कुसुमाग्रज
- २) शेला - इंदिरा संत
- ३) इतकी वर्ष झालीत आपल्या संसाराला - चंद्रकांत पाटील
- ४) शेतकरी - बबन सराडकर
- ५) स्फोट - नीरजा
- ६) मला एक संस्कृती सापडली आहे -चंद्रकांत वाघमारे

आवश्यक मराठी - सत्र तिसरे व चवथे

अभ्यासग्रंथ - 'साहित्य सरिता' भाग - २ (संपादित ग्रंथ)

प्रश्नपत्रिकेचे स्वरूप वगुणविभागणी-(गुण विभागणी ८०+२०)एकुण १०० गुण
लेखी परिक्षा - ८० गुण श्रेयांक - ०४

- प्रश्न १. दीर्घोत्तरी प्रश्न -गद्य (दोनपैकी एक सोडवा) - गुण १६
प्रश्न २. दीर्घोत्तरी प्रश्न -पद्य (दोनपैकी एक सोडवा) - गुण १६
प्रश्न ३. लघुत्तरी चार प्रश्न -गद्य (दोन गट-'अ' किंवा
गट - 'आ' पैकी एक गट सोडवा) -गुण १६
प्रश्न ४. लघुत्तरी चार प्रश्न -पद्य (दोन गट-'क' किंवा
गट - 'ख' पैकी एक गट सोडवा) - गुण १६
प्रश्न ५. थोडक्यात उत्तरे लिहा. (सर्व प्रश्न अनिवार्य) - गुण १६
दोन प्रश्न गद्य- दोन प्रश्न पद्य

- अंतर्गत गुण - २० : १) वर्गातील नियमित उपस्थिती - गुण ०५
२) स्वाध्याय -गुण १०
३) मौखिक चाचणी -गुण ०५

Syllabus for B.A. (Part II) Semester III & IV Examination

Macro Economics - I & II

स्थूलअर्थशास्त्र -I & II

Time : Three Hours

Max. Marks : 80

- N.B : 1) All questions are compulsory.
2) All questions carry equal marks.

1) Long Question For 16 Marks
OR
Long Question

2) Long Question For 16 Marks
OR
Long Question

3) Answer the Following Short Questions (Solved Any Two) For 16 Marks

a) b) c) d) Each 8

Marks

4) Answer the Following Short Questions (Solved Any Two) For 16 Marks

a) b) c) d) Each 8

Marks

5) Write a short note (Solved All) For 16 Marks

i) ii) iii) iv) v) vi) vii) viii) Each 2 Marks

Note : 1) One question from each unit.

2) Questions No. 5 should be asked from all units with equal distribution of marks.

B.A. I (Economics) (Nature of Internal Assessment)

Semester Pattern

- 1) Assignment to students by respective paper teachers - 05 marks.
- 2) Attendance of the students - 05 marks
- 3) Seminar / presentation of the student to the respective paper (by respective paper teacher) - 10 marks

Model Question Paper

Model Que. Paper - 1		Model Que. Paper - 1		Model Que. Paper - 1		Model Que. Paper - 1
Q.1 Unit No. 3	Or	Q.1 Unit No.1	Or	Q.1 Unit No. 2	Or	Q.1 Unit No. 4
Q.1 Unit No. 1		Q.2Unit No. 2		Q.2Unit No. 4		Q.2Unit No. 3
Q.3Unit No. 2		Q.3 Unit No. 4		Q.3Unit No. 3		Q.3Unit No. 1
Q.4Unit No. 4		Q.4 Unit No. 3		Q.4Unit No. 1		Q.4Unit No. 2
Q.5 Unit No.1,2,3,4	Or	Q.5 Unit No.1,2,3,4	Or	Q.5 Unit No.1,2,3,4	Or	Q.5 Unit No.1,2,3,4

**Semester Pattern Scheme of Examinations for
Economics
B.A. Part II - Semester III & IV**

			Examination		internal Assessment		Total	
			Marks	Credits	Marks	Credits	Marks	Credits
Sem - III	Macro Economics - I	Full Marks	80	4	20	1	100	5
		Pass Marks	32	1.6	8	0.4	40	2
Sem - IV	Macro Economics - I	Full Marks	80	4	20	1	100	5
		Pass Marks	32	1.6	8	0.4	40	2

B. A. – Sociology

Sem- III,IV

Pattern of Question paper

1. There will be four units in each paper
2. Question paper will consist of five questions & all questions shall be compulsory.
3. Four questions will be an four units with internal choice (one question on each units)
4. Fifth question will be compulsory with questions from each of the four units having each of weightage & there will be no internal choice.
5. Each paper will be of 3 hours questions.
6. Minimum passing marks in each head (theory , practical & internal assessment) will be, 35%

B.A. Part II

Internal Assessment System

Subject: Sociology

Indian Society : Issues and problems - sem - III

- Sem - IV

Internal Assessment system - 20 Marks (Each Semester)

(As per syllabus)

1. Class seminar :

Two Class seminar in academic session :

i) Seminar III - 10 Marks

ii) Seminar IV - 10 Marks

2. Home Assignment :

i) Seminar III - 5 Marks

ii) Seminar IV - 5 Marks

3. Oral Test & personality Test :

(Co-operation, Leadership, Presentation, Confidence)

i) Semester III - 05 Marks

ii) Semester IV - 05 Marks

Total - 40 Marks (20 Marks each Semester)

GONDWANA UNIVERSITY, GADCHIROLI
Nature of Question Paper for Semester Pattern
B.A. Part-II

Indian Society : Issues and Problems
Sem III & IV

Time : 3Hours

Total Marks : 80 Marks

- Instructions : 1. All Questions are compulsory
2. Figures to the rights indicate full marks.

- Q. 1. Answer any one long type question of the following.
(Any one out of two) 16 Marks
- Q. 2. . Answer any one long type question of the following.
(Any one out of two) 16 Marks
- Q. 3. Write short answer of the following.
(Any two out of four) 08 Marks
08 Marks
- Q. 4. Write short answer of the following.
(Any two out of four) 08 Marks
08 Marks
- Q. 5. Write very short answer of the following.
(Eight question are compulsory) 02 Marks
02 Marks
02 Marks
02 Marks
02 Marks
02 Marks

02 Marks

Total : 80 Marks

External and Internal Evaluation Semester pattern – 80 :20 Marks for B.A. Level

(B.A. II year) sociology

(A) External Evaluation :

(i) Two long questions with internal choice : 32
Marks

1. 16 Marks

2. 16 Marks

(ii) Two Short questions with internal choice : 32
Marks

1. 16 Marks (Two questions each of eight marks out of four)

2. 16 Marks (Two questions each of eight marks out of four)

(iii) Fifth question will be compulsory with question from each of the four Unit 16
Marks

Having equal weightage and there will be no internal choice .

1. 16 Marks (Eights question each of two marks)

Total	80
-------	----

Marks

(B) Internal Evaluation :

20

Marks

Total 100 Marks

Minimum Passing Marks :

(A) External Evaluation : 80-32 B.A. – II (Passing Marks)

(B) Internal Evaluation :20-08 B.A. - II(Passing Marks)

40 Marks

Subject: Sociology

B.A. Part-II-Indian Society : Issues and Problems-III & IV

Performance for internal Assessment System (Valuation Model)

Roll No.	Enrollment No.	Name of Student	Class	Internal Evolution			Total	Remarks
				Class Seminar 10 Marks	Home Assignment 05 Marks	Oral Personality Test/Project Work Educational Tour 05 Marks		
1	2	3	4	5	6	7	8	9

Date : / /2018

Subject
Principal

Examiner

B.A. Part-II (Political Science)

Political Theory (Semester – III)

Unit I : Political Theory

- (a) Political Theory – Meaning, Definition, Nature and scope, significance
- (b) Approaches to Political Theory – Traditional & Modern

UNIT II : Theories of origin of the state

- (a) State : Meaning, Definition, elements of state
- (b) Theories of origin of state : Divine Theory, Social contract theory, Historical theory.

UNIT III : Theories of Sovereignty

- (a) Sovereignty : Meaning, Definition, Types Features.
- (b) Theory of Sovereignty : Austins Theory, Pluralist Theory

UNIT IV : Theories of social change

- (a) Social Change : Meaning Definition, Forms of Social Change, Factor Responsible for social change.
- (b) Theories of Social Change : Cyclic Theory, Idealist Theory, Marxist Theory of Revolutionary change.

External and Internal Evaluation Semester Pattern -80:20 Marks for B.A. Level

[A] External Evaluations :

- (I) Two long questions with internal choice : 32 Marks
1. 16 Marks
 2. 16 Marks
- (II) Two Semilong Questions with internal choice : 32 Marks
1. 16 Marks (Two Questions each of eight marks out of four)
 2. 16 Marks (Two Questions each of eight marks out of four)
- (III) Fifth question will be compulsory with questions from each of the four unit 16 Marks
having equal weightage and there will be no internal choice.
1. 16 Marks (Eight questions each of two marks)

Total	80 Marks
--------------	-----------------

[B] Internal Evaluation : 20 Marks

Total **100 Marks**

Minimum Passing Marks:

[A] External Evaluation: 80 - 32 B.A. - I (Passing Marks)

[B] Internal Evaluation: 20 -08 B.A-I (Passing Marks)

100/40(Passing Marks)

Internal Assessment System

B.A. Political Science

Internal Assessment System (Per Semester) **20**
Marks

[As Per Syllabus]

[1] Class Seminar: **10**
Marks

2)Home Assignment: - **05 Marks**

[3] Oral Test & Personality Test: **05**
Marks

[Co-Operation, Leadership, Presentation, confidence]

Performance for Internal Assessment System [Valuation Model]

B.A. Political Science

Roll No.	Enrolment No	Name of Student	Class	Internal Evolution			Total	Remarks
				Class Seminar 10 Marks	Home Assignment 05 Marks	Oral Test / Personality Test / Project Work / Educational Tour / Local Self Government visit [local Level] 05 Marks		
1.	2.	3.	4.	5.	6.	7.	8.	9.

Date : / / 20

Subject Examiner

Principal

SEMESTER PATTERN EXAMINATION

B.A. SEMESTER I TO VI EXAMINATION

Political Science

Time : 3 Hours

Max Marks : 80

Instruction :

- i] All question are compulsory
- ii] All question carry equal marks
- iii] Give correct question number to the answer

- | | | |
|----|---|------------------|
| 1. | Long question any one internal choice | 16 Marks each 16 |
| 2. | Long question any one internal choice | 16 Marks each 16 |
| 3. | Semi long question any two question (Out of 4 - ABCD) | 8 Marks each 16 |
| 4. | Semi long question any two question (Out of 4 - ABCD) | 8 Marks each 16 |
| 5. | Write short answer (Eight question compulsory) | 2 Marks each 16 |

Note :

Question pattern from 01 to 05 shall be from any four units. For example, question no. 01 can be from any Module or unit of 01 to 04 from the syllabus. Similarly question no. 02, 03, 04 shall be from any module or unit of 01 to 04.

GONDWANA UNIVERSITY, GADCHIROLI**Model Question Paper****B.A. I, II, III (Ist to VIth Semester Pattern)**

Model Que. paper		Model Que. paper		Model Que. paper		Model Que. paper
Q.1 Module or Unit No. 3	or	Q.1 Module or Unit No. 1	or	Q.1 Module or Unit No. 2	or	Q.1 Module or Unit No. 4
Q.2 Module or Unit No. 1		Q.2 Module or Unit No. 2		Q.2 Module or Unit No. 4		Q.2 Module or Unit No. 3
Q.3 Module or Unit No. 2		Q.3 Module or Unit No. 3		Q.3 Module or Unit No. 3		Q.3 Module or Unit No. 1
Q.4 Module or Unit No. 4		Q.4 Module or Unit No. 4		Q.4 Module or Unit No. 1		Q.4 Module or Unit No. 2
Q.5 Module or Unit No. 1,2,3,4	or	Q.5 Module or Unit No. 1,2,3,4	or	Q.5 Module or Unit No. 1,2,3,4	or	Q.5 Module or Unit No. 1,2,3,4

Gondwana University, Gadchiroli.
Syllabus of History B.A.II (C.B.C.S)

Semester-III

Modern India (1757 to 1920 A.D)

Assignment Marks: 20, Period- 75/ Theory Marks: 80 Total Marks:- 100.

Unit -1. [No. of Period - 19]

- 1). Rise of British Power in Bengal – Battle of Plassey (1757),
Battle of Buxar (1764)
- 2). Robert Clive's – Dual Government, Lord Cornwallis – Permanent
Settlement,
- 3). Lord Wellesley – Subsidiary Alliance, Lord Bentinck – Internal reform.

Unit- 2. [No. of Period - 19]

- 4).Revolt of 1857 – Nature, Causes and Effects.
- 5).Effect of British rule on Indian Economy – Trade, Agriculture and
Industry.
- 6). Religious and social reforms movement in 19th century – Brahma
Samaj,
Prarthana Samaj, Satyashodhak Samaj, Arya Samaj and Depressed
Class
Movement.

Unit -3. [No. of Period - 18]

- 7). Lord Lytton – Administration.
- 8). Lord Ripon – Internal Reforms,
- 9).Lord Curzon- Internal Administration.

Unit -4. [No. of Period - 19]

- 10). Rise of Indian Nationalism.
- 11). Establishment of Indian National Congress and Moderate Politics.
- 12). Era of Radical Nationalism & Contribution of Tilak.

SEMESTER PATTERN EXAMINATION
B.A. II SEMESTER III&IV EXAMINATION
HISTORY

Time : Three Hours

Max. Marks :

80

- 1). All questions are compulsory.
- 2). All questions carry equal marks.
- 3). Give correct question number to the answer.

- | | |
|--|----------------------|
| 1. Long question Any one internal choice | [1 x 16 = 16 marks] |
| 2. Long question Any one internal choice | [1 x 16 = 16 marks] |
| 3. Two Short question out of four | [2 x 8 = 16 marks] |
| 4. Two Short question out of four | [2 x 8 = 16 marks] |
| 5. Eight very short question (Two Questions from each unit)[8 x 2 = 16 marks] | |

Note: -

- Question pattern 01 to 05 shall be from for units.
- One question from each unit will be asked in question no. from 1 to 4.
- In question no. 05, two questions will be asked from each unit.

Assignment Scheme:-

1. Assignment	10 Marks.
2. Viva / Seminar	05 Marks.
3. Overall performance	05 Marks.
<hr/>	
Total Marks:-	20 Marks.
<hr/>	

Marks Scheme

Passing Theory and Internal Assessment

Maximum Marks		Minimum Marks	
Theory	Internal Assessment	Theory	Internal Assessment
80	20	32	08

GONDWANA UNIVERSITY GADCHIROLI

CHOICE BASED CREDIT SYSTEM SEMESTER PATTERN SYLLABUS

FOR

B.A. GEOGRAPHY

Semester wise Distribution of Marks

Sr.No.	Class	Semester	Subject	Theory paper Marks	Internal Assessment	Practical Mark	Total Mark
1	B.A. Part I	I	Core Subject Introduction to Geography	60	15	25	100
2	B.A. Part I	II	Core Subject Climatology	60	15	25	100
3	B.A. Part II	III	Core Subject Geomorphology	60	15	25	100
4	B.A. Part II	IV	Core Subject Geomorphology and Oceanography	60	15	25	100
5	B.A. Part III	V	Elective Subject I) Geography of Maharashtra II) Bio Geography III) Geography of Tourism	50	20	30	100
6	B.A. Part III	VI	Elective Subject I) India – A Geographical Analysis II) Cultural Geography III) Geography of Health	50	20	30	100
				340	100	160	600

GONDWANA UNIVERSITY GADCHIROLI
CHOICE BASED CREDIT SYSTEM SEMESTER PATTERN SYLLABUS
B.A. GEOGRAPHY

SEM	CORE COURSES 3 CORE COURSES WITH 4 CREDITS / COURSE	Ability Enhancement Compulsory Courses (AECC)	Skill Enhancement Courses (SEC)	Discipline Specific Elective Cours	Generic Elective Course	Foundation Courses
I	GEOGRAPHY CORE (01) INTRODUCTION TO GEOGRAPHY AND PRACTICAL I (3+1=4 Credits)					
I	GEOGRAPHY CORE (02) CLIMATOLOGY AND PRACTICAL II (3+1=4 Credits)					
III	GEOGRAPHY CORE (03) GEOMORPHOLOGY AND PRACTICAL III(3+1=4 Credits)					
IV	GEOMORPHOLOGY AND (04) OCEANOGRAPHY AND PRACTICAL IV(3+1=4 Credits)					
V				GEOGRAPHY OF MAHARASHTRA OR BIO- GEOGRAPHY OR GEOGRAPHY OF TOURISM AND	1.(GOOGLE EARTH)COMPUTER APPLICATION for GEOGRAPHICAL ANALYSIS 2 .LOCAL ISSUES IDENTIFICATION OF MEDICINAL PLANTS/ BIODIVERSITY/CHANGIN G LAND USE(2 Credits)Traval& Tourism	

				Practical V (3+1=4 Credits)		
VI				GEOGRAPHY OF INDIA OR CULTURAL GEOGRAPHY OR GEOGRAPHY OF HEALTH AND Practical VI (3+1=4 Credits)	FIELD WORK REPORT/ PROJECT ON SOCIO ECONOMIC SURVEY OF VILLAGE / INDUSTRIAL AREA / MINING AREA/ TRIBAL SURVEY (04) INSTRUMENTAL SURVEYING GPS/PTS/PCS/DLS etc, (02)	

PROJECT 01: ANALYSIS OF GEOGRAPHIC FEATURES WITH GOOGLE EARTH, REMOTE SENSING & GPS Etc.

PROJECT 02: PREPARATION OF MAP OF AGRICULTURE FIELD, RIVERBED, CANAL Etc. WITH THE HELP OF SURVEYING INSTRUMENTS

PROJECT 03: LOCAL GEO- ENVIRONMENTAL ISSUES.

GONDWANA UNIVERSITY GADCHIROLI
CHOICE BASED CREDIT SYSTEM SEMESTER PATTERN SYLLABUS

B.A. GEOGRAPHY
PATTERN OF EXAMINATION

Theory :

One theory paper of **60 marks** each and of three hours duration will be conducted at the end of Semester.

Practical's :

- 1) **One Practical examination of 25 marks and of four hours duration** of each semester will be conducted at the end of the same semester.
- 2) Practical examinations of **EVEN** semesters will be conducted by internal and External examiners. And **ODD** semesters will conduct internal examiner appointed by the University.

Internal Assessment:

- 1) Head of the department will carry out internal assessment of the students on the basis of evaluation report from the concerned teacher/ teachers, under the supervision of the principal of the college and will be done at the end of each semester.
- 2) Distribution of 15 marks of internal assessment is as under --
 - i) Class Attendance 05 marks
 - ii) Home Assignment & study two 05 marks
 - iii) Group discussion / seminar 05 marks

Rules and Regulation

1. There will be four periods per week for theory papers.
2. The batch of Practical class should not be exceeding 16 students.
3. There will be two periods per batch per week for practical's.
4. The minimum passing marks of Theory paper and internal Assessment is 24 & Passing Marks for Practical are 11.
5. The student has to pass practical separately.
6. Marks will not be allotted to student if he found absent in study tour.

. Pattern of Question Paper (Third & Fourth Semester)

Que 1 :	A) from unit I I OR B) from unit II	Marks 12
Que 2 :	A) from unit IV OR B) from unit IV	Marks 12
Que 3 :	A) from unit I B) from unit I OR C) from unit I D) from unit I	Marks 12 (6 mark each)
Que 4 :	A) from unit III B) from unit III OR C) from unit III D) from unit III	Marks 12 (6 mark each)

Que 5 : This Question will have six objective types' questions on all four units there shall be no internal choice.

Marks 12

The following certificate must have necessarily attached to the practical record. Note book of the examinee when submitted before commencement of practical examination.

CERTIFICATE

Department of Geography

Name of College..... This is to certify that this practical record is
the Original practical works of

Shri/ Kumari/ Smt.

Class..... Semester..... During the academic year.

He/she has attended/ not attained the field work/ Study tour prescribed by the
Gondwana University Gadachiroli.

Signature of the teacher who taught the examinee.

- 1)
- 2)
- 3)

Head of the Department

THEORY PAPER SEMESTER III (Core Subject)Effective from 2018-19 session

GEOMORPHOLOGY

Semester Exam: 60 Marks
Internal Assessment : 15 Marks

UNIT -1

Definition, Nature and Scope of Geomorphology, Place of Geomorphology in physical Geography' ,
Interior of Earth, Earth movements.

UNIT -2

Continental Drift Theory by Wagner, Plate Tectonics, Isostasy, Earthquakes and Volcanoes .

UNIT -3

Weathering Process, Types of weathering and related landforms, Rocks : Origin and composition of
rocks ;Types of Rocks.

UNIT -4

Work of River: Erosion, Transportation and Deposition and associated landforms. Types of streams
and drainage pattern, Concept of cycle of erosion, interruption of cycle of erosion / Rejuvenation
and associated features.

PRACTICAL SEMESTER-III

Marks : 25

I. Preparation of relief maps and diagrams 06

(a) Drawing of various topographical features by using contours.

(b) Study of at least five contour maps representing different relief features with the help of profiles.

2. Study of Indian Topographical maps 04

Plains, Plateau and Mountain region.

3. Plane Table survey -Radiation and intersection methods 05

(At least four plans)

4. Viva -Vice practical record 10

PLAN OF PRACTICAL EXAMINATIONS

The following-e plan is strictly followed to test the skill develop by the students

UNITS	QUESTIONS	MARKS
1.	a) Drawing of topographical feature by using contours	3
	b) identification of features on contour maps & drawing of profile	3
2.	interpretation of topographical maps	4
3.	Plane Table survey and preparation of map or area measurement	5
4.	Viva Voice on practical record (5+5=10)	10

GONDWANA UNIVERSITY GADCHIROLI

CHOICE BASED CREDIT SYSTEM SEMESTER PATTERN SYLLABUS

FOR

Sr.No.	Class	Semester	Subject	Theory paper Marks	Internal Assessment	Practical Mark	Total Mark
1	B.A. Part I	I	Core Subject Introduction to Geography	60	15	25	100
2	B.A. Part I	II	Core Subject Climatology	60	15	25	100
3	B.A. Part II	III	Core Subject Geomorphology	60	15	25	100
4	B.A. Part II	IV	Core Subject Geomorphology and Oceanography	60	15	25	100
5	B.A. Part III	V	Elective Subject I) Geography of Maharashtra II) Bio Geography III) Geography of Tourism	60	15	25	100
6	B.A. Part III	VI	Elective Subject I) India – A Geographical Analysis II) Cultural Geography III) Geography of Health	60	15	25	100
				360	90	150	600

B.A. GEOGRAPHY

Semester wise Distribution of Marks

GONDWANA UNIVERSITY GADCHIROLI

CHOICE BASED CREDIT SYSTEM SEMESTER PATTERN SYLLABUS

B.A. GEOGRAPHY

PATTERN OF EXAMINATION (ALL SEMESTER)

Theory:

One theory paper of 60 marks each and of three hours duration will be conducted at the end of each semester.

Practicals:

- 1) One Practical examination of 25 marks and of four hours duration of each semester will be conducted at the end of the same semester.
- 2) Practical examinations of all semesters will be conducted by internal and External examiners appointed by the University.

Internal Assessment:

- 1) Head of the department will carry out internal assessment of the students on the basis of evaluation report from the concerned teacher/ teachers, under the supervision of the principal of the college and will be done at the end of each semester.
- 2) Distribution of 15 marks of internal assessment is as under –
 - i) Class Attendance 05 marks
 - ii) Home Assignment & Seminar 05 marks
 - iii) Visit to a Geo. Places 05 marks

Rules and Regulation

1. There will be four periods per week for theory papers.
2. The batch of Practical class should not be exceeding 16 students.
3. There will be two periods per batch per week for practical's.
4. The minimum passing marks of Theory paper is 24 and internal Assessment is 06 & Passing Marks for Practical are 10.
5. The student has to pass practical and theory paper separately.
6. Marks will not be allotted to student if he found absent in study tour.

Pattern of Question Paper (V&IV Semester)

Que 1 : A) from unit I Marks 12

OR

B) from unit II

Que 2 : A) from unit III Marks 12

OR

B) from unit IV

Que 3 : A) from unit I Marks 12

B) from unit I (6 mark each)

OR

C) from unit II

D) from unit II

Que 4 : A) from unit III Marks 12

B) from unit III (6mark each)

OR

C) from unit IV

D) from unit IV

Que 5 : This Question will have six objective types' questions on all four
units there shall be no internal choice.

Marks 12

The following certificate must have necessarily attached to the practical record.
Note book of the examinee when submitted before commencement of practical
examination.

PRACTICAL

SEMESTER-V

Unit – I : Enlargement & Reduction by Graphical Methods (At least two of each methods.)

Unit – II : Basic principles of land surveying

Prismatic compass survey

- a) Correction of bearing
- b) Open and close traverse (At least two of each methods)
- c) Closing of error (By Browditch Methods – graphical)

Unit – III : Types Cartographic symbol and their uses

- a) Use of line and Bar graph for representing population, agriculture, Industry and transport data. (Simple, Compound and Multiple)
- b) Divided rectangle & circles.

Unit – IV :

Population pyramids.(Simple, superimposed & compound)

Unit – V : Viva- Voce & Practical.

Plan of Practical Examination:

Unit I : Enlargement and Reduction	4 marks
Unit II : A Prismatic Compass survey	
a. Calculation of Reduced level	3 marks
b. Drawing of Profile	3 marks
Unit III :	
Preparation of Maps and Diagram	
a. Line or Bar graph	3 marks
b. Divided rectangle or circle	3 marks
Unit IV :	
Population Pyramids	4 marks
Unit V :	
Viva-voice	3 marks
Practical record	2marks
Total	25 marks

PRACTICAL

SEMESTER-VI

Unit – I :

Introduction to modern techniques (on theoretical base): Remote sensing as a tool for data generation and mapping, GIS and Computer.

Unit – II :

Leveling – use of Dumpy level in the field problem on leveling:-

- a) Preparation of field Book (Collimation and Rise & Fall Methods)
- b) Drawing of Profile.

Unit – III :

Meaning and Computation of correlation coefficient by Pearson’s and Spearman’s method (Atleast two exercise of each)

Unit - IV: Field work and Field Report

A Short field study – a socio-economic survey of a small village.

Unit – V : Viva-voce & Practical Record.

Plan of Marks of Practical Examination:

Unit I : Introduction to Modern Techniques (Any Two) two marks each	4 marks
a) Computer b) Remote Sensing c) GIS	
Unit II: Problem of leveling.	
a. Calculation of Reduced level	3 marks
b. Drawing of Profile	2 marks
Unit III : Computation of correlation	4 marks
Unit IV : Socio Economics Survey report	4 marks
Unit V : Preparation of Maps	
Representation of population & economics data	3 marks
Choropleth maps & dot methods	
Unit VI : Viva-voce	3 marks
Practical record	2 marks
<hr/>	
Total	25 marks

B.A. (Semester – III)
(English Literature)

UNIT – 1

- (i) George Elliott : Silas Marner

UNIT – 2

- (i) Francis Bacon : Of Studies
- (ii) Sri Richard Steele : The Trumpet Club
- (iii) Oliver Goldsmith : The Man In Black (iv) Charles
Lamp : Dream Children

UNIT – 3

- (i) Growth of English Essay from Elizabethan Age to the
Victorian Age.
- (ii) Growth of Novel with special emphasis on
Victorian Novel

UNIT – 4

- (i) Picaresque Novel
- (ii) Sentimental Novel
- (iii) Historical Novel
- (iv) Gothic Novel

Question Pattern for S. Y. B. A. sem. – III & IV – English Literature

(Revised from 2019-20)

Time: 3 Hours

Max. Marks: 80

Qus-1 A) Answer ANY ONE of the following questions in about 150 words.

(Any 1 out of 2) (Based on Unit-I) $1 \times 10 = 10$

Qus-1 B) Answer ANY ONE of the following questions in about 150 words.

(Any 1 out of 2) (Based on Unit-II) $1 \times 10 = 10$

Qus-2 A) Answer ANY TWO of the following questions in about 75 words each.

(Any 2 out of 3) (Based on Unit-I) $2 \times 5 = 10$

Qus-2 B) Answer ANY TWO of the following questions in about 75 words each.

(Any 2 out of 3) (Based on Unit-II) $2 \times 5 = 10$

Qus-3 A) Answer ANY ONE of the following questions in about 150 words.

(Any 1 out of 2) (Based on Unit-III) $1 \times 10 = 10$

Qus-3 B) Answer ANY TWO of the following questions in about 75 words.

(Any 2 out of 3) (Based on Unit-III) $2 \times 5 = 10$

Qus-4) Answer ANY TWO of the following questions in about 75 words.

(Any 2 out of 4) (Based on Unit-IV) $2 \times 5 = 10$

Qus-5) Answer ANY FIVE of the following questions in not more than three lines each.

(Any 5 out of 8) (Based on Unit-II & III) $5 \times 2 = 10$

The Internal Assessment

20 marks

Attendance- 05 Marks, Assignments- 05 Marks, and Seminar/Group Discussion- 05 Marks and Viva-voce-05 Marks

GONDWANA UNIVERSITY GADCHIROLI

B.A. Home Economics

Semester – III

PAPER – Food And Nutrition

FULL MARKS – 100

Semester Exam: 60 Marks

TIME –3 Hrs.

Internal Assessment: 15 Marks

[TH – 60 + Pr.- 25 + IA = 15]

OBJECTIVE:

The following objectives are decided for B.A Semester III / Home Economics / Program.

- To promote basic knowledge pertaining to various food groups and nutrients.
- To relate the composition of foods to their various properties.
- To promote understanding of common nutritional disorders due to the deficiency of nutrients.
- To learn Principles of diet planning and plan balance diet of family members.

Course content : Theory

Unit I

- 1.1 Definition of Health, Nutrition and dietetics. Functions of food.
- 1.2 Dimensions of Health (physical, psychological, emotional, spiritual)
- 1.3 Digestive System-Organs and glands related to food digestion and their functions.

Unit II

2 Macro Nutrients

- 2.1 Proteins – Introduction, classification, function, sources, daily need and deficiency effect.

2.2 Carbohydrates - Introduction, classification, function, sources, daily need and deficiency effect.

2.3 Fats - Introduction, classification, function, sources, daily need and deficiency effect.

2.4 Water – Functions, sources, daily need and deficiency.

Unit III

3 Micro Nutrients

3.1 Vitamins – Functions, sources, daily need and deficiency effect

Water Soluble – vit. B complex – B1, B2, B3, B6, B12, Folic acid

Vit. C

Fats Soluble- Vit. A,D,E,K.

3.2 Minerals – Functions, Sources, daily need and deficiency, effect

a. Major- i) Calcium ii) Phosphorus iii) Iron

b. Minor- i) Sodium ii) Iodine

Unit IV

4.1 Balance Diet – use of Balance diet in meal planning,

Factors affecting meal planning (nutritional, socio-cultural, religious, geographic, economic, availability)

4.2 Nutrition through life cycle – Pregnancy, Lactation, Infancy, Preschool, Adolescent, Adulthood, Old age.

4.3 Energy Requirement – Calorie requirements for Secondary, Moderate and Heavy Workers.

Factor affecting energy requirement–BMR, activity, age, climate, physiological condition.

PRACTICAL WORK

Time – 3 Hours

Marks – 25

1. Carbohydrates –
 - a) Sabudana Wada / Cabbage Pulao / Uttapam
 - b) Lavang lata / Jaggery Wheat flour ladu
2. Proteins –
 - a) Stuffed Soya Paratha / Mix Dalwada / egg curry
 - b) Mungdal Halwa / Khova Burfi
3. Fats –
 - a) Pudachi wadi /Chole Bhature /Palak Puri
 - b) Nankhatai / Cake
4. Vitamins –
 - a) Harabhara Kabab / Sprouted Usal / Veg Thalipith
 - b) Carrot Halwa / Lauki Halwa
5. Minerals –
 - a) Paneer Bhurgi / Drum sticks Bhaji / Mater Paneer
 - b) Jaggery Groundnut chikki / Mix chikki
- 6) Water –
 - a) Jaljira, Butter Milk, Fruit punch, Lemon Juice (any two)
 - Calculation of Calories and Particular Nutrient as per Dish.
 - Enlisting the five rich sources of all nutrients with the help of nutritive value table.

Practical Examination

Time – 3 Hrs

Total Marks – 25

Distribution of Marks

- | | |
|--|------|
| 1. Preparation and Presentation of two Dishes | – 12 |
| 2. Calculation of Calories and Particular nutrient as per dish | – 4 |
| 3. Enlisting four important sources of one nutrient | – 4 |
| 4. Viva | – 3 |
| 5. Record Book | – 2 |

Internal Assessment

Total Marks – 15

- | | | |
|--------------------|---|---|
| 1. Unit test | – | 5 |
| 2. Attendance | – | 5 |
| 3. Home Assignment | – | 5 |

GONDAWANA UNIVERSITY, GADCHIROLI
 BACHELOR OF COMMERCE
 (THREE YEARS UG COURSE IN FACULTY OF COMMERCE AND MANAGEMENT)
 COURSE AND EXAMINATION SCHEME WITH CHOICE BASED CREDIT SYTSEM
 (Semester – III)

Appendix - III

Sr. No.	Area	Unique Subject Code	Subject	Course Scheme			No. of Credits	Examination Scheme (Maximum Marks)				Examination Scheme (Minimum Marks)			
				L	T	P		ESE	IA	P	Total	ESE	IA	P	Total
01	AECC (Foundation Course)	UCA3F01	Marathi/Hindi/ Supplementary English	4	-	-	2	80	20	-	100	40	-	40	
		SEC-I UCA3F02	Cost Accounting	5	-	-	4	80	20	-	100	40	-	40	
02	Core (Core Course)	UCA3C03	Compulsory English	4	-	-	4	80	20	-	100	40	-	40	
		UCA3C04	Company Law	5	-	-	4	80	20	-	100	40	-	40	
		UCA3C05	Monetary Economics Paper-I	4	-	-	3	60	15	-	75	30	-	30	
		UCA3C06	Corporate Accounting Paper -I	5	-	-	3	60	15	-	75	30	-	30	
03	DSE	UCA3EM3	Group- A Marketing Management (Advertising Management)	4	-	-	4	80	20	-	100	40	-	40	
		UCA3EH3	Group -B Human Resource Development (Organizational Behavior Paper-I)	4	-	-	4	80	20	-	100	40	-	40	
		UCA3EB3	Group -C Banking and Insurance (Banking and Insurance Law and Practice -I)	4	-	-	4	80	20	-	100	40	-	40	
		UCA3EI3	Group -D Information Technology (Computrized Accounting and MIS)	4	-	4/ Batch	4	60	15	25	100	30	10	40	

GONDWANA UNIVERSITY, GADCHIROLI



FACULTY OF SCIENCE AND TECHNOLOGY BOARD OF STUDIES IN ZOOLOGY

SUBMISSION OF CHOICE BASED CREDIT SYSTEM (CBCS) SYLLABUS OF ZOOLOGY FOR UNDER GRADUATE (B. Sc.) PROGRAMME OF SEMESTER III AND SEMESTER IV FROM SESSION 2018 - 19

**SCHEME AND SYLLABUS UNDER CHOICE BASED CREDIT
SYSTEM (CBCS) FOR B.Sc. ZOOLOGY**

Semester	Core Course (12)	Ability Enhancement Compulsory Courses AEC(2)	Skill Enhancement (Foundation) Courses SEC(4)	Discipline Specific Elective (DSE)
I	CC - Chemistry P -I CC - Chemistry P -II CC - Botany P -I CC - Botany P -II CC - Zoology P -I CC - Zoology P -II	English (1) Marathi (1)		
II	CC - Chemistry P -III CC - Chemistry P -IV CC - Botany P -III CC - Botany P -IV CC - Zoology P -III CC - Zoology P -IV	English (1) Marathi (1)		
III	CC - Chemistry P -V CC - Chemistry P -VI CC - Botany P -V CC - Botany P -VI CC - Zoology P -V CC - Zoology P -VI		Environmental Studies	
IV	CC - Chemistry P -VII CC - Chemistry P -VIII CC - Botany P -VII CC - Botany P -VIII CC - Zoology P -VII CC - Zoology P -VIII		Environmental Studies	
	CC - Chemistry P -IX CC - Chemistry P -X CC - Botany P -IX CC - Botany P -X CC - Zoology P -IX CC - Zoology P -X		(Any one) 1. Apiculture 2. Sericulture 3. Vermiculture and Lac Culture 4. Aquarium fish Culture	DSE-Chem I DSE - Bot I DSE - Zoo I (Any One) 1. Parasitology 2. Applied Zoology 3. Insect Vectors and disease 4 Aquatic Biology

VI	CC - Chemistry P -XI CC - Chemistry P -XII CC - Botany P -XI CC - Botany P -XII CC - Zoology P -XI CC - Zoology P -XII		1. Medical diagnosis 2. Public Health & Hygiene 3. Research Methodology and Instrumentation	DSE- Chem II DSE - Bot II DSE - Zoo II (Any One) 1. Immunology 2. Animal Biotechnology 3. Micro-technique, Bioinformatics and Biostatistics
----	---	--	---	--

Discipline Core Courses (DCC) : Zoology

1. Animal Diversity
2. Cell Biology, Genetics and Evolutionary Biology
3. Comparative Anatomy and Developmental Biology of Vertebrates
4. Physiology and Biochemistry

Discipline Specific Electives (DSE): Zoology (Any two)

1. Applied Zoology
2. Animal Biotechnology
3. Aquatic Biology
4. Immunology
5. Reproductive Biology
6. Insect, Vector and Diseases

Skill Enhancement Courses (SEC): Zoology

1. Apiculture
2. Aquarium Fish Keeping
3. Aquatic Biology
4. Medical Diagnostics
5. Public Health and Hygiene
6. Sericulture

GONDWANA UNIVERSITY, GADCHIROLI
CBCS SYLLABUS IN ZOOLOGY

SEMESTER - I

PAPER CODE	CORE PAPER	TITLE OF THE PAPER	CREDIT
USCZOT01	I	NONCHORDATE - PROTOZOA TO ANNELIDA	02
USCZOT02	II	CELL BIOLOGY	02
USCZOP01	PRACTICAL	CORE COURSE I & II	02

SEMESTER - II

PAPER CODE	CORE PAPER	TITLE OF THE PAPER	CREDIT
USCZOT03	III	NONCHORDATE - ARTHROPODA TO HEMICHORDATA	02
USCZOT04	IV	GENETICS & EVOLUTION	02
USCZOP02	PRACTICAL	CORE COURSE III & IV	02

SEMESTER- III

PAPER CODE	CORE PAPER	TITLE OF THE PAPER	CREDIT	SEC
USCZOT05	V	ANIMAL DIVERSITY (CHORDATES) and COMPARATIVE ANATOMY	02	ENVIRONMENTAL STUDIES
USCZOT06	VI	PHYSIOLOGY & BIOCHEMISTRY - I	02	
USCZOP03	PRACTICAL	CORE COURSE V & VI	02	

SEMESTER- IV

PAPER CODE	CORE PAPER	TITLE OF THE PAPER	CREDIT	SEC
USCZOT07	VII	DEVELOPMENTAL BIOLOGY	02	ENVIRONMENTAL STUDIES
USCZOT08	VIII	PHYSIOLOGY & BIOCHEMISTRY - II	02	
USCZOP04	PRACTICAL	CORE COURSE VII & VIII	02	

SEMESTER -V

SEC (ANY ONE)	DSE (ANY ONE)
1. APICULTURE	1. PARASITOLOGY
2. SERICULTURE	2. APPLIED ZOOLOGY
3. VERMICULTURE & LAC CULTURE	3. INSECT VECTOR & DISEASE
4. AQUARIUM FISH CULTURE	4. AQUATIC BIOLOGY

SEMESTER- VI

SEC (ANY ONE)	DSE (ANY ONE)
1. MEDICAL DIGNOSTICS	1. IMMUNOLOGY
2. PUBLIC HEALTH AND HYGIENE	2. ANIMAL BIOTECHNOLOGY
3. RESEARCH METHODOLOGY	3. MICROTECHNIQUE, BIOINFORMATICS & BIOSTATISTICS
4. INSTRUMENTATION	4. REPRODUCTIVE BIOLOGY

Scheme of Marks of Theory and Practical

Semester	Paper	Title	Marks		Total
			Theory	Internal Assessment	
III	I	Animal Diversity(Chordate) and Comparative Anatomy	50	10	150
	II	Physiology and Biochemistry - I	50	10	
	Practical	Animal Diversity, Comparative Anatomy, Physiology and Biochemistry-I	30	-	
IV	I	Developmental Biology	50	10	150
	II	Physiology and Biochemistry - II	50	10	
	Practical	Developmental Biology, Physiology and Biochemistry - II	30	-	

GONDWANA UNIVERSITYGADCHIROLISYLLABUS

For

B. Sc.

BOTANY

SEMESTER III & IV

Under

Choice Based Credit System

(CBCS)

(With effect from: 2018-19)

SEMESTER – III:

Papers	Title of the Paper	Th/Pr	Internal Assessment	Total Marks
Paper – I	Reproductive Biology of Angiosperms, Plant Growth and Development	50 Marks	10 Marks	60 Marks
Paper – II	Plant Biochemistry and Physiology	50 Marks	10 Marks	60 Marks
Practical – I	Based on Theory Paper –I & II of Semester – III	30 Marks	--	30 Marks
Internal Assessment: Based on Assignment, Seminar, Unit Test & overall attendance and performance of the student				

**B.Sc. BOTANY
SEMESTER – III
PRACTICAL**

Based on Theory Paper - I & II of Semester – III

[Time 5 Hours]

[Max. Marks – 30]

- Que. 1: One experiment [A] from **Reproductive Biology of Angiosperms** **05 Marks**
- Que. 2: One experiment [B] from **Plant Growth and Development** **05 Marks**
- Que. 3: One experiment [C] from **Plant Biochemistry** **05 Marks**
- Que. 4: One experiment [D] from **Plant Physiology** **05 Marks**
- Que. 5: Identify and comment on given spots: **04 Marks**

SPOT-E: (Reproductive Biology of Angiosperms)

SPOT-F: (Plant Growth and Development)

SPOT-G: (Plant Biochemistry)

SPOT-H: (Plant Physiology)

- Que. 6: Practical Record (2 Marks) Excursion Report (2 Marks) Viva-voce (2 Marks) **06 Marks**

NOTE: Well labeled diagrams are expected wherever necessary.

SEMESTER – IV:

Papers	Title of the Paper	Th/Pr	Internal Assessment	Total Marks
Paper – I	Cell Biology, Genetics and Biotechnolgy	50 Marks	10 Marks	60 Marks
Paper – II	Plant Ecology	50 Marks	10 Marks	60 Marks
Practical – III	Based on Theory Paper –I & II of Semester – III	30 Marks	--	30 Marks
Internal Assessment: Based on Assignment, Seminar, Unit Test & overall attendance and performance of the student				

GONDWANA UNIVERSITY, GADCHIROLI
CBCS Theory Question Paper Pattern
For
B.Sc. BOTANY
SEMESTER – III and IV
Theory

All questions are compulsory and carry equal marks
Draw well labeled diagram where ever necessary
[Time 3 Hours] [Max. Marks – 50]

Question 1. Based on Unit – I :05 x 2 = 10

- a. Unit - I
- b. Unit - I

OR

- c. Unit - I
- d. Unit - I
- e. Unit - I
- f. Unit - I

: 02^{1/2} X4 = 10

Question 2. Based on Unit – II:05 x 2 = 10

- a. Unit II
- b. Unit II

OR

- c. Unit II
- d. Unit II
- e. Unit II
- f. Unit II

: 02^{1/2} X4 = 10

Question 3. Based on Unit – III :05 x 2 = 10

- a. Unit III
- b. Unit III

OR

- a. Unit III
- b. Unit III
- c. Unit III
- d. Unit III

: 02^{1/2} X4 = 10

Question 4. Based on Unit - IV :05 x 2 = 10

- a. Unit IV
- b. Unit IV

OR

: 02^{1/2} X4 = 10

- c. Unit IV
- d. Unit IV
- e. Unit IV
- f. Unit IV

Question 5. Write any ten questions in one or two lines only :1 x 10 = 10

(Diagrams are NOT necessary)

- a. Unit I
- b. Unit I
- c. Unit I
- d. Unit II
- e. Unit II
- f. Unit II
- g. Unit III
- h. Unit III
- i. Unit III
- j. Unit IV
- k. Unit IV
- l. Unit IV

B.Sc. Part II (Semester - III) (CBCS)

USCChT05

Paper – I (Inorganic Chemistry)

Total marks: 50 Total Lectures: 48

Note: Figures to the right hand side indicate number of lectures

UNIT I

(A) Hydrides of boron: Structure and bonding in diborane and borazine, Classification and applications of carbides. **[6 L]**

(B) Basic properties of Iodine, interhalogen compounds : Preparation and structure of ClF , ClF_3 , IF_5 & IF_7 . Polyhalides : Classification and structure of I_3^- , I_5^- , I_7^- and ICl_2^- **[2 L]**

(C) Oxy acids of Sulphur: Preparation and Structure of Caro's and Marshall Acid. **[2 L]**

(D) Study of Silicates: Classification, Preparation, Properties and Structure of tetra sulphur tetranitride, S_4N_4 **[2 L]**

UNIT II

A) Ionic Solids: Ionic structures, radius ratio effect & coordination number, Limitation of radius ratio rule, Lattice energy and Born-Haber cycle. Salvation energy and solubility of ionic solids, polarizing power and polarizability of ions, Fajan's rules. **[6L]**

(B) Metallic Bonding: Free electron theory and properties of metals, valance bond theory and Band theory to explain nature of conductors, insulators & semiconductors (intrinsic and extrinsic). **[3L]**

(C) Acids and Bases: Bronsted Lowery Concept Lux-Flood Solvent system and Lewis concept of acid and bases. **[3L]**

UNIT III

A) Chemistry Of First Transition Series Elements: Properties of the elements of first transition series with reference to their electronic configuration, atomic and ionic radii, ionization potential, Variable oxidation state, Magnetic properties, Colour, Complex formation tendency and Catalytic activity. **[8L]**

B) Chemistry Of Elements Of Second And Third Transition Series: Electronic configuration of 4d and 5d transition series. Comparative treatment with 3d-analogous (Groups Cr-Mo-W, Fe-Ru-Os, Co-Rh-Ir, Ni-Pd-Pt) in respect of oxidation states, magnetic behavior and stereo chemistry. **[4L]**

B.Sc. Part II (Semester - III) (CBCS)

USCChT06

Paper – II (Physical Chemistry)

Total marks: 50 Total Lectures: 48

Note: Figures to the right hand side indicate number of lectures

UNIT I

Phase Equilibria

(A) Phase rule: statement of phase rule, definition of phase, component and degree of freedom, derivation of phase rule, derivation of Clausius Clapeyron equation & its application in deciding slopes of line for two phase equilibria, applications of phase rule to two phase equilibria of i) water system, ii) sulphur system & iii) Pb-Ag system.

[6L]

(B) Liquid-Liquid mixtures: Ideal liquid mixtures, Raoult's law of ideal solutions, Henry's law, non-ideal systems, azeotropes: HCl -H₂O & ethanol-water system.

Partial miscible liquids: Phenol-water system, trimethylamine-water, nicotine-water system, lower & upper consolute temperature, effect of impurity.

Immiscible liquids: Steam distillation, Nernst distribution law, Limitations, deviations & applications. **[6L]**

UNIT II

Thermodynamics-II

(A) Second law of thermodynamics : Need for second law of thermodynamics, statements of second law of thermodynamics, concept of entropy, entropy as a state function of V & T, P&T, entropy change in phase change for ideal gas, entropy as criteria of spontaneity & equilibrium. **[4L]**

(B) Free energy functions: Helmholtz free energy (A) & Gibb's free energy (G) & their properties, standard free energies, effect of temperature on free energy (Gibb's-Helmholtz equation) & its applications, A&G as criteria for thermodynamic equilibrium. **[4L]**

Chemical Kinetics

Study the kinetics of the following reactions.

1. Kinetics of iodide-persulphate reaction
2. Integrated rate method:
 - a. Acid hydrolysis of methyl acetate with hydrochloric acid.
 - b. Saponification of ethyl acetate.
 - c. Compare the strengths of HCl and H₂SO₄ by studying kinetics of hydrolysis of methyl acetate

Colligative Properties

Determination of molecular weight by Rast Method

Distribution of Marks for Practical Examination

Time 4-5 hours (One Day Examination)	Marks 30
Inorganic Chemistry (Semi micro analysis)	12
Physical Chemistry (Any one Exercise)	12
Viva-Voce	03
Record	03
<hr/>	
Total:	30

Gondwana University, Gadchiroli



Faculty of Science & Technology

Proposed Syllabus For

B.Sc. Mathematics

Semester-III & Semester-IV

(Choice Based Credit System)

With effect from

Academic Year: 2018-19

(Considered and Approved in B.O.S. in Mathematics)

Gondwana University, Gadchiroli

B.Sc. Mathematics

Semester-III & IV

(Choice Based Credit System)

Semester-III

Paper –V: USMT-05 Real Analysis

Paper- VI: USMT-06 Set Theory and Laplace Transform

Semester-IV

Paper – VII: USMT-07 Algebra

Paper- VIII: USMT-08 Elementary Number Theory

Board of Studies in Physics
FACULTY OF SCIENCE
GONDWANA UNIVERSITY, GADCHIROLI

Syllabus of
B. Sc. Second Year (Semester pattern)
(Choice Based Credit System)

SUBJECT - PHYSICS
Semester III & Semester IV

Semester III & Semester IV
SUBJECT - PHYSICS

Teaching and Semester Examination Scheme for B.Sc(Second Year).

Class	Semester	Paper	Teaching Scheme Per Week (Workload)			Examination Scheme			
			Theory	Total	Practical	Theory Marks		Practical Marks	Total Marks
						Paper	Internal Assessment		
B. Sc. II	III	USPHT05	3	6 + 2T	6	50	10	30	150
		USPHT06	3			50	10		
	IV	USPHT07	3	6 + 2T	6	50	10	30	150
		USPHT08	3			50	10		

B. Sc. Semester CBCS Pattern Examination Scheme :

1. There shall be total six semesters.
2. Each semester shall comprise of 90 teaching days.
3. Each Semester I to VI shall be of 150 marks.
4. Distribution of marks will be as follows

i.	Paper I	Theory	50 Marks
		Internal Assessment	10 Marks
ii.	Paper II	Theory	50 Marks
		Internal Assessment	10 Marks
iii.	Practical (section A and B)		30 Marks
Total	(i + ii + iii)		150 Marks

5. The marks on internal assessment of the student shall be compounded with the theory Paper. The passing marks will be 40 % marks.
6. A student will have to perform at least five experiments from each section (Total 10 experiments) per semester. At the time of Practical examination every student has to perform two experiments (one from each section), each of three hours duration.
7. The distribution of marks for practical examination is as follows.

Record Book	----	6
Viva-voce	----	6
Experiment (A + B)	----	18
TOTAL	---	30

8. Evaluation of the student during the semester for internal assessment:-

For Theory internal:

Sr. No.	Work Assigned	Marks	Marks Obtained
1.	Assignment	02	
2.	Class Test	05	
3.	Active Participation Seminar/Routine Activity etc.	03	
Total		10	

Signature of teacher in-charge

Head of Department

9. The internal assessment shall be done by respective college and the marks shall be sent to the university one month prior to the final examination of each semester.
10. All theory papers shall be divided into four units. Each unit shall be cover in 15 periods of 48 minutes.
11. The theory question paper shall be of 3 hours duration and comprise of 5 questions with internal choice and with equal weightage to all units. The pattern of question paper shall be as follows.

Pattern of Question Paper
Subject – Physics

Time: 3 Hours

Maximum marks :50

Question No.	Marks Allotted
Qu. 1 EITHER	
A (From Unit – I) (i, ii, iii, two or three bits including numerical)	10
OR	
B (From Unit – I) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 2 EITHER	
A (From Unit – II) (i, ii, iii, two or three bits including numerical)	10
OR	
B (From Unit – II) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 3 EITHER	
A (From Unit – III) (i, ii, iii, two or three bits including numerical)	10
OR	
B (From Unit – III) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 4 EITHER	
A (From Unit – IV) (i, ii, iii, two or three bits including numerical)	10
OR	
B (From Unit – IV) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 5 Attempt any TEN questions from the following.	
a) From Unit I	1
b) From Unit I	1
c) From Unit I	1
d) From Unit II	1
e) From Unit II	1
f) From Unit II	1
g) From Unit III	1
h) From Unit III	1
i) From Unit III	1
j) From Unit IV	1
k) From Unit IV	1
l) From Unit IV	1

The above pattern is for all two papers of each semester of B.Sc. I (CBCS pattern) & B.Sc. II (CBCS pattern) w.e.f. 2018-19 and B.Sc. III from next subsequent years.

Proposed Syllabus for B.Sc. II CBCS (Semester Pattern) Subject – Physics

The syllabus of Physics as per semester system for the B.Sc. II will be implemented from the Academic year **2018-2019**.

Name of programme	Duration	Semester	Subject: Physics	Code	Title
B. Sc. II	Two Semester	Sem- III	Theory	USPHT05	Thermal Physics
				USPHT06	Radiation & Statistical Physics
			Practical	USPHP03	10 experiments
		Sem- IV	Theory	USPHT07	Waves, Acoustic & Laser
				USPHT08	Optical Physics
			Practical	USPHP04	10 experiments

Gondwana University, Gadchiroli

Choice Based Credit System (CBCS) Syllabus

B. Sc. II

Subject: Electronics

Semester-III& IV

**Board of Studies - Electronics
Gondwana University, Gadchiroli**

W. E. From 2018-19

Scheme of Bachelor of Science for CBCS Semester Examination

Gondwana University, Gadchiroli

Subject: Electronics

Class	Semester	Paper	Teaching Scheme Per Week			Examination Scheme				
			Theory	Total	Practical	Theory Marks			Practical Marks	Total Marks
						Paper	Internal Assessment	Total		
B.Sc.I	I	I	3	6 + 1T*	6	50	10	120	30	150
		II	3			50	10			
	II	I	3	6 + 1T*	6	50	10	120	30	150
		II	3			50	10			
B.Sc.II	I	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			
	II	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			
B.Sc.III	I	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			
	II	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			

* Periods for Tutorials per batch.

**** The student should appear in the University practical examination otherwise he/she will be treated as a failed. However their internal marks will be carried forward.**

Pattern of Question Papers (UG)

Time : 3 Hours

Maximum marks : 50

Question No.		Marks Allotted
Que. 1	Either	
	From Unit - I	10
	Or	
	From Unit - I	10
Que. 2	Either	
	From Unit - II	10
	Or	
	From Unit - II	10
Que. 3	Either	
	From Unit - III	10
	Or	
	From Unit - III	10
Que. 4	Either	
	From Unit - IV	10
	Or	
	From Unit - IV	10
Que.5	Solve any 10 out of 12 questions	10 marks
	(3 questions from each unit)	1 mark each

The above pattern is for all papers of each semester of B. Sc. II, w.e.f. 2018-2019 and B.Sc. III from subsequent years.

Details of the Syllabus
B.Sc. (Second Year)
Subject: Electronics
Scheme for Semester-III
W.E.F. 2018-19

Paper	No. of Periods per week (48 minutes each)			Marks				
	Lecture	Practical	Tutorial	Theory	Internal Assessment	Theory Total	Practical	Total
Paper – I (USELT05) Power Amplifier, Oscillators and Power Supplies	3	6	2	50	10	120	30	150
Paper – II (USELT06) Microprocessor	3			50	10			

CHOICE BASED CREDIT SYSTEM
B.Sc. SEM III
ELECTRONICS

Paper – I (USELT05)

Power Amplifier, Oscillators and Power Supplies

Theory : 48 Lectures

Credit : 02

Unit-I

Power amplifier: Introduction to power transistor, difference between voltage and power amplifier, class A amplifier with resistive load and its efficiency, transformer coupled class A power amplifier and its efficiency, push pull amplifier, complimentary- symmetry power amplifier.

Theory Internal Assessment (20 marks)

Sr.No.	Internal Assessment	P – I	P – II	T (20)
01	Assignment	02	02	04
02	Class Test	05	05	10
03	Adaptive Participation in routine class activities/seminars etc.	03	03	06
	Total	10	10	20

Note: An Industrial visit / Study tour should be arranged for the student after semester-III.

PRACTICALS (Conducted by internal examiner) (USELP03)

It is divided into two sections i.e. Section-A and Section-B. At least five experiments from each section must be performed and the practical record book duly signed should be submitted at the time of examination. Each student is expected to perform one experiment from each section, in the University Examination. The duration of practical examination is six hours.

Mark Distribution :

	Record	Experiment	Viva	Total
Section – A	3	9	3	15
Section – B	3	9	3	15
			Total	30

List of Experiments:

Section A

1. Study of Transformer couple Class A Amplifier.
2. Study of Push-Pull Amplifier.
3. Study of Unregulated Power Supply.
4. Study of Transistor Series Pass Regulator

Details of the Syllabus

Second Year B.Sc.

Subject: Electronics

Scheme for Semester-IV

Paper	No. of Periods per week (48 minutes each)			Marks				
	Lecture	Practical	Tutorial	Theory	Internal Assessment	Theory Total	Practical	Total
Paper – I (USELT07) Communication Electronics	3	6	2	50	10	120	30	150
Paper – II (USELT08) Interfacing, PPI devices and Microcontroller	3			50	10			

CHOICE BASED CREDIT SYSTEM

B.Sc. SEM IV

ELECTRONICS

Paper – I (USELT07)

Communication Electronics

Theory: 48 Lectures

Credit: 02

Unit I

Electronic communication: Introduction to communication, Block diagram of an electronic communication system. Electromagnetic communication spectrum, band designations and usage. Concept of Noise, signal-to-noise (S/N) ratio. Brief idea of frequency allocation for radio communication system in India (TRAI). Channels and base-band signals.

12L

B.Sc.-II (Computer Science) SEMESTER-III

B.Sc. (Computer Science) – II (Semester -III)											
Subject	Paper Code	Paper Name	Total Period /Week	Credit	Theory (Th) Assessment				Practical (Prac.)		Total (Th. + Prac.)
					IA	UE	Total	Min. Passing (40%)	UE	Min. Passing (40%)	
Core Course	USCST05	DATABASE MANAGEMENT & SYSTEM ANALYSIS	6T + 1Tu (Per Batch)	6	10	50	60	48 Marks	30	12	150
	USCST06	OBJECT ORIENTED PROGRAMMING WITH C++			10	50	60				

Note:

- Student must appear for University Practical Examination otherwise he/she will be treated as fail. However their Internal marks will be carried forward.
- In a Group, if any student remains absent in one of the paper then candidate result will be considered as fail in that group even though he/she has scored minimum passing marks in other paper of that group. Candidate need to appear in both the papers of that group.

B.Sc.-II(Computer Science)

SEMESTER-IV

B.Sc.(ComputerScience)–II(Semester-IV)											
Subject	Paper Code	Paper Name	Total Period /Week	Cre dit	Theory(Th) Assessment			Practical (Prac.)		Total (Th. + Prac.)	
					IA	UE	Total	Min. Passing (40%)	UE		Min. Passing (40%)
Core Course	USCST07	ALGORITHM & DATA STRUCTURES	6T + 1Tu (Per Batch)	6	10	50	60	48 Marks	30	12	150
	USCST08	VISUALBASIC & INTRODUCTION TO .NET			10	50	60				

Note:

- Student must appear for University Practical Examination otherwise he/she will be treated as fail. However their Internal marks will be carried forward.
- In a Group, if any student remains absent in one of the paper then candidate result will be considered as fail in that group even though he/she has scored minimum passing marks in other paper of that group. Candidate need to appear in both the papers of that group.

Microbiology B. Sc. II Semester-III (CBCS)

Course Code - USMBT05

Paper-I

Marks: 50

Credits: 2

Total Hours :48

MICROBIAL PHYSIOLOGY AND METABOLISM**Objective:** To make the students to understand the fundamentals of bacterial physiology and Metabolic pathways.

Unit No.	Content	Hrs
1	Growth	12
	a) Concept of Growth; b) Bacterial Growth Curve and its phases c) Reproduction-Binary fission d) Generation time, mathematical expression, Growth rate constant e) Diauxic Growth f) Synchronous Growth (methods) g) Continuous Culture (methods) h) Measurement of Bacterial Growth: Breed's method, Hemocytometer, Coulter counter, Plate count, Membrane filter count. i) Physical conditions required for growth i) Oxygen requirement ii) pH iii) Temperature iv) Miscellaneous.	
2	Enzymes	12
	a) Introduction and terminologies used in Enzymology, Characteristics of Enzymes, Nomenclature and Classification Based on IUB system and EC. b) Enzymes and catalysts i. Activation energy ii. Mechanism of enzyme action c) The active site, Allosteric Site, Allosteric modulators d) Enzyme-Substrate Interactions (E. Fischer Hypothesis & Daniel Koshland's Model) e) Enzyme kinetics: i. Michaelis-Menten equation ii. Line Weaver-Burk Plot f) Enzyme Inhibition: Competitive, Uncompetitive and non- competitive g) Factors affecting Enzyme activity: pH, temperature and substrate concentration.	
3	Microbial Metabolism	12
	a) Definition of Metabolism, Anabolism, Catabolism and Amphibolism. b) EMP pathway (detail) c) HMP pathway (outline) d) ED Pathway (outline) e) PK pathway (outline) f) TCA cycle (detail) g) Metabolic mill (outline), Anaplerotic reactions: Definition and examples h) β -oxidation of fatty acid, Urea Cycle	
Energy Metabolism		12
4	a) Phosphorylation: Substrate level, definition and examples, Oxidative Phosphorylation and electron transport chain - general features, cytochromes, NADH and Succinate dehydrogenase, Chemoistic coupling hypothesis. b) Cyclic and non cyclic phosphorylation in detail c) General concept of Respiration and Fermentation: Alcohol, lactic acid, acetone butanol and mixed acid fermentation. d) High energy rich compounds	

Microbiology B. Sc. II Semester-III (CBCS)

Course Code - USMBT06

Paper-II

Marks: 50

Credits: 2

Total Hours :48

FOOD, SOIL MICROBIOLOGY AND MICROBIAL ECOLOGY

Objective: To make the students to understand the fundamentals of Food, Soil and Microbial ecology.

Unit No.	Content	Hrs
1	Food Microbiology	12
	a) Definition and types of food, Sources of contamination in food b) Microbial examinations of food, Significance of microorganisms in food c) Spoilage and its types (Different types of spoilages with suitable examples) d) Preservation of food (Physical, chemical and biological methods) e) Food borne diseases, food infections and food poisoning (Botulism, <i>Staphylococcal</i> intoxication and <i>Salmonellosis</i>) f) Concept of HACCP	
2	Soil Microbiology	12
	a) Definition and composition of soil, types of soil b) Humus Formation (Nature and Characteristics) c) Compost , aerobic and anaerobic methods of composting d) Elemental transformations: Carbon cycle; Nitrogen cycle; Sulphur cycle; Phosphorus cycle	
3	Microbial Association and Nitrogen Fixation	12
	a) Positive and Negative Microbial associations with examples, mutualism, Symbiosis, Syntrophism, Synergism, Commensalism, Parasitism, Competition, Antibiosis. b) Biological Nitrogen fixation , Nitrogen fixing bacteria, Symbiotic and non symbiotic nitrogen fixation, Process of nodulation in legume, Nitrogenase complex, Mechanism of nitrogen fixation (symbiotic and non symbiotic), <i>Nif</i> gene and r DNA technology in N ₂ Fixation. c) Mycorrhizae (types and application) d) Biofertilizers and Biopesticides	
4	Environmental Biotechnology	12
	a) Microbial leaching - Bioleaching of Copper and Uranium. b) Microbial Enhanced Oil Recovery (MEOR). c) Bioremediation, Acid mine drainage, Desulfurization of coal d) Biogas plant, Construction and working mechanism e) Biodegradation of (a) Cellulose (b) Pesticides (Xenobiotics)	

Practical B. Sc. II
Semester III
{Based on Paper I & II}

Course code – USMBP03

Total Hours: 48

CREDITS: 2

Marks: 30

1. *Demonstration of enzymes activity: Catalase, Lecithinase (Lipase), Amylase, Caseinase (protease), Urease, Gelatinase
2. *Isolation and study of *Rhizobium* from root nodules.
3. *Isolation and study of *Azotobacter* from soil
4. Demonstration of Synergism.
5. Demonstration of Antibiosis
6. Demonstration of Syntrophism.
7. Isolation and Study of Rhizospheric microflora.
8. *Demonstration of: Ammonification, Nitrification, Nitrate Reduction.
9. Microbiological examination of food by SPC, YMPC.
10. Demonstration of cellulose degradation.
11. Study of Phosphate solubilization by *Mycorhizae*.
12. *Production of amylase enzyme and its assay
13. Preparation of *Rhizobium* Biofertilizer.
14. Study of bacterial growth curve.
15. Study of effect of P^H, temperature on enzyme activity
16. Detection of food Adulteration

Note: i) Minimum 4 major and 4 minor experiments are compulsory
ii) Underlined experiments are considered to be major experiments
iii) Experiments with asterisks are compulsory
iv) Duration of practical examination will be 8 hours i.e. 4 hours each for two Consecutive days

Distribution of marks for practical examination:

One major experiment	10 Marks
Two minor experiments 5 × 2=10	marks
Viva-Voce	05 marks
Practical Record	05 Marks

Total 30 marks

Microbiology B. Sc. II Semester-IV (CBCS)

Course Code – USMBT07		Paper-I	Marks: 50
Credits: 2		Total Hours	
:48			
INDUSTRIAL MICROBIOLOGY			
Objective: To make the students to understand the fundamentals of Industrial processes and mechanisms for the product formation.			
Unit No.	Content	Hrs	
1	<p>Basics of Industrial Microbiology</p> <p>Definition, Scope and Development of Industrial Microbiology, Bioreactor / Fermentor (Definition, Characteristics of Ideal, General design and Different parts of typical Fermentor), Application of Computer in fermentation process, Antifoaming agents.</p> <p>Types of Fermentor: Laboratory Fermentor, Batch and Continuous Fermentor with diagram, Single stage and Multiple stage continuous fermentor (in brief).</p> <p>Fermentations: Definition and Types- Batch and Continuous (comparison), Aerobic and Anaerobic, Solid and Liquid state, Surface and Submerged culture, Single, Dual / Multiple culture.</p>	12	
2	<p>Fermentation Media and Microbes in Industrial Microbiology</p> <p>A) Commonly used raw materials for the fermentation process with composition: Saccharine materials (Cane and beet molasses, fruit juices, cheese whey), Starchy materials (cereals and root tubers), Cellulosic materials (Sulphite waste liquor, wood molasses, agricultural waste- rice straw), Nitrogenous materials (corn steep liquor), Vegetable oils.</p> <p>B) Industrially important microorganisms & their products (List)</p> <p>Screening of industrially important microorganisms: Primary and Secondary screening, Strain improvement, Inoculum build up, Scale up of fermentation process, Tolerance studies.</p>	12	
3	<p>Upstream and Downstream Processing</p> <p>Upstream process : Definition and different stages in brief</p> <p>Downstream process - Recovery & Purification of fermentation products(brief)</p> <ul style="list-style-type: none"> . Cell mass removal by precipitation, filtration & centrifugation . Cell disruption by physical & chemical methods . Solvent recovery process . Chromatographic separation and industrial product recovery . Drying & crystallization, Quality testing of end product. . Packaging and marketing of product 	12	
4	<p>Production of Important Fermentation products</p> <p>Industrial production, Fermentation media , Microbes involved, Biochemistry, fermentation conditions, Product recovery operations and Uses of.</p> <ul style="list-style-type: none"> • Beverages (Production of Wine, concept of Beer and its types) • Organic acid (Citric acid) • Antibiotics(Penicillin) • Amino acids(Lysine) • Enzymes (Amylase) • Biomass – Baker's Yeast • Fermented food – Idli 	12	

Microbiology B. Sc. II Semester-IV (CBCS)		
Course Code -USMBT08	Paper-II	Marks:
50		
Credits: 2		Total Hours
:48		
MICROBIAL GENETICS AND MOLECULAR BIOLOGY		
Objective: To make the students to understand the fundamentals of Microbial genetics and concept of DNA, RNA and Protein Synthesis.		
Unit No.	Content	Hrs
1	Gene Regulation and Gene Action	12
	<p>Concept of Gene- Intron, Exon, Recon, Muton, Cistron-Mono and Polycistron, Structural organization of DNA in cell (Nucleosome Model).</p> <p>Types of Genes - Split gene, Overlapping genes and Pseudo genes, Central dogma of gene action (Brief).</p> <p>Regulation of Gene Expression - Repression, Induction, Positive and Negative Control.</p> <p>Operon Model - Lac operon and trp operon in E.coli</p> <p>Role of SiRNAs and MiRNAs in regulation.</p>	
2	Mutation and Replication	12
	<p>Spontaneous and Induced Mutation, Frequency of Mutation.</p> <p>Types of Mutation - Point mutation (Base substitution), Frameshift mutation, Nonsense mutation, Missense mutation, Silent mutation, Suppressor mutation (Intragenic and Extragenic), Transition and Transversion.</p> <p>Mutagens - Physical and Chemical agents</p> <p>Detection of Mutation - Replica plating technique and Ame's Test</p> <p>Enzymes in DNA replication - DNA helicases, RNA primase, SSB, DNA polymerase and DNA ligase. Mechanism of DNA replication (detail), Modes of replication, DNA damage and repair (NER, BER)</p>	
3	RNA synthesis, Processing and Translation	12
	<p>Transcription - RNA polymerase, sigma factor, pribnow box, mechanism of transcription (detail), reverses transcription.</p> <p>Post transcriptional modification - m-RNA processing, Splicing mechanism - alternate and spliceosome.</p> <p>Genetic codes and its different characteristics.</p> <p>Translation - General features, enzymes and factors involved, mechanism of protein synthesis in bacteria (detail).</p>	
4	Genetic Recombination	12
	<p>Transformation - Competence, Artificially induced competence, Mechanism of bacterial transformation, Griffith Experiment.</p> <p>Transposable Genetic Elements - Insertion sequence and transposon</p> <p>Transduction - U tube experiment, Generalized and specialized transduction, abortive and complete transduction.</p> <p>Conjugation - F factor, F+ cells, F- cells, Hfr cells, F prime cells, Mechanism of conjugation, Sexduction.</p>	

Practical's B.Sc. II
(Semester IV)
{Practical's based on Paper -I & II}

Course Code – USMBP04

Total Hours: 48

CREDITS: 2

Marks: 30

1. Primary screening of antibiotic producers, amylase producers, and organic acid producers.
2. Preparation of fermented food – Idli.
3. *Production of Penicillin by Fermentation and its Bioassay.
4. *Production of Wine by Fermentation and its estimation by Titration.
5. *Production of Ethanol by Fermentation and its estimation by Titration.
6. Production of Citric acid by Surface/submerged fermentation and its estimation by titration.
7. Extraction and Purification of RNA from Yeast.
8. Replica Plate method.
9. *Isolation of bacterial plasmid DNA
10. *Extraction of genomic DNA from E. coli and isolation by Agarose gel electrophoresis
11. *Digestion of DNA using restriction enzyme and analysis by agarose gel electrophoresis
12. *Ligation of restricted DNA fragment
13. Demonstration of Transformation
14. Demonstration of Conjugation

Note: i) Minimum 4 major and 4 minor experiments are compulsory
ii) Underlined experiments are considered to be major experiments
iii) Experiments with asterisks are compulsory
iv) Duration of practical examination will be 8 hours i.e. 4 hours each for two consecutive days

Distribution of marks for practical examination:

One major experiment	10 marks
Two minor experiments $5 \times 2 =$	10 marks
Viva-Voce	5 marks
Practical Record	5 marks

Total 30 marks

GONDWANA UNIVERSITY, GADCHIROLI

T. Y. B. A. Sem- V & VI

COMMUNICATIVE ENGLISH

For the session 2019-20 and onwards

Objectives:

1. To enhance the communicative abilities of the learners.
2. To broaden the knowledge of English language of the learners.
3. To make the students self-expressive.
4. To develop writing skills among the learners.
5. To prepare the learners to deal with soft skills.
6. To expand the learners' use of correct and appropriate expressions.

GONDWANA UNIVERSITY, GADCHIROLI

T. Y. B. A. Sem.- V

COMMUNICATIVE ENGLISH

For the session 2019-20 and onwards

Contents	Marks Allotted
Unit : I	(20)
1. An Introduction to Communication	
2. Information Transfer	
Unit : II	(20)
1. Interview and Interviewing Skills	
2. Presentations	
Unit : III	(20)
A. Meetings	
B. Notices, Agenda and Minutes	
Unit : IV	(20)
1. Degrees of Comparison	
2. Direct and Indirect Speech	
3. E-Mail Writing	

Scheme of Examination for T. Y. B. A. Sem.- V

Communicative English

Time : 3 Hours

Max. Marks: 80

Que-1. Answer the following questions in about 150 words each. (Any 2 out of 3) $2 \times 8 = 16$

(Based on Unit- I)

Que-2. Answer the following questions in about 150 words each. (Any 2 out of 3) $2 \times 8 = 16$

(Based on Unit- II)

Que-3. Answer the following questions in about 150 words each. (Any 2 out of 3) $2 \times 8 = 16$

(Based on Unit- III)

Que-4. (A) Change the Degree (Based on Unit- IV-1) (Any 4 out of 6) $4 \times 1 = 04$

(B) Change the narration (Based on Unit- IV-2) (Any 3 out of 5) $3 \times 2 = 06$

(C) E- Mail Writing (with internal choice) (Based on Unit- IV-3) $1 \times 10 = 10$

Que-5. Very short Answer-Questions to be answered in one or two lines each (6 out of 8)

(Based on Unit- I, II & III)

$6 \times 2 = 12$

The Internal Assessment

20 marks

Attendance- 05 Marks, Assignment- 05 Marks, and Seminar/Group Discussion- 05 Marks and Viva-voce-05 Marks

T. Y. B. A. Sem.- VI
COMMUNICATIVE ENGLISH

For the session 2019-20 and onwards

Contents	Marks Allotted
Unit : I	(20)
1. Speeches	
2. Reference Skills	
Unit : II	(20)
1. Business Correspondence-Letters of Inquiry, Order, Interview Call, Appointment,	
Unit : III	(20)
1. Editing Skills	
2. Synthesis of Sentences (Simple / Complex / Compound)	
Unit : IV	(20)
1. Report Writing (Official)	
2. Essay Writing (200 words)	

Scheme of Examination for T. Y. B. A. Sem.- VI

Communicative English

Time : 3 Hours

Max. Marks: 80

Que-1. (A) Answer the following questions in about 150 words. (Internal Choice) 1X10 = 10

(Based on Unit- I- Speeches)

(B) Answer the following questions in about 150 words. (Internal Choice) 1X10 = 10

(Based on Unit- I- Reference Skills)

Que-2. (A) Write the following letter- Letter of Inquiry or Letter of Order.

(Based on Unit- II)

1X10 = 10

(B) Write the following letter- Interview Call Letter or Letter of Appointment.

(Based on Unit- II)

1X10 = 10

Que-3. (A) Explain the following terms (Any 7 out of 10)

7X2 = 14

(Based on Unit- III- Editing Skills)

(B) Do as directed (Any 3 out of 6)

3X2 = 06

(Based on Unit-III- Synthesis of Sentences)

Que-4. Write an official report in 200 words (with internal choice)

1X10 = 10

(Based on Unit- IV—Report Writing)

Que-5. Write an essay on any one of the following topics in 200 words (1 out of 4) 1X10 = 10

(Based on Unit- IV—Essay Writing)

The Internal Assessment

20 marks

Attendance- 05 Marks, Viva-Voce- 10 Marks, and Seminar- 05 Marks

Book prescribed for Sem- V & VI- ***Synergy: Communication in English and Study Skills***, Board of Editors, Published by Orient BlackSwan

Reference Books:

1. Business Communication- Basic Concepts and Skills, J. P. Parekh & others, Orient BlackSwan.
2. *English Grammar and Composition*, by R. C. Jain, published by Macmillan India Limited.

अभ्यासपत्रिका –Communication Marathi

बी. ए. सत्र – पाचवे (CBCS)

शैक्षणिक सत्र – २०१९ – २०२० पासून पुढे

(Skill Enhancement (Job Oriented) Course) SEC

'साहित्य सरिता' भाग – ३ (आवश्यक मराठी)

अभ्यासग्रंथ : व्यावहारिक मराठी : संपादित ग्रंथ

मराठी अभ्यासमंडळ गोंडवाना विद्यापीठ, गडचिरोली

सत्र पाचवे करिता निश्चित अभ्यासक्रम खालीलप्रमाणे :

प्रकरणपहिले – व्यावहारिक मराठी : स्वरूप आणि भूमिका

प्रकरण दुसरे – भाषिक संवाद व्यवहाराची मूलतत्त्वे

प्रकरण तिसरे – सारांशलेखन

प्रकरण चवथे – इतिवृत्तलेखन

प्रकरण पाचवे – प्रसारमाध्यमांसाठी वृत्तलेखन

प्रकरण सहावे – भाषांतरविद्या

प्रकरण सातवे – मुलाखत लेखन

प्रकरण आठवे – संपादन प्रक्रिया :

अ) संहिता संपादन

ब) स्मरणिका संपादन

प्रकरण नववे – जाहिर निवेदन आणि माहितीपत्रक

प्रकरण दहावे – इंटरनेट आणि मराठी भाषा व साहित्य

प्रकरण अकरावे – कल्पना विस्तार

प्रश्नप्रत्रिकेचे स्वरूप व गुणविभागणी

गुणविभागणी ८० + २० = एकूण गुण १००

लेखी परीक्षा — ८० गुण

श्रेयांक — ०४

सत्र — पाचवे

- १) सर्व प्रश्न लघुत्तरी स्वरूपाचे राहतील.
- २) सर्व प्रश्नांना समान गुण आहेत.

प्रश्न १ लघुत्तरी प्रश्न (सहा पैकी कोणतेही चार सोडवा) (प्रकरण — पहिले ते तिसरे)	गुण — २०
प्रश्न २ लघुत्तरी प्रश्न (सहा पैकी कोणतेही चार सोडवा) (प्रकरण — चवथे ते सहावे)	गुण — २०
प्रश्न ३ लघुत्तरी प्रश्न (सहा पैकी कोणतेही चार सोडवा) (प्रकरण — सातवे ते नववे)	गुण — २०
प्रश्न ४ लघुत्तरी प्रश्न (सहा पैकी कोणतेही चार सोडवा) (प्रकरण — दहावे व अकरावे)	गुण — २०

अंतर्गत गुण — २०

- १) वर्गातील नियमित उपस्थिती गुण — ०५
- २) स्वाध्याय गुण — १०
- ३) मौखिक चाचणी गुण — ०५

सत्र पाचवे— स्वाध्याय करिता 'सुगम मराठी व्याकरण' लेखक — मो. रा. वाळंबे या ग्रंथातील प्रकरण (१०) लिंगविचार, (११) वचनविचार (१२) विभक्तिविचार, (१३) सामान्यरूप हे राहतील.

विषय शिक्षकांनी विद्यार्थ्यांकडून स्वाध्यायाच्या रूपाने तयार करून घ्यावे.

अभ्यासपत्रिका-COMMUNICATION MARATHI

सत्र सहावे (CBCS)

शैक्षणिक सत्र-२०१९-२०२० पासून पुढे

(Skill Enhancement (Job oriented)Course) SEC

अभ्यासग्रंथ : 'साहित्य सरिता' भाग -३ ('व्यावहारिक मराठी ') - संपादित ग्रंथ

मराठी अभ्यासमंडळ, गोंडवाना विद्यापीठ, गडचिरोली

सत्र सहा करिता निश्चित अभ्यासक्रम खालील प्रमाणे

सत्र सहावे

प्रकरण -१ बोलावे कसे?

प्रकरण -२ लिहावे कसे?

प्रकरण -३ सृजनात्मक लेखन

प्रकरण -४ माहितीपट/अनुबोधपट

प्रकरण -५ नभोनाट्य/दुरचित्रवाणी नाटक

किंवा मालिका नाटक

प्रकरण -६ प्रवासवर्णन

प्रकरण -७ जाहिरात मसुदालेखन

प्रकरण -८ प्रत्रात्मक लेखन

प्रकरण -९ परिच्छेद लेखन

प्रकरण -१० ग्रंथ परिक्षण

प्रकरण -११ मुद्रित शोधन

प्रश्नप्रत्रिकेचे स्वरूप व गुणविभागणी

गुणविभागणी ८० + २० = एकूण गुण १००

लेखी परीक्षा - ८० गुण

श्रेयांक - ०४

सत्र -सहावे

१) सर्व प्रश्न लघुत्तरी स्वरूपाचे राहतील.

२) सर्व प्रश्नांना समान गुण आहेत.

प्रश्न १ लघुत्तरी प्रश्न (सहा पैकी कोणतेही चार सोडवा) गुण - २०

(प्रकरण - पहिले ते तिसरे)

प्रश्न २ लघुत्तरी प्रश्न (सहा पैकी कोणतेही चार सोडवा) गुण - २०

(प्रकरण - चवथे ते सहावे)

प्रश्न ३ लघुत्तरी प्रश्न (सहा पैकी कोणतेही चार सोडवा) गुण - २०

(प्रकरण - सातवे ते नववे)

प्रश्न ४ लघुत्तरी प्रश्न (सहा पैकी कोणतेही चार सोडवा) गुण - २०

(प्रकरण - दहावे व अकरावे)

अंतर्गत गुण - २०

१) वर्गातील नियमित उपस्थिती गुण - ०५

२) स्वाध्याय गुण - १०

३) मौखिक चाचणी गुण - ०५

सत्र सहावे- स्वाध्याय करिता 'सुगम मराठी व्याकरण' लेखक - मो. रा. वाळंबे या ग्रंथातील प्रकरण (२५) प्रयोग, (२७) समास, (३५) म्हणी व वाक्प्रचार हे राहतील.

विषय शिक्षकांनी विद्यार्थ्यांकडून स्वाध्यायाच्या रूपाने तयार करून घ्यावे.

Gondvana University, Gadchiroli

Syllabus for B. A. (Part - III)(Economics)

**Choice Based Credit System
V - Semester & VI – Semester**

Session: 2019 - 2020 Onwards

Scheme of Examination for

B. A. (Part - III)

(Economics)

Model Question Paper

Model Que. Paper-1		Model Que. Paper-2		Model Que. Paper-3		Model Que. Paper-4
Q. 1 Module or Unit No. 3 Q.2 Module or Unit No.1 Q.3 Module or Unit No. 2 Q.4 Module or Unit No. 4 Q.5 Module or Unit No 1,2,3,4	Or	Q. 1 Module or Unit No. 1 Q.2 Module or Unit No.2 Q.3 Module or Unit No. 4 Q.4 Module or Unit No. 3 Q.5 Module or Unit No 1,2,3,4	Or	Q. 1 Module or Unit No. 2 Q.2 Module or Unit No.4 Q.3 Module or Unit No. 3 Q.4 Module or Unit No. 1 Q.5 Module or Unit No 1,2,3,4	or	Q. 1 Module or Unit No. 4 Q.2 Module or Unit No.3 Q.3 Module or Unit No. 1 Q.4 Module or Unit No. 2 Q.5 Module or Unit 1,2,3,4

B.A. III (Economics) (Nature of Internal Assessment) SEMESTER PATTERN (CBCS)

1. Assignment to students by respective paper teachers - 05 marks.
2. Attendance of the students - 05 marks.
3. Seminar/Presentation of the student to the respective paper (by respective paper teacher) – 10 marks.

CBCS SEMESTER PATTERN EXAMINATION

B.A (PART III)

Semester – V & VI

Indian Economy – I & II

Time: Three Hours.

Max Marks: 80

Instructions-

- i) All questions are compulsory.
- ii) All question carry equal marks.
- iii) Draw neat diagrams wherever necessary.
- iv) Give correct question number to the answer.

- | | |
|--|-------------------|
| 1. Broad question Any One internal choice. | 16 Marks each -16 |
| 2. Broad question any one internal choice. | 16 Marks each -16 |
| 3. Write Any Two question (Out of 4- ABCD) | 8 Marks each -16 |
| 4. Write Any Two question (Out of 4- ABCD) | 8 Marks each -16 |
| 5. Write short Answers (Eight) | 2 Marks each -16 |

Note: -Question pattern from 01 to 05 shall be from any four units. For example, question no 01 can be from any Module or unit of 01 to 04 from the syllabus. Similarly question No. 02, 03, 04 shall be from any module or unit of 01 to 04. And question no 05 will be from all module or all unit 01 to 04.

**CBCS Semester Pattern scheme of examinations for
Economics**

B.A. Part –III Semester (V&VI)

			Examination		Internal Assessment		Total	
			Marks	Credits	Marks	Credits	Marks	Credits
Semester V	Indian Economy -I	Full Marks	80	4	20	1	100	5
		Pass Marks	32	1.6	8	0.4	40	2
Semester VI	Indian Economy -II	Full Marks	80	4	20	1	100	5
		Pass Marks	32	1.6	8	0.4	40	2



Gondwana University, Gadchiroli
B.A. III (Sociology) CBCS
Sociology of Tribal Society

Sem – V

Objectives –

1. To introduce tribal society to the students of sociology as a major segment of Indian Society.
2. To make aware the students about the tribal social change problems & solutions.

UNIT - I : The Concept of Tribe

- a. Meaning and definition.
- b. Characteristics of Tribal Society.
- c. Difference between tribe and caste.
- d. Demographic profile – habitat, distribution and concentration of tribal people, tribal zones, sex ratio.

UNIT - II : Tribal Social Organization

- a. Family – meaning & definition, characteristics, types, functions, matriarchal family – Khasi, Garo, Nair, patriarchal family.
- b. Marriage – meaning, definition, aims, characteristics, types, way of acquiring mates.
- c. Clan - Meaning , Definition, Characteristics, Types
- d. Status & role of women in tribal society – meaning, definition of status & role, status of women in matriarchal tribal society & patriarchal tribal society 77

UNIT - III : Social Mobility & Change.

- a. Meaning & definition of social mobility & change.
- b. Hinduization & Sanskritization.

Question Paper Pattern

(For V & VI Semesters)

Time :3 hrs.

Total Marks :80

Q. 1 (A) One Long Answer Question out of two to be answered in about 200 words based on Unit I **1x10= 10 Marks**

(B) Two Short Answer Questions out of four to be answered in about 100 words each based on Unit I **2x5=10 Marks**

(C) Two Annotations out of four based on Unit I **2x5=10 Marks**

Q.2 (A) One Long Answer Question out of two to be answered in about 200 words based on Unit II **1x10= 10 Marks**

(B) Two Short Answer Questions out of four to be answered in about 100 words each based on Unit II **2x5=10 Marks**

Q.3 (A) One Long Answer Question out of two to be answered in about 200 words based on Unit III **1x10= 10 Marks**

(B) Two Short Answer Questions out of four to be answered in about 100 words each based on Unit III **2x5=10 Marks**

Q.4 Five out of Seven Very Short Notes based on Unit IV **5x2=10 Marks**

Internal Assessment

20 Marks

Attendance **05** Marks, Assignment **10** Marks, Presentation **05** Marks

Paper- C

INDIA'S FOREIGN POLICY

Semester -VI

Unit: 1 Foreign Policy

- a) Meaning and definitions, determinants of India's foreign policy
- b) Characteristics of India's foreign policy

Unit:2 Development of India's Foreign Policy

- a) Pre independence era
- b) Post-independence foreign policy up to 1990

Unit: 3 Foreign Policy Process

- a) Constitutional provisions, cabinet and prime minister, political parties.
- b) Media and public opinion

Unit: 4 India's approach to the major global issues.

- a) Disarmament – arms control, cross border terrorism.
- b) Environmental position and Human rights

External and Internal Evaluation Semester Pattern -80:20 Marks for B.A. Level

[A] External Evaluations :

(I) Two long questions with internal choice : 32 Marks

1. 16 Marks

2. 16 Marks

(II) Two Semilong Questions with internal choice : 32 Marks

1. 16 Marks (Two Questions each of eight marks out of four)

2. 16 Marks (Two Questions each of eight marks out of four)

(III) Fifth question will be compulsory with questions from each of the four unit 16 Marks

having equal weightage and there will be no internal choice.

1. 16 Marks (Eight questions each of two marks)

Total 80 Marks

[B] Internal Evaluation : 20 Marks

Total 100 Marks

Minimum Passing Marks:

[A] External Evaluation: 80 -28 B.A. – I (Passing Marks)

[B] Internal Evaluation: 20 -07 B.A-I (Passing Marks)

100/35 (Passing Marks)

Internal Assessment System

B.A. Political Science

Internal Assessment System (Per Semester) 20
Marks

[As Per Syllabus]

[1] Class Seminar: 10
Marks

2)Home Assignment: - 05 Marks

[3] Oral Test & Personality Test: 05
Marks

[Co-Operation, Leadership, Presentation, confidence]

Performance for Internal Assessment System [Valuation Model]

B.A. Political Science

Roll No.	Enrolment No	Name of Student	Class	Internal Evolution			Total	Remarks
				Class Seminar 10 Marks	Home Assignment 05 Marks	Oral Test / Personality Test / Project Work / Educational Tour / Local Self Government visit (local Level) 05 Marks		
1.	2.	3.	4.	5.	6.	7.	8.	9.

Date : / / 20

Subject Examiner

Principal

Model Que. paper		Model Que. paper		Model Que. paper		Model Que. paper
Q.1 Module or Unit No. 3	or	Q.1 Module or Unit No. 1	or	Q.1 Module or Unit No. 2	or	Q.1 Module or Unit No. 4
Q.2 Module or Unit No. 1		Q.2 Module or Unit No. 2		Q.2 Module or Unit No. 4		Q.2 Module or Unit No. 3
Q.3 Module or Unit No. 2		Q.3 Module or Unit No. 3		Q.3 Module or Unit No. 3		Q.3 Module or Unit No. 1
Q.4 Module or Unit No. 4		Q.4 Module or Unit No. 4		Q.4 Module or Unit No. 1		Q.4 Module or Unit No. 2
Q.5 Module or Unit No. 1,2,3,4	or	Q.5 Module or Unit No. 1,2,3,4	or	Q.5 Module or Unit No. 1,2,3,4	or	Q.5 Module or Unit No. 1,2,3,4

SEMESTER PATTERN EXAMINATION

B.A. SEMESTER I TO VI EXAMINATION

Political Science

Time : 3 Hours

Max Marks : 80

Instruction :

- i] All question are compulsory
- ii] All question carry equal marks
- iii] Give correct question number to the answer

- | | | |
|----|---|------------------|
| 1. | Long question any one internal choice | 16 Marks each 16 |
| 2. | Long question any one internal choice | 16 Marks each 16 |
| 3. | Semi long question any two question (Out of 4 - ABCD) | 8 Marks each 16 |
| 4. | Semi long question any two question (Out of 4 - ABCD) | 8 Marks each 16 |
| 5. | Write short answer (Eight question compulsory) | 2 Marks each 16 |

Note :

Question pattern from 01 to 05 shall be from any four units. For example, question no. 01 can be from any Module or unit of 01 to 04 from the syllabus. Similarly question no. 02, 03, 04 shall be from any module or unit of 01 to 04.

SEMESTER PATTERN EXAMINATION
B.A. III SEMESTER V&VI EXAMINATION

HISTORY

Time : Three Hours

Max. Marks :

80

- 1). All questions are compulsory.
- 2). All questions carry equal marks.
- 3). Give correct question number to the answer.

- | | |
|---|----------------------|
| 1. Long question Any one internal choice | [1 x 16 = 16 marks] |
| 2. Long question Any one internal choice | [1 x 16 = 16 marks] |
| 3. Two Short question out of four | [2 x 8 = 16 marks] |
| 4. Two Short question out of four | [2 x 8 = 16 marks] |
| 5. Eight very short question. (Two Questions from each unit)[8 x 2 = 16 marks] | |

Note: -

- Question pattern 01 to 05 shall be from for units.
- One question from each unit will be asked in question no. from 1 to 4.
- In question no. 05, two questions will be asked from each unit.

Assignment Scheme:-

1. Assignment	10 Marks.
2. Viva / Seminar	05 Marks.
3. Overall performance	05 Marks.
<hr/>	
Total Marks:-	20 Marks.
<hr/>	

Marks Scheme

Passing Theory and Internal Assessment

Maximum Marks		Minimum Marks	
Theory	Internal Assessment	Theory	Internal Assessment
80	20	32	08

**Member of
Board of Studies in History**

GONDWANA UNIVERSITY GADCHIROLI

CHOICE BASED CREDIT SYSTEM SEMESTER PATTERN SYLLABUS

FOR

Sr.No.	Class	Semester	Subject	Theory paper Marks	Internal Assessment	Practical Mark	Total Mark
1	B.A. Part I	I	Core Subject Introduction to Geography	60	15	25	100
2	B.A. Part I	II	Core Subject Climatology	60	15	25	100
3	B.A. Part II	III	Core Subject Geomorphology	60	15	25	100
4	B.A. Part II	IV	Core Subject Geomorphology and Oceanography	60	15	25	100
5	B.A. Part III	V	Elective Subject I) Geography of Maharashtra II) Bio Geography III) Geography of Tourism	60	15	25	100
6	B.A. Part III	VI	Elective Subject I) India – A Geographical Analysis II) Cultural Geography III) Geography of Health	60	15	25	100
				360	90	150	600

B.A. GEOGRAPHY

Semester wise Distribution of Marks

GONDWANA UNIVERSITY GADCHIROLI

CHOICE BASED CREDIT SYSTEM SEMESTER PATTERN SYLLABUS

B.A. GEOGRAPHY

PATTERN OF EXAMINATION (ALL SEMESTER)

Theory:

One theory paper of 60 marks each and of three hours duration will be conducted at the end of each semester.

Practicals:

- 1) One Practical examination of 25 marks and of four hours duration of each semester will be conducted at the end of the same semester.
- 2) Practical examinations of all semesters will be conducted by internal and External examiners appointed by the University.

Internal Assessment:

- 1) Head of the department will carry out internal assessment of the students on the basis of evaluation report from the concerned teacher/ teachers, under the supervision of the principal of the college and will be done at the end of each semester.
- 2) Distribution of 15 marks of internal assessment is as under –

i)	Class Attendance	05 marks
ii)	Home Assignment & Seminar	05 marks
iii)	Visit to a Geo. Places	05 marks

Rules and Regulation

1. There will be four periods per week for theory papers.
2. The batch of Practical class should not be exceeding 16 students.
3. There will be two periods per batch per week for practical's.
4. The minimum passing marks of Theory paper is 24 and internal Assessment is 06 & Passing Marks for Practical are 10.
5. The student has to pass practical and theory paper separately.
6. Marks will not be allotted to student if he found absent in study tour.

B. A.(Semester- V)
(English Literature)

Content	Marks Allotted
Unit – 1: Drama (Detailed Study)	(30 Marks)
(i) William Shakespeare: <i>King Lear</i>	
Unit – 2 Drama (Non-Detailed Study)	(20 Marks)
(ii) Girish Karnad: <i>Tughlaq</i>	
Unit – 3 Background	(20 Marks)
i. Structure of Drama	
ii. Tragedy	
iii. Comedy	
iv. Tragi-Comedy	
v. Farce and Melodrama	
Unit – 4 Literary Terms	(10 Marks)
i. Prologue	
ii. Imitation	
iii. Buskin	
iv. Subplot	
v. Antihero	
vi. Comic Relief	
vii. Aside	
viii. Climax	

Recommended Books:

- 1) William Shakespeare: *King Lear*, Penguin India
- 2) Girish Karnad: *Tughlaq*, Oxford University Press
- 3) *A Background to the Study of English Literature* by B. Prasad
- 4) M.H. Abrahams- *A Glossary of Literary Terms*
- 5) *A Glossary of Literary Terms* - Cuddon

B. A.(Semester- VI)
(English Literature)

Content	Marks Allotted
Unit – 1: Drama (Detail)	(30 Marks)
<i>i. Mahesh Dattani : Dance Like A Man</i>	
Unit – 2: Drama (Non-Detail)	(20 Marks)
<i>i. Vijay Tendulkar : Ghasiram Kotwal</i>	
Unit – 3: Background	(20 Marks)
<i>i. Aristotle: Poetics (Character and Plot)</i>	
<i>ii. Classical Indian Drama: Theory and Practice</i>	
Unit – 4: Literary Terms	(10 Marks)
<i>i. Monologue</i>	
<i>ii. Soliloquy</i>	
<i>iii. Stock Character</i>	
<i>iv. Catharsis</i>	
<i>v. Dramatic Irony</i>	
<i>vi. Cosmic Irony</i>	
<i>vii. Denouement</i>	
<i>viii. Three Unities</i>	

Recommended Books:

- 1) Mahesh Dattani : *Dance Like A Man* , Penguin India
- 2) Vijay Tendulkar: *Ghasiram Kotwal*, Penguin India
- 3) Bharata, *Natyashastra tr. Manomohan Ghosh*, Vol. I, 2nd Edition, (Calcutta: Granthalaya, 1967) Chapter 6: Sentiments, pp.100-118
- 4) M.H. Abrahams- *A Glossary of Literary Terms*
- 5) A Glossary of Literary Terms- Cuddon

अभ्यासपत्रिका — मराठी वाङ्मय (मराठी ऐच्छिक)

बी. ए. सत्र — पाचवे (CBCS)

शैक्षणिक सत्र — २०१९ — २०२० पासून पुढे

अभ्यासपत्रिका (CORE COURSE) - UAMLT 'प्राचीन मराठी वाङ्मयाचा इतिहास आणि प्राचीन साहित्यशास्त्र

अभ्यासग्रंथ — १) प्राचीन मराठी वाङ्मयाचा इतिहास : लेखक : ल. रा. नसिराबादकर या ग्रंथातील

प्रकरण — १. महाराष्ट्र हे देशभाषा मराठी, २. आद्यकवी मुकुंदराज, ३. महानुभावांची साहित्यसरिता, ४. ज्ञानदेवे रचिला पाया, ५. नामयाची वाणी अमृताची खाणी, ६. संतमेळ्याची अभंगवाणी ८. समन्वयकार एकनाथ, १०. तुका झालासे कळस, ११. 'दासबोध'कार समर्थ, १२. पंडित कवी, १७. शाहिरी काव्य, १८. बखर गद्य

२) काव्यशास्त्रप्रदीप : लेखक — डॉ. स. रा. गाडगीळ या ग्रंथातील

प्रकरण— ५. रसप्रक्रिया, ६. काव्यानंदमीमांसा.

प्रश्नपत्रिकेचे स्वरूप व गुणविभागणी

गुणविभागणी ८० + २० = एकूण गुण १००

लेखी परीक्षा — ८० गुण

श्रेयांक — ०४

प्रश्न १ दीर्घोत्तरी प्रश्न (दोन पैकी एक सोडवा)

गुण — १६

'प्राचीन मराठी वाङ्मयाचा इतिहास'

प्रश्न २ दीर्घोत्तरी प्रश्न (दोन पैकी एक सोडवा)

गुण — १६

'प्राचीन मराठी वाङ्मयाचा इतिहास'

प्रश्न ३ लघुत्तरी प्रश्न (दोन गट पैकी एक गट सोडवा.)

गुण — १६

गट— 'अ' किंवा गट — 'आ' प्रत्येक गटात चार प्रश्न राहतील.

'प्राचीन मराठी वाङ्मयाचा इतिहास'

प्रश्न ४ लघुत्तरी प्रश्न (दोन गट पैकी एक गट सोडवा.)

गुण — १६

गट— 'क' किंवा गट — 'ख' प्रत्येक गटात चार प्रश्न राहतील.

दोन प्रश्न 'प्राचीन मराठी वाङ्मयाचा इतिहास' एक प्रश्न रसप्रक्रिया, एक प्रश्न काव्यानंदमीमांसा

प्रश्न ५ थोडक्यात उत्तरे लिहा (सर्व प्रश्न अनिवार्य)

गुण — १६

१) 'प्राचीन मराठी वाङ्मयाचा इतिहास'

२) 'प्राचीन मराठी वाङ्मयाचा इतिहास'

३) रसप्रक्रिया

४) काव्यानंदमीमांसा

अंतर्गत गुण — २०

१) वर्गातील नियमित उपस्थिती

गुण — ०५

२) स्वाध्याय

गुण — १०

३) मौखिक चाचणी

गुण — ०५

अभ्यासपत्रिका — मराठी वाङ्मय (मराठी ऐच्छिक)
बी. ए. सत्र — सहावे (CBCS)
शैक्षणिक सत्र — २०१९ — २०२० पासून पुढे
अभ्यासपत्रिका (CORE COURSE) - UAMLT वाङ्मयप्रकार,
प्रवासवर्णन, भाषाविज्ञान

अभ्यासग्रंथ — १) अपूर्वाई : लेखक — पु. ल. देशपांडे (श्रीविद्या प्रकाशन, पुणे)

२) भाषाविज्ञान परिचय : लेखक — डॉ. स. गं. मालशे/डॉ. द. दि. पुढे/डॉ. अंजली सोमण या ग्रंथातील

प्रकरण— १. भाषेचे स्वरूप व उपयोजन, २. प्रमाणभाषा व बोलीभाषा.

प्रश्नपत्रिकेचे स्वरूप व गुणविभागणी

गुणविभागणी ८० + २० = एकूण गुण १००

लेखी परीक्षा — ८० गुण

श्रेयांक — ०४

प्रश्न १ दीर्घोत्तरी प्रश्न (दोन पैकी एक सोडवा)

गुण — १६

‘अपूर्वाई’

प्रश्न २ दीर्घोत्तरी प्रश्न (दोन पैकी एक सोडवा)

गुण — १६

‘अपूर्वाई’

प्रश्न ३ लघुत्तरी प्रश्न (दोन गट पैकी एक गट सोडवा.)

गुण — १६

गट— ‘अ’ किंवा गट — ‘आ’ प्रत्येक गटात चार प्रश्न राहतील.

‘अपूर्वाई’

प्रश्न ४ लघुत्तरी प्रश्न (दोन गट पैकी एक गट सोडवा.)

गुण — १६

गट— ‘क’ किंवा गट — ‘ख’ प्रत्येक गटात चार प्रश्न राहतील.

दोन प्रश्न ‘अपूर्वाई’ एक प्रश्न भाषेचे स्वरूप व उपयोजन, एक प्रश्न प्रमाणभाषा व बोलीभाषा

प्रश्न ५ थोडक्यात उत्तरे लिहा (सर्व प्रश्न अनिवार्य)

गुण — १६

१) ‘अपूर्वाई’

२) ‘अपूर्वाई’

३) भाषेचे स्वरूप व उपयोजन

४) प्रमाणभाषा व बोलीभाषा

अंतर्गत गुण — २०

१) वर्गातील नियमित उपस्थिती

गुण — ०५

२) स्वाध्याय

गुण — १०

३) मौखिक चाचणी

गुण — ०५

GONDWANA UNIVERSITY GADCHIROLI

B.A. Home Economics

Semester – V

PAPER – Prenatal and Infancy Development

FULL MARKS – 100

Semester Exam: 60 Marks

TIME –3 Hrs.

Internal Assessment: 15 Marks

[TH – 60 + Pr.- 25 + IA = 15]

OBJECTIVE:

- To introduce the students to the field of child development. Its concept, scope, dimensions and interrelations.
- To sensitize the students to interventions in the field of child-development.
- To understand the biological and physiological foundation of development.

Unit I

- 1.1 Meaning, Definition, Importance of child development.
- 1.2 Definition and difference of Growth and Development and stages of development.
- 1.3 Principles of development.
- 1.4 Factors influencing growth and development.

Unit II

2.1 Heredity and Environment.

Heredity – Definition, mechanism of Heredity.

Environment – Definition, Influences of environment on child.

Relation of heredity and environment .

2.2 Female & Male Reproductive system

Practical

1. Diet for Pregnant Women – Vegetable Paratha, Koshimbir, Veg Pulao, Palak Paneer, Beet Burfi
2. Diet for Lactating Women – Gum Laddu, Aaliv Kheer ,Mung Dhirdi,
3. Diet for Infants – Veg Daliya. Wheat Floor-Jaggery Halwa,
4. Drafting and Stitching – (0-1year) Zabla, Bib, Nicker.

Practical Exam

25 Marks

- | | |
|---|----|
| 1. Cooking – Preparation of two dishes | 10 |
| 2. Drafting and stitching any one garment | 10 |
| 3. Viva | 03 |
| 4. Record Book | 02 |

Internal Assessment

15 Marks

- | | |
|----------------------|----|
| 1. Unit test - | 05 |
| 2. Attendance - | 05 |
| 3. Home Assignment - | 05 |

Unit III

3.1 Childhood Behavior Problems: Its causes & remedies.

Temper tantrums, Bed wetting, Thumb sucking, Stealing, Lying, Pica, Day-dreaming, nail-biting.

3.2 Discipline – types, merits and demerits, Significance of punishment and rewards.

Unit IV

1.1 Parenting and Parents-child relationship: Importance, need for desirable child rearing practices.

1.2 Infant Mortality, Maternal Mortality – causes & remedies.

1.3 Juvenile Delinquency – Definition, causes, prevention.

Practical

1. Diet for Preschool child - Sandwiches, Fruit salad, Dahi-wada Tilgul-groundnut laddu / Moha Chikki, Veg Aappe.
2. Diet for School going children – Coconut Biscuits, Milk shake, Mung pakoda, Veg Cutlet,
3. Knitting baby set (1-2 Years) – Sweeter, Bonnet, Socks.

Practical Exam

25 Marks

- | | | |
|--|---|----|
| 1. Cooking – Preparation of two dishes – | | 10 |
| 2. Knitting (any one) | - | 10 |
| 3. Viva | - | 03 |
| 4. Record Book | - | 02 |

Internal Assessment**15 Marks**

1. Attendance	05
2. unit test	05
3. Home Assignment	05

Practical Work

In regard to the Practical work the private candidate should be instructed to complete the practical prescribed in the syllabus in the college affiliated to the Gondwana University and where this subject is taught. The record book should be duly signed by the Head of the Department or Principal of the College.

Private candidate should write to the Principal concerned in June for Semester V and November for Semester VI for information regarding the time of Practical classes which will be conducted for the private candidate.

Suggested Readings:

1. Speaking of child care, Every thing you wanted to know.(Gupta (1991) 2nd Ed. New Delhi, Starling.
2. Child rearing and psycho-social development. New Delhi : Lidhop M (1987) Ashish Publication.
3. Family interaction : Bahr S.J.(1989) N.V. Macmillan
4. Human Development : Rice F.P. (1995) New Jersey : Prentics Hill.
5. Moral Values in Child development .Dutt, S. (1998) New Delhi- Anmol
6. Child Development : Elizabeth Hurlock
7. Child growth and development : Elizabeth Hurlock

GONDAWANA UNIVERSITY, GADCHIROLI
COMMERCE
 (THREE YEARS UG COURSE IN FACULTY OF COMMERCE AND MANAGEMENT)
 COURSE AND EXAMINATION SCHEME WITH CHOICE BASED CREDIT SYTSEM
 (Semester – V)

Appendix - V

BACHELOR OF

Sr. No.	Area	Unique Subject Code	Subject	Course Scheme			No. of Credits	Examination Scheme (Maximum Marks)				Examination Scheme (Minimum Marks)			
				L	T	P		ESE	IA	P	Total	ESE	IA	P	Total
01	SEC - III (Foundation Course)	UCA5F01	Auditing	4	-	-	2	80	20	-	100	40	-	-	40
02	Generic Elective- II	UCA5E02	Indian Economics (Urban)	4	-	-	4	80	20	-	100	40	-	-	40
03	Core (Core Course)	UCA5C03	Business Communication Paper-I	4	-	-	3	60	15	-	75	30	-	-	30
		UCA5C04	Advanced Accounting Paper-I	5	-	-	3	60	15	-	75	30	-	-	30
		UCA5C05	Commercial Law	4	-	-	4	80	20	-	100	40	-	-	40
04	DSE	UCA5EM5	Group -A Marketing Management (Industrial Marketing)	4	-	-	4	80	20	-	100	40	-	-	40
		UCA5EH5	Group- B Human Resource Development (Industrial Relation)	4	-	-	4	80	20	-	100	40	-	-	40
		UCA5EB5	Group -C Banking and Insurance (Recent Trends in Banking and Insurance Paper-I)	4	-	-	4	80	20	-	100	40	-	-	40
		UCA5EI5	Group -D Information Technology (MS-Access And Visual Basics)	4	-	4/ Batch	4	60	15	25	100	30	10	-	40

GONDAWANA UNIVERSITY, GADCHIROLI
COMMERCE
 (THREE YEARS UG COURSE IN FACULTY OF COMMERCE AND MANAGEMENT)
 COURSE AND EXAMINATION SCHEME WITH CHOICE BASED CREDIT SYTSEM
 (Semester – VI)

Appendix - VI

BACHELOR OF

Sr. No.	Area	Unique Subject Code	Subject	Course Scheme			No. of Credits	Examination Scheme (Maximum Marks)				Examination Scheme (Minimum Marks)			
				L	T	P		ESE	IA	Project	Total	ESE	IA	P	Total
01	SEC - IV (Foundation Course)	UCA6F01	Corporate Law	4	-	-	4	80	20	-	100	40	-	40	
02	Generic Elective- III	UCA6E02	Indian Economics (Rural)	4	-	-	4	80	20	-	100	40	-	40	
03	Core (Core Course)	UCA6C03	Business Communication Paper-II	4	-	-	3	60	15	-	75	30	-	30	
		UCA6C04	Advanced Accounting Paper-II	5	-	-	3	60	15	-	75	30	-	30	
		UCA6C05	Income Tax	5	-	-	4	80	20	-	100	40	-	40	
04	DSE	UCA6EM6	Group -A Marketing Management (Service Marketing)	4	-	-	4	40	10	50	100	20	20	40	
		UCA6EH6	Group- B Human Resource Development (Labor Law)	4	-	-	4	40	10	50	100	20	20	40	
		UCA6EB6	Group -C Banking and Insurance (Recent Trends in Banking and Insurance Paper-II)	4	-	-	4	40	10	50	100	20	20	40	
		UCA6EI6	Group -D Information Technology (Software Product And Project Management)	4	-	4/ Batch	4	40	10	50	100	20	20	40	

Compulsory Project in final Semester: - In final semester project is to be submitted for DSE subject. For IT related DSE the project team can be constituted of maximum five students per team. However, for other DSEs, the project team can be constituted of maximum ten students per team.

GONDWANA UNIVERSITY, GADCHIROLI



FACULTY OF SCIENCE AND TECHNOLOGY BOARD OF STUDIES IN ZOOLOGY

**SUBMISSION OF
CHOICE BASED CREDIT SYSTEM (CBCS)
SYLLABUS OF ZOOLOGY FOR UNDER GRADUATE (B.Sc.)
PROGRAMME OF SEMESTER V AND SEMESTER VI
FROM SESSION 2019 - 2020**

SCHEME AND SYLLABUS UNDERCHOICE BASED CREDIT SYSTEM (CBCS)FOR B.Sc. ZOOLOGY

Semester	Core Course (12)	Ability Enhancement Compulsory Courses AEC(2)	Skill Enhancement (Foundation) Courses SEC(4)	Discipline Specific Elective (DSE)
I	CC - Chemistry P -I CC - Chemistry P -II CC - Botany P -I CC - Botany P -II CC - Zoology P -I CC - Zoology P -II	English (1) Marathi (1)		
II	CC - Chemistry P -III CC - Chemistry P -IV CC - Botany P -III CC - Botany P -IV CC - Zoology P -III CC - Zoology P -IV	English (1) Marathi (1)		
III	CC - Chemistry P -V CC - Chemistry P -VI CC - Botany P -V CC - Botany P -VI CC - Zoology P -V CC -Zoology P -VI		Environmental Studies	
IV	CC - Chemistry P -VII CC - Chemistry P -VIII CC - Botany P -VII CC - Botany P -VIII CC - Zoology P -VII CC - Zoology P -VIII		Democracy, Elections and Good Governance	
V	CC - Chemistry P -IX CC - Chemistry P -X CC - Botany P -IX CC - Botany P -X CC - Zoology P -IX CC - Zoology P -X		(Any one) 1. Apiculture 2. Sericulture	DSE-Chem I DSE - Bot I DSE - Zoo I (Any Two) 1. Parasitology 2. Applied Zoology 3. Insect Vectors and disease 4 Aquatic Biology
VI	CC - Chemistry P -XI CC - Chemistry P -XII		(Any one) 1. Medical	DSE- Chem II DSE - Bot II

	CC - Botany P -XI CC - Botany P -XII CC - Zoology P -XI CC - Zoology P -XII		Diagnostics 2.Public Health & Hygiene	DSE - Zoo II (Any Two) 1. Immunology 2. Animal Biotechnology 3. Microtechnique, Bioinformatics and Biostatistics 4. Reproductive Biology
--	--	--	---	---

Discipline Core Courses (DCC) : Zoology

1. Animal Diversity
2. Cell Biology, Genetics and Evolutionary Biology
3. Comparative Anatomy and Developmental Biology of Vertebrates
4. Physiology and Biochemistry

Discipline Specific Electives (DSE): Zoology (Any two)

1. Applied Zoology
2. Animal Biotechnology
3. Aquatic Biology
4. Immunology
5. Reproductive Biology
6. Insect, Vector and Diseases

Skill Enhancement Courses (SEC): Zoology

1. Apiculture
2. Aquarium Fish Keeping
3. Aquatic Biology
4. Medical Diagnostics
5. Public Health and Hygiene
6. Sericulture

GONDWANA UNIVERSITY, GADCHIROLI
CBCS SYLLABUS IN ZOOLOGY

SEMESTER - I

PAPER CODE	CORE PAPER	TITLE OF THE PAPER	CREDIT
USCZOT01	I	NONCHORDATE - PROTOZOA TO ANNELIDA	02
USCZOT02	II	CELL BIOLOGY	02
USCZOP01	PRACTICAL	CORE COURSE I & II	02

SEMESTER - II

PAPER CODE	CORE PAPER	TITLE OF THE PAPER	CREDIT
USCZOT03	III	NONCHORDATE - ARTHROPODA TO HEMICHORDATA	02
USCZOT04	IV	GENETICS & EVOLUTION	02
USCZOP02	PRACTICAL	CORE COURSE III & IV	02

SEMESTER- III

PAPER CODE	CORE PAPER	TITLE OF THE PAPER	CREDIT	SEC
USCZOT05	V	ANIMAL DIVERSITY (CHORDATES) and COMPARATIVE ANATOMY	02	ENVIRONMENTAL STUDIES
USCZOT06	VI	PHYSIOLOGY & BIOCHEMISTRY - I	02	
USCZOP03	PRACTICAL	CORE COURSE V & VI	02	

SEMESTER- IV

PAPER CODE	CORE PAPER	TITLE OF THE PAPER	CREDIT	SEC
USCZOT07	VII	DEVELOPMENTAL BIOLOGY	02	DEMOCRACY, ELECTIONS AND GOOD GOVERNANCE
USCZOT08	VIII	PHYSIOLOGY & BIOCHEMISTRY - II	02	
USCZOP04	PRACTICAL	CORE COURSE VII & VIII	02	

SEMESTER- V

PAPER CODE	CORE PAPER	DSE(ANY TWO) TITLE OF PAPER	CREDIT	SEC(ANY ONE) (COLLEGE LEVEL)
USCZOT09	IX	1) PARASITOLOGY	02	1) APICULTURE
USCZOT10	X	2) APPLIED ZOOLOGY	02	2) SERICULTURE
USCZOT11	XI	3) INSECT VECTOR AND DISEASES	02	-
USCZOT12	XII	4) AQUATIC BIOLOGY	02	-
USCZOP05 USCZOP06 USCZOP07 USCZOP08	PRACTICAL	CORE COURSE - ANY TWO FROM CORE PAPER IX, X, XI, XII	02	02

DSE- Scheme of Marks of Theory and Practical of semester V

SEMESTER	PAPER	TITLE DSE(ANY TWO)	MARKS		TOTAL
			THEORY	INTERNAL ASSESSMENT (ANY TWO)	
V	I	1) PARASITOLOGY	50	10	120
	II	2) APPLIED ZOOLOGY	50	10	
	III	3) INSECT VECTOR AND DISEASES	50	10	
	IV	4) AQUATIC BIOLOGY	50	10	
	PRACTICAL	ANY TWO FROM DSE	30	-	30
					150

SEC (ANY ONE) (COLLEGE LEVEL)

Scheme of Marks of Theory and Practical of semester V

SEMESTER	PAPER	TITLE SEC(ANY ONE)	MARKS		TOTAL
			THEORY	PRACTICAL	
V	I	1) APICULTURE	15	35	50
	II	2) SERICULTURE	15	35	50

SEMESTER- VI

PAPER CODE	CORE PAPER	DSE(ANY TWO) TITLE OF PAPER	CREDIT	SEC(ANY ONE) (COLLEGE LEVEL)
USCZOT13	XIII	1) IMMUNOLOGY	02	1) MEDICAL DIAGNOSTIC
USCZOT14	XIV	2) ANIMAL BIOTECHNOLOGY	02	2) PUBLIC HEALTH AND HYGIENE
USCZOT15	XV	3) MICROTCHNIQUE, BIOINFORMATICS AND BIOSTASTISTICS	02	-
USCZOT16	XVI	4) REPRODUCTIVE BIOLOGY	02	-
USCZOP09 USCZOP10 USCZOP11 USCZOP12	PRACTICAL	CORE COURSE - ANY TWO FORM CORE PAPER XIII, XIV, XV AND XVI	02	02

Scheme of Marks of Theory and Practical of semester VI

SEMESTER	PAPER	TITLE DSE(ANY TWO)	MARKS		TOTAL
			THEORY	INTERNAL ASSESSMENT (ANY TWO)	
VI	I	1) IMMUNOLOGY	50	10	120
	II	2) ANIMAL BIOTECHNOLOGY	50	10	
	III	3) MICROTCHNIQUE, BIOINFORMATICS AND BIOSTASTISTICS	50	10	
	IV	4) REPRODUCTIVE BIOLOGY	50	10	
	PRACTICAL	ANY TWO FROM DSE	30	-	30
					150

SEC (ANY ONE) (COLLEGE LEVEL)

Scheme of Marks of Theory and Practical of semester VI

SEMESTER	PAPER	TITLE SEC(ANY ONE)	MARKS		TOTAL
			THEORY	PRACTICAL	
VI	I	1) MEDICAL DIAGNOSTICS	15	35	50
	II	2) PUBLIC HEALTH AND HYGIENE	15	35	50

GONDWANA UNIVERSITY, GADCHIROLI
CHOICE BASED CREDIT SYSTEM (CBCS) SYLLABUS
PROGRAMME – BACHLOR OF SCIENCE (B.Sc.)
SEMESTER – V AND SEMESTER VI
SUBJECT – ZOOLOGY THEORY INTERNAL ASSESSMENT
FOR DSE PAPER ONLY
PAPER – I AND II (SELECTED)

Theory Internal Assessment – 20 Marks

Format for the theory internal assessment

Sr. NO.	Evaluation type	Marks for selected paper I and Paper II	Marks for selected paper I and Paper II
01	One assignment	02	02
02	One class test	05	05
03	Active participation in routine class activities/ seminars etc.	03	03
	Total	10	10

GONDWANA UNIVERSITY, GADCHIROLI
CHOICE BASED CREDIT SYSTEM (CBCS) SYLLABUS
PROGRAMME - BACHELOR OF SCIENCE (B.Sc.)
SEMESTER-V AND SEMESTER VI

SUBJECT- ZOOLOGY – THEORY QUESTION PAPER PATTERN

Maximum Marks – 50

Time – 3 Hours

Note : 1) All questions are compulsory

2) All questions carry equal marks

3) Draw well labeled diagram wherever necessary

Q1) Unit I – Long question – 10 Marks

Or

a. Short question – 05 Marks

b. Short question – 05 Marks

Q2) Unit II – Long question – 10 Marks

Or

a. Short question – 05 Marks

b. Short question – 05 Marks

Q3) Unit III – Long question – 10 Marks

Or

a. Short question – 05 Marks

b. Short question – 05 Marks

Q4) Unit IV – Long question – 10 Marks

Or

a. Short question – 05 Marks

b. Short question – 05 Marks

Q5) Write short notes on any 10 out of 12(3 questions from each units) – 10 Marks

**GONDWANA UNIVERSITY
GADCHIROLI**



**FACULTY OF SCIENCE AND
TECHNOLOGY**

SYLLABUS

For

T. Y. B. Sc.

BOTANY

SEMESTER - VI

Under

Choice Based Credit System (CBCS)

(With effect from: 2019-20)

**Scheme for Choice Based Credit System for B.Sc. Programme in
BOTANY**

SEMESTER - VI

Semester	Core Course 6 Credits	Ability Enhancement Compulsory Course (2+2= 4 credits)	Skill Enhancement Courses SEC 2 Credits	Discipline Specific Elective DSE 6 Credits
SEM-VI			<p>SEC-IV Any one SEC is to be chosen from the pool of SEC of Core subjects selected by the student.</p> <ol style="list-style-type: none"> Gardener Training – (Advanced) Biofertilizers Ethnobotany Medicinal Botany Modern Farming Techniques 	<p>DSE II Two Papers of any one DSE are to be chosen by the student from the Three Options given below.</p> <p>Option-1 Paper - I: Mycology and Plant Pathology - I Paper - II: Mycology and Plant Pathology - II</p> <p>Option-2 Paper-I: Plant Biotechnology – I Paper-II: Plant Biotechnology – II</p> <p>Option-3 Paper-I: Plant Diversity & Conservation – I Paper-II: Plant Diversity & Conservation - II</p> <p>PRACTICAL-VI Based on Paper I and II of DSE selected by the student from the above mentioned Options-1, 2 and 3 of Semester-VI</p>

SEMESTER – VI:**Discipline Specific Elective-II (DSE-II)**

NOTE: Student has to select any ONE from Three Options under DSE-II category.

Papers	Title of the Paper	Theory / Practical	Internal Assessment	Total Marks
Option-1				
Paper – I	Mycology and Plant Pathology - I	50 Marks	10 Marks	60 Marks
Paper – II	Mycology and Plant Pathology - II	50 Marks	10 Marks	60 Marks
Option-2				
Paper – I	Plant Biotechnology – I	50 Marks	10 Marks	60 Marks
Paper – II	Plant Biotechnology – II	50 Marks	10 Marks	60 Marks
Option-3				
Paper – I	Plant Diversity and Conservation - I	50 Marks	10 Marks	60 Marks
Paper - II	Plant Diversity and Conservation - II	50 Marks	10 Marks	60 Marks
Practical - VI	Based on two papers of DSE – II selected by the student from the above mentioned Options- 1, 2 and 3 of Semester-VI	30 Marks	--	30 Marks
Internal Assessment: Based on Assignment, Seminar, Unit Test & Overall Attendance and P erformance of the student				

**GONDWANA UNIVERSITY
GADCHIROLI**



**FACULTY OF SCIENCE AND
TECHNOLOGY**

SYLLABUS

For

T. Y. B. Sc.

BOTANY

SEMESTER – V & VI

Under

Choice Based Credit System (CBCS)

(With effect from: 2019-20)

**Scheme for Choice Based Credit System for B.Sc. Programme in
BOTANY**

Semester	Core Course 6 Credits	Ability Enhancement Compulsory Course (2+2= 4 credits)	Skill Enhancement Courses SEC 2 Credits	Discipline Specific Elective DSE 6 Credits
SEM-V			<p>SEC-III</p> <p><u>Any One</u> SEC is to be chosen from the pool of SEC of Core Subjects selected by the student</p> <ol style="list-style-type: none"> 1. Gardener Training – (Basic) 2. Mushroom Culture Technology 3. Herbal Technology 4. High Density Planting 5. Floriculture <p>PRACTICAL</p> <p>(70% part of the SEC is Practical)</p>	<p>DSE I</p> <p><u>Two papers of any one</u> DSE are to be chosen by the student from Three Options given below.</p> <p>Option-1 Paper-I : Genetics and Plant Breeding – I</p> <p>Paper II: Genetics and Plant Breeding - II</p> <p>Option-2 Paper-I: Molecular Biology - I</p> <p>Paper II: Molecular Biology - II</p> <p>Option-3 Paper-I: Economic Botany- I</p> <p>Paper II: Economic Botany- II</p> <p>PRACTICAL</p> <p>Based on paper I and II of DSE selected by the student from the above mentioned Options-1, 2 and 3 of Semester-V.</p>

SEMESTER – V:**Discipline Specific Elective-I (DSE-I)**

NOTE: Student has to select any ONE from the three Options under DSE-I category.

Papers	Title of the Paper	Theory / Practical	Internal Assessment	Total Marks
Option-1				
Paper – I	Genetics and Plant Breeding – I	50 Marks	10 Marks	60 Marks
Paper - II	Genetics and Plant Breeding – II	50 Marks	10 Marks	60 Marks
Option-2				
Paper – I	Molecular Biology - I	50 Marks	10 Marks	60 Marks
Paper -II	Molecular Biology - II	50 Marks	10 Marks	60 Marks
Option-3				
Paper –I	Economic Botany- I	50 Marks	10 Marks	60 Marks
Paper –II	Economic Botany- II	50 Marks	10 Marks	60 Marks
Practical – V	Based on two papers of DSE – I selected by the student from the above mentioned Options- 1, 2 and 3 of Semester –V	30 Marks	--	30 Marks
Internal Assessment: Based on Assignment, Seminar, Unit Test & Overall Attendance and Performance of the Student.				

GONDWANA UNIVERSITY, GADCHIROLI

CBCS Theory Question Paper Pattern

For

B.Sc. BOTANY

SEMESTER – V and VI

Theory

All questions are compulsory and carry equal marks

Draw well labeled diagram where ever necessary

[Time 3 Hours]

[Max. Marks – 50]

Question 1. Based on Unit – I

05 x 2 = 10

- a. Unit - I
- b. Unit - I

OR

02½ x 4 = 10

- c. Unit - I
- d. Unit - I
- e. Unit - I
- f. Unit - I

Question 2. Based on Unit – II

05 x 2 = 10

- a. Unit II
- b. Unit II

OR

02½ x 4 = 10

- c. Unit II
- d. Unit II
- e. Unit II
- f. Unit II

Question 3. Based on Unit – III

05 x 2 = 10

- a. Unit III
- b. Unit III

OR

02½ x 4 = 10

- c. Unit III
- d. Unit III
- e. Unit III
- f. Unit III

Question 4. Based on Unit – IV

05 x 2 = 10

- a. Unit III
- b. Unit III

OR

02½ x 4 = 10

- c. Unit IV
- d. Unit IV
- e. Unit IV
- f. Unit IV

Question 5. Write any ten questions in one or two lines only
(Diagrams are NOT necessary)

1 x 10 = 10

- a. Unit I
- b. Unit I
- c. Unit I
- d. Unit II
- e. Unit II
- f. Unit II
- g. Unit III
- h. Unit III
- i. Unit III
- j. Unit IV
- k. Unit IV
- l. Unit IV

SEMESTER – V:

Skill Enhancement Courses (SEC-III)

NOTE:

1. Any one SEC is to be chosen from the pool of SEC of Core subjects selected by the student.
2. Complete programme of SEC is governed by the college.
3. EXAMINATION will be conducted by the college and the credits will be given to the student accordingly.
4. Choice of selecting SEC is within the pool of Core subjects selected by the student.
(Example: CBZ, CBM, CZM, PCM, PEM, etc.)
5. Course comprises 30% theory and 70% practical.
6. Duration of the course is THREE MONTHS.
(Theory- 72 hours + Practical- 266 hours = 288 hours)

SEC-III Options	Title of the Paper	Theory	Practical	Total Marks
Option-1	Gardener Training – (Basic)	30 Marks	70 Marks	100 Marks
Option-2	Mushroom Culture Technology	30 Marks	70 Marks	100 Marks
Option-3	Herbal Technology	30 Marks	70 Marks	100 Marks
Option-4	High Density Planting	30 Marks	70 Marks	100 Marks
Option-5	Floriculture	30 Marks	70 Marks	100 Marks

Skill Enhancement Courses (SEC-III)

Theory Examination Pattern

Theory Question Paper Pattern
For
B.Sc. BOTANY CBCS
SEMESTER – V
Skill Enhancement Courses (SEC-III)

Time: 02 Hours]

[Max. Marks- 30

Q.1. Long question10 Marks

Q.2. Short question

a)5 Marks

b)5 Marks

Q.3. MCQ10 Marks

(Ten MCQ each of ONE mark)

Practical Examination Assessment Pattern (Max. Marks- 70)

Assessment of practical Examination is based on the following fulfillment by the student.

1.	Project Submission	20 Marks
2.	Project Presentation	20 Marks
3.	Assignments	10 Marks
4.	Field Visit	10 Marks
5.	Overall Performance /feedback	10 Marks
Total Marks		70 Marks

SEC: Assessment of Project/Assignments:

- Assessment of SEC will be made on Evaluation of the Written Format of Project Work consisting of 50 marks and Oral Interaction /Feedback with the students on Project / Theme consisting of 20 marks.
- A Project must consist of the following 6 Chapters:
 1. Introduction,
 2. Basic Concepts,
 3. Main Analysis on the selected Theme/ Theory,
 4. Supplementary or Complimentary Analysis to the Main Theme/Theory,
 5. Self-study Report & Conclusion ,
 6. List of References of Books & Other Materials.
- The Project & Assignment will follow the University approved Syllabi materials on Subject & Paper specific topics/themes/issues.
- The Project must consist of all the basic features including Cover Page, Preface, Certification by Guide and Contents etc. apart from Chapterisation.
- The word limits of a Project will be in between 2500 to 3500 and the word limits of an Assignment will be in between 400 to 500.

Discipline Specific Elective Chemistry
(Choose any two)
B.Sc.III (Semester V) (CBCS)
USC DSE ChT 09

Total marks: 50 Total Lectures: 48

Note: Figures to the right hand side indicate number of lectures

Discipline Specific Elective Chemistry I (Organic Chemistry)

UNIT I

Spectroscopy

Nuclear magnetic resonance (NMR) spectroscopy. Proton magnetic resonance (¹H NMR) spectroscopy, nuclear shielding and deshielding, chemical shift and molecular structure, spin-spin splitting and coupling constants, areas of signals, interpretation of PMR spectra of simple organic molecules such as ethyl bromide, ethanol, acetaldehyde, 1, 1, 1-tribromoethane, ethyl acetate, toluene and acetophenone. Problems pertaining to the structure elucidation of simple organic compounds using nmr data. (12L)

UNIT III

Organic Synthesis via Enolates.

Definition, Active methylene compounds, Preparation of Aceto acetic ester, (Claisen condensation with Mechanism), Acidity of alpha hydrogen, properties and reactions involving formation of mono, di and unsaturated carboxylic acids, also synthesis of ketone, diketone, 4-methyl uracil from acetoacetic ester, keto-enol tautomerism. Preparation of diethyl malonate, properties and reactions involved in alkylation, formation of mono, di and unsaturated carboxylic acids, and also synthesis of glycine and barbutric acids from diethyl malonate (12L)

UNIT III

Polymers

Introduction and classification including di-block, tri-block and amphiphilic polymers, (2L)

Polymerization reactions -

Introduction, Hydrolysis, Hydrogenation, Addition and Substitution reactions, Cross-linking

reactions, Cure reactions, Reactions of various aliphatic and aromatic pendent groups in polymers. applications of plastics – thermosetting (phenol-formaldehyde, Polyurethanes) and thermosoftening (PVC, polythene); (7L)

Fabrics – natural and synthetic (acrylic, polyamido, polyester); Rubbers – natural and synthetic: Buna-S, Chloroprene and Neoprene; Vulcanization; Polymer additives; Introduction to liquid crystal polymers; Biodegradable and conducting polymers with examples. (3L)

UNIT IV

Green Chemistry and Technology for sustainable development

Green Chemistry from theory to practice The twelve principles of green chemistry Green Chemistry and sustainable Development Designing Products under the holistic approach “ Cradle-to Cradle” Scientific areas for practical applications of green chemistry Use of alternative basic chemicals as feed stocs in chemical industry and research Green Chemistry and Reduction of solvent Toxicity (Alternative Solvents or replacement) Applications of New Methodologies in the synthesis of chemical compounds- catalysis and green chemistry. Green Chemistry and Toxic organic solvents Green solvents and Alternative methods Green Chemistry, Green solvents – Alternative techniques in organic synthesis. (12L)

USC DSE ChP 05(Organic)

Practicals

- A) Identification of organic compound on the basis of NMR data.
- B) 1. Estimation of hydroxyl number of a polymer using colorimetric method..
2. Estimation of the amount of HCHO in the given solution by sodium sulphite method
- C) 1. Preparation of nylon 66
2. Preparation of urea-formaldehyde resin.
- D) Green chemistry synthesis of organic compound by using micro wave technic.

5 Cann, M.C. & Connelly, M. E. Real world cases in Green Chemistry, American Chemical Society (2008).

6 Cann, M. C. & Thomas, P. Real world cases in Green Chemistry, American Chemical Society (2008).

7 Pavia, D. L. Lamponan, G. H. & Kriz, G.S. W B Introduction to organic laboratory

Distribution Of Marks For Practical Examination

Time 4-5 hours (One Day Examination) Marks 30

USC DSE ChP 05 (Experiment) (In examination Experiment A is compulsory (4M)+ any one from B or C or D (8M) 12

USC DSE ChP 06 (Experiment) (In examination any one) 12

USC DSE ChP 07(Experiment) (In examination any two) 12

USC DSE ChP 08 (Experiment) (In examination any one) 12

ANY TWO FROM ABOVE FOUR

TOTAL MARKS 12+12= 24

Viva-Voce 03

Record 03

Total : 30 marks

Discipline Specific Elective Chemistry
(Choose any two)
B.Sc.III (Semester VI) (CBCS)
USC DSE ChT 13

Discipline Specific Elective Chemistry V (Inorganic)

UNIT-I

A) Qualitative and quantitative aspects of analysis:

Sampling, evaluation of analytical data, errors, accuracy and precision, methods of their expression, normal law of distribution if indeterminate errors, statistical test of data; F, Q and t test, rejection of data, and confidence intervals. (6 L)

B) Flame Photometry:

Basic principles of instrumentation (choice of source, monochromator, detector, choice of flame and Burner designs. Effect of solvent in flame photometry . Techniques of atomization and sample introduction; Method of background correction, sources of chemical interferences and their method of removal. Limitations of flame photometry. Application of Flame photometry . Experimental procedure for quantitative analysis (6L)

UNIT-II:

A) Separation Techniques:

a) Chromatography: Classification, Principle, Technique and Application of Paper and Column Chromatography.

b) Ion- Exchange: Types of ion exchange resins, Equilibria and ion exchange capacity, Application in separation of binary mixtures.

c) Solvent Extraction: Principle and Classification , Factors influencing extraction and Application in chemistry. (6L)

B) Fertilizer:

Classification, Chemical fertilizer with example, advantages and disadvantages of chemical fertilizer, manures and compost and their advantages over chemical fertilizers. (3L)

C) Basic Principal of Soil Chemistry:-

Introduction of soil and its type, Chemical Analysis of soil, Collection of soil Sample, Method of analysis, Soil pH, Soil Salinity, Organic carbon, available phosphorous and potassium. Lime requirements. (3 L)

Discipline Specific Elective Chemistry VI (Physical)

UNIT I

A) Photochemistry :-

Interaction of radiation with matter, difference between thermal and photochemical process, Beer-Lamberts, laws of photochemistry :Grothus-Draper law, Stark-Einstein law, Jablonski diagram depicting various processes (nonradiative and radiative) fluorescence, phosphorescence, chemiluminescence, quantum yield, determination of quantum yield of reactions, causes for low and high quantum yields. Some examples of photochemical reactions (e.g. Photochemical decomposition of Hydrogen iodide, Photosynthesis of HBr from H₂ and Br₂ and photosynthesis of HCl from H₂ and Cl₂ Photosensitized reactions. Energy transfer processes. (8 L)

B) Dipole Moment :-

Electrical dipole moment, polarization of molecules (Clausius-Mosotti equation), orientation of dipoles in an electric field. Determination of dipole moment. Bond moments. Group moments for benzene derivatives. Application of dipole moment to (i) % ionic character (ii) Shape of molecules, (iii) study of geometrical isomers and (iv) substituted benzene molecules. (4 L)

UNIT-II

Spectroscopy

A) Rotational Spectroscopy:

Introduction to spectroscopy, Dipole moment and Rotational Spectra. Rotational spectra of diatomic molecules, Energy levels of rigid rotor. Selection rule for transition between energy levels. Expression for wave number (cm⁻¹) of spectral lines in terms of rotational constant (B) and rotational quantum number (J). Intensity of spectral lines. Application of rotational spectra for determination of bond length of diatomic molecules. Introduction to non-rigid rotor.[6 L]

5 Cann, M.C. & Connelly, M. E. Real world cases in Green Chemistry, American Chemical Society (2008).

6 Cann, M. C. & Thomas, P. Real world cases in Green Chemistry, American Chemical Society (2008).

7 Pavia, D. L. Lamponan, G. H. & Kriz, G.S. W B Introduction to organic laboratory

Distribution Of Marks For Practical Examination

Time 4-5 hours (One Day Examination) Marks 30

USC DSE ChP 05 (Experiment) (In examination Experiment A is compulsory (4M)+ any one from B or C or D (8M) 12

USC DSE ChP 06 (Experiment) (In examination any one) 12

USC DSE ChP 07(Experiment) (In examination any two) 12

USC DSE ChP 08 (Experiment) (In examination any one) 12

ANY TWO FROM ABOVE FOUR

TOTAL MARKS 12+12= 24

Viva-Voce 03

Record 03

Total : 30 marks

Distribution Of Marks
Skill Enhancement course

Theory -15Marks
Practical -35 Marks

For theory examination

15 marks multiple choice question paper is to be set by the college and evaluation is done by college.

For practical Examination:

- 1) One practical of 10 marks
- 2) One survey based project report 20 marks
- 3) Viva 5 marks

Total marks =15+35=50



Gondwana University, Gadchiroli

Proposed B.Sc. (Mathematics) CBCS Syllabus

Semester-V & VI

2019-2020

By

Board of Studies (Mathematics)

Faculty of Science & Technology

B.SC. (MATHEMATICS)

SEMESTER WISE DISTRIBUTION OF MARKS AND CREDITS

There are two Types of Courses for B.Sc. Sem V and Sem VI

(A) Skill Enhancement Course (SEC)

(B) Discipline Specific Elective (DSE)

SKILL ENHANCEMENT COURSE (SEC)

Sr. No.	Class	Semester	Theory paper Marks	Internal Assessment Marks	Total Marks	Marks for passing out of 50
1	B.Sc.	V	15	35	50	20(minimum 06 marks in theory examination)
2	B.Sc.	VI	15	35	50	20(minimum 06 marks in theory examination)
			30	70	100	40

Semester	Papers	College Examination	College Internal Assessment	Total
		Paper-Marks	Paper-Marks	Marks-Credits
Sem -V	1 (SEC)	1 - 15	1 - 35	50 - 2
Sem -VI	1 (SEC)	1 - 15	1 - 35	50 - 2

DISTRIBUTION OF MARKS FOR SEC INTERNAL ASSESSMENT

Sr. No.	Activities	Max Marks
1	Attendance	05
2	Seminar on the respective paper	15
3	Project on any topics in Mathematics	15

Skill Enhancement Course (SEC)

- Note: i) For Skill Enhancement Course (SEC), College will conduct the examination.
ii) For each semester V & VI, SEC Examination is of 50 Marks with 2 credits.
iii) Theory examination is of 15 marks and internal assessment is of 35 marks.
iv) Minimum passing marks is 20 (Including minimum 06 marks in theory + internal Assessment marks).
v) Examination Time period for SEC theory examination is of 01 hour.

Discipline Specific Elective (DSE)

For Discipline Specific Elective (DSE), University will conduct the examination.

B.Sc. (MATHEMATICS)
SEMESTER WISE DISTRIBUTION OF MARKS AND CREDITS FOR
DISCIPLINE SPECIFIC ELECTIVE (DSE)

Sr. No.	Class	Semester	Theory Paper Marks		Internal Assessment Marks	Total Marks
			Paper I	Paper II		
1	B.Sc.	V	60	60	15+15	150
2	B.Sc.	VI	60	60	15+15	150
			120	120	60	300

Semester	Papers	University Examination	Internal Assessment	Total
		Marks-Credits	Marks-Credits	Marks-Credits
Sem-V	2 (DSE)	2x60 - 2x2	2x15 - 2x1 = 2	150-6
Sem-VI	2 (DSE)	2x60 - 2x2	2x15 - 2x1 = 2	150-6

DISTRIBUTION OF MARKS FOR DSE INTERNAL ASSESSMENT

Sr. No.	Activities	Max Marks
1	Attendance	05
Any Two of the following activities		
1	Seminar	05
2	Unit test	05
3	Home Assignments	05

Total Marks: 15 + 15

Minimum Passing Marks: 06 + 06

Proposed Scheme for B. Sc Sem - V with Choice Based Credit System

B. Sc. Sem - V

Mathematics

2019-2020

Skill Enhancement Course (SEC)

Maximum Marks - 15+35

Credits -2

College will conduct the Examination.

Choose any **one** of the following Papers

Paper: SEC - I - Probability

Paper: SEC -II - Mathematical Modeling

Discipline Specific Elective (DSE)

Time – Three Hours

Max. Marks – 60+15

University will conduct the Theory examination

Choose any **Two** of the following.

Paper: DSE –I- Linear Algebra

Paper: DSE –II- Mechanics

Paper: DSE –III- Matrices and Theory of Equations

Paper: DSE-IV-Special Relativity - I

Proposed Scheme for B. Sc. Sem VI with Choice Based Credit System

B.Sc. Sem VI

Mathematics

2019-2020

Skill Enhancement Course (SEC)

Maximum Marks- 15+35.

Credits -2

College will conduct the examination

Choose any **one** of the following Papers

Paper: SEC - III - Graph Theory

Paper: SEC - IV - Boolean Algebra

Discipline Specific Elective (DSE)

Time: Three Hour

Max. Marks – 60+15

University will conduct the examination of **Discipline Specific Elective (DSE) Subjects.**

Choose any **Two** of the following.

Paper: DSE –V- Numerical Methods

Paper: DSE –VI - Complex Analysis and Vector Calculus

Paper: DSE –VII- Linear Programming and Transportation Problems.

Paper: DSE –VIII- Special Relativity - II

Board of Studies in Physics
FACULTY OF SCIENCE & TECHNOLOGY
GONDWANA UNIVERSITY, GADCHIROLI



Syllabus of
B.Sc. Third Year (Semester Pattern)
(Choice Based Credit System)

SUBJECT - PHYSICS
Semester V & Semester VI
From academic session- 2019-20

Semester V & Semester VI

SUBJECT - PHYSICS

Teaching and Semester Examination Scheme for B.Sc.(Third Year) .

Class	Semester	DSE Paper (Any two)	Teaching Scheme Per Week (Workload)			Examination Scheme				
			Theory	Total	Practical	Theory Marks		Practical Marks	Total Marks	Credits
						Paper	Internal Assessment			
B. Sc. III	V	DSE P-I	3	6 + 2T	6	50	10	30	150	06
		DSE P-II	3			50	10			
		SEC								
	VI	DSE P-I	3	6 + 2T	6	50	10	30	150	06
		DSE P-II	3			50	10			
		SEC								

B. Sc. Semester CBCS Pattern Examination Scheme :

- There shall be total six semesters.
- Each semester shall comprise of 90 teaching days.
- Each semester I to VI shall be of 150 marks.
- Distribution of marks will be as follows

i.	Paper I	Theory	50 Marks
		Internal Assessment	10 Marks
ii.	Paper II	Theory	50 Marks
		Internal Assessment	10 Marks
iii.	Practical (section A and B)		30 Marks
Total	(i + ii + iii)		150 Marks

- The marks on internal assessment of the student shall be compounded with the theory Paper. The passing marks will be **40 %** marks.
- A student will have to perform at least five experiments from each section per semester. At the time of practical examination every student has to perform two experiments(one from each section), each of three hours duration.
- The distribution of marks for practical examination is as follows.

Record Book	----	6
Viva-voce	----	6
Experiment (A + B)	----	18
TOTAL	----	30
- Evaluation of the student during the semester for internal assessment:-

For Theory internal:

Sr. No.	Work Assigned	Marks
1.	Assignment	02
2.	Class Test	05
3.	Active Participation Seminar/Routine Activity etc.	03
Total		10

9. The internal assessment shall be done by respective college and the marks shall be sent to the university one month prior to the final examination of each semester.

10. All theory papers shall be divided into four units. Each unit shall be cover in 12 periods of 48 minutes.

11. The theory question paper shall be of 3 hours duration and comprise of 5 questions with internal choice and with equal weightages to all units. The pattern of question paper shall be as follows.

12. In B. Sc. Third year (Sem V & VI) student have to opt any two DSE course from the given four courses (for theory & practical) in each semester.

13. **INSTRUCTION FOR SKILL ENHANCEMENT COURSES (SEC):**

- i. There should be two skill enhance courses in each semester V and VI. The student should opt any one out of two as per their choice in each semester.
- ii. Total marks for SEC is 50.
- iii. For SEC 70% weightage is given to practical work and 30% weightage to theory paper.
- iv. Theory paper should be of MCQ type.
- v. The distribution of marks for SEC practical work will be as follows-

SEC practical	Project Work	20 Marks
	Project Record	08 Marks
	Viva-Voce	07 Marks
Total		35 Marks

- vi. The examination should be conducted and evaluated at college level for each semester and equivalent grade obtained by student should be submitted to the university prior to the final exam of each semester.

Pattern of Question Paper
Subject – Physics

Time: 3 Hours

Maximum Marks :50

Question No.	Marks Allotted
Qu. 1 EITHER	
A (From Unit – I) (i, ii, iii, two or three bits including numerical)	10
OR	
B (From Unit – I) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 2 EITHER	
A (From Unit – II) (i, ii, iii, two or three bits including numerical)	10
OR	
B (From Unit – II) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 3 EITHER	
A (From Unit – III) (i, ii, iii, two or three bits including numerical)	10
OR	
B (From Unit – III) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 4 EITHER	
A (From Unit – IV) (i, ii, iii, two or three bits including numerical)	10
OR	
B (From Unit – IV) [Four bits (a),(b), (c), (d) including numerical]	4 x 2½
Qu. 5 Attempt any TEN questions from the following.	
a) From Unit I	1
b) From Unit I	1
c) From Unit I	1
d) From Unit II	1
e) From Unit II	1
f) From Unit II	1
g) From Unit III	1
h) From Unit III	1
i) From Unit III	1
j) From Unit IV	1
k) From Unit IV	1
l) From Unit IV	1

The above pattern is for all papers of each semester of B.Sc. I (CBCS pattern)w.e.f. 2017-18, B.Sc. II (CBCS pattern) w.e.f. 2018-19 and B.Sc. III (CBCS) w.e.f. 2019-20.

Proposed Syllabus for B.Sc. III CBCS (Semester Pattern)
Subject – Physics

The syllabus of Physics as per semester system for the B.Sc. III will be implemented from the Academic year 2019-2020.

Name of programme	Duration	Semester	Subject: Physics	Code	Title
22B. Sc. III	Two Semester	Sem V	Theory	USDSEPHT09	Elements of Modern Physics
				USDSEPHT10	Solid State Physics
				USDSEPHT11	Medical Physics
				USDSEPHT12	Mathematical Physics
			Practical	USDSEPHP05	10 experiments
			Skill Enhancement Courses	USSECPH01	Physics Workshop Skill
				USSECPH02	Electrical Circuits and Network Skills
		Sem VI	Theory	USDSEPHT13	Nuclear and Particle Physics
				USDSEPHT14	Digital & Analog Circuits and Instrumentation
				USDSEPHT15	Embedded system: Introduction to Microcontrollers
				USDSEPHT16	Quantum Mechanics
			Practical	USDSEPHP06	10 experiments
			Skill Enhancement Courses	USSECPH03	Basic Instrumentation Skills
				USSECPH04	Renewable Energy and Energy Harvesting

**Scheme and Syllabus under Choice Based Credit System (CBCS)
for B.Sc. Physics**

Semester	Core Course (DSC) (12)	Ability Enhancement Compulsory Courses AECC(2)	Skill Enhancement (Foundation) Courses SEC(2)	Discipline Specific Elective (DSE)
I	DSC 01–Physics P -I DSC 02–Physics P -II	English (1) Marathi/Hindi/S up. English (1)		
II	DSC 03–Physics P -I DSC 04–Physics P -II	English (1) Marathi/Hindi/S up. English (1)		
III	DSC 05–Physics P -I DSC 06–Physics P -II		Environmental Studies	
IV	DSC 07- Physics P -I DSC 08- Physics P -II		Democracy, Elections and Good Governance	
V	DSE 01- Physics P -I DSE 02- Physics P -II		(Any one) 1. Physics Workshop Skill 2. Electrical Circuits and Network Skills	DSE-Physics (Any Two) 1. Elements of Modern Physics 2. Solid State Physics 3. Medical Physics 4. Mathematical Physics
VI	DSE 03- Physics P -I DSE 04- Physics P -II		1. Basic Instrumentation Skill 2. Renewable Energy and Energy Harvesting	DSE- Physics (Any Two) 1. Nuclear and Particle Physics 2. Digital & Analog Circuits and Instrumentation 3. Quantum Mechanics 4. Embedded system: Introduction to Microcontroller

Gondwana University, Gadchiroli

Choice Based Credit System (CBCS) Syllabus

B. Sc. III

Subject: Electronics

Semester-V & VI

**Board of Studies - Electronics
Gondwana University, Gadchiroli**

W. E. From 2019-20

Scheme of Bachelor of Science for CBCS Semester Examination

Gondwana University, Gadchiroli

Subject : Electronics

Class	Semester	Paper	Teaching Scheme Per Week			Examination Scheme				
			Theory	Total	Practical	Theory Marks			Practical Marks	Total Marks
						Paper	Internal Assessment	Total		
B.Sc.I	I	I	3	6 + 1T*	6	50	10	120	30	150
		II	3			50	10			
	II	I	3	6 + 1T*	6	50	10	120	30	150
		II	3			50	10			
B.Sc.II	I	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			
	II	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			
B.Sc.III	I	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			
	II	I	3	6 + 2T*	6	50	10	120	30	150
		II	3			50	10			

* Periods for Tutorials per batch.

** The student should appear in the University practical examination otherwise he/she will be treated as a failed. However their internal marks will be carried forward.

Pattern of Question Papers (UG)

Time : 3 Hours

Maximum marks : 50

Question No.		Marks Allotted
Que. 1	Either	
	From Unit - I	10
	Or	
	From Unit - I	10
Que. 2	Either	
	From Unit - II	10
	Or	
	From Unit - II	10
Que. 3	Either	
	From Unit - III	10
	Or	
	From Unit - III	10
Que. 4	Either	
	From Unit - IV	10
	Or	
	From Unit - IV	10
Que. 5	Solve any 10 out of 12 questions	10 marks
	(3 questions from each unit)	1 mark each

The above pattern is for all papers of each semester of B. Sc. III, w.e.f. 2019-2020.

Details of the Syllabus
B.Sc. (Third Year)
Subject: Electronics
Scheme for Semester-V
W.E.F. 2019-20

Paper	No. of Periods per week (48 minutes each)			Marks				
	Lecture	Practical	Tutorial	Theory	Internal Assessment	Theory Total	Practical	Total
Paper – I (Compulsory) (USELT09) Electronic Instrumentation	3			50	10			
Paper – II (Elective-I) (USELT10) C Programming-I OR Paper – II (Elective-II) (USELT11) Antenna Theory OR Paper – II (Elective-III) (USELT12) Biomedical Instrumentation	3	6	2	50	10	120	30	150

Theory Internal Assessment (20 marks)

Sr. No.	Internal Assessment	P – I	P – II	T (20)
01	Assignment	02	02	04
02	Class Test	05	05	10
03	Adaptive Participation in routine class activities / seminars etc.	03	03	06
	Total	10	10	20

Note: An Industrial visit / Study tour should be arranged for the student after semester-III.

PRACTICALS (Conducted by internal examiner) (USELP03)

It is divided into two sections i.e. Section-A and Section-B. At least five experiments from each section must be performed and the practical record book duly signed should be submitted at the time of examination. Each student is expected to perform one experiment from each section, in the University Examination. The duration of practical examination is six hours.

Mark Distribution :

	Record	Experiment	Viva	Total
Section – A	3	9	3	15
Section – B	3	9	3	15
		Total	30	

List of Experiments:**Section A : Compulsory - Electronic Instrumentation**

1. Study of Series type Ohmmeter
2. Study of Shunt type Ohmmeter
3. Study of DC multirange Ammeter.
4. Study of DC multirange Voltmeter.
5. Study of loading effect in Voltmeter (DC only).
6. Study of Schering Bridge.
7. Study of Owen's bridge.
8. Study/Use of CRO for measurement of voltage and frequency.
9. Study/Use of CRO for determination of frequency and phase.
10. To determine the Characteristics of LVDT.
11. To determine the Characteristics of Thermistors and RTD.
12. Measurement of temperature by Thermocouples.

Section-B: Elective-I - C-programming I

1. At least 2 programs based on C-operators and expressions.
2. At least 2 programs on Input / Output.
3. At least 2 programs on decision making and branching using if, if-else, switch statements.

Details of the Syllabus
B.Sc. (Third Year)
Subject: Electronics
Scheme for Semester-VI
W.E.F. 2019-20

Paper	No. of Periods per week (48 minutes each)			Marks				
	Lecture	Practical	Tutorial	Theory	Internal Assessment	Theory Total	Practical	Total
Paper – I (USELT13) (Compulsory) Photonic Devices and Power Electronics	3	6	2	50	10	120	30	150
Paper – II (Elective-I) (USELT14) C Programming-II								
OR Paper – II (Elective-II) (USELT15) Antenna Theory	3			50	10			
OR Paper – II (Elective-III) (USELT16) Biomedical Instrumentation								

**B.Sc. SEM VI
ELECTRONICS**

Paper – II (USELT15) (Elective I)

Digital Signal Processing

Theory: 48 Lectures

Credit:02

Unit I

Discrete-Time Signals and Systems: Classification of Signals, Transformations of the Independent Variable, Periodic and Aperiodic Signals, Energy and Power Signals, Even and Odd Signals, Discrete-Time Systems, System Properties. Impulse Response, Convolution Sum; Graphical Method; Analytical Method, Properties of Convolution; Commutative; Associative; Distributive; Shift; Sum Property System Response to Periodic Inputs, Relationship Between LTI System Properties and the Impulse Response; Causality; Stability; Invertibility, Unit Step Response.

Unit II

Discrete-Time Fourier Transform: Fourier Transform Representation of Aperiodic Discrete-Time Signals, Periodicity of DTFT, Properties; Linearity; Time Shifting; Frequency Shifting; Differencing in Time Domain; Differentiation in Frequency Domain; Convolution Property.

Unit III

The z-Transform: Bilateral (Two-Sided) z-Transform, Inverse z-Transform, Relationship Between z-Transform and Discrete-Time Fourier Transform, z-plane, Region-of-Convergence; Properties of ROC, Properties; Time Reversal; Differentiation in the z-Domain; Power Series Expansion Method (or Long Division Method); Analysis and Characterization of LTI Systems; Transfer Function and Difference-Equation System Solving Difference Equations.

Unit IV

Filter Concepts: Phase Delay and Group delay, Zero-Phase Filter, Linear-Phase Filter, Simple FIR Digital Filters, Simple IIR Digital Filters, All pass Filters, Averaging Filters, Notch Filters.

Reference Books:

1. Digital Signal Processing, Tarun Kumar Rawat, 2015, Oxford University Press, India
2. Digital Signal Processing, S. K. Mitra, McGraw Hill, India.
3. Principles of Signal Processing and Linear Systems, B.P. Lathi, 2009, 1st Edn. Oxford University Press.
4. Fundamentals of Digital Signal processing using MATLAB, R.J. Schilling and S.L. Harris, 2005, Cengage Learning.
5. Fundamentals of signals and systems, P.D. Cha and J.I. Molinder, 2007, Cambridge University Press.
6. Digital Signal Processing Principles Algorithm & Applications, J.G. Proakis and D.G. Manolakis, 2007, 4th Edn., Prentice Hall.

B.Sc. – III (Computer Science)

Semester V	Paper 1:	SYSTEM ANALYSIS AND PROJECT MANAGEMENT	Theory : 50 Marks Internal : 10 Marks	Practical : 30 Marks
	Paper 2:	DATABASE PROGRAMMING WITH ORACLE	Theory : 50 Marks Internal : 10 Marks	
Semester VI	Paper 1:	E-COMMERCE AND HTML	Theory : 50 Marks Internal : 10 Marks	Practical : 30 Marks
	Paper 2:			
	Elective			
	1	VB.NET	Theory : 50 Marks	
	2	Data Communication With Cloud Computing Basics	Internal : 10 Marks	
	3	JAVA		

Appendix-3**Pattern of Question Paper**

General Rules and Regulations regarding pattern of question paper for the semester end examination is as given below:

1. There will be four units in each paper.
2. Maximum marks of each theory paper will be 50.
3. Question paper will consist of five questions, each of 10 marks.
4. Four questions will be based on four units with internal choice.
5. Fifth question will be compulsory with questions from each of the four units having equal weightage and there will be no internal choice.

Bachelor of Science	
B.Sc. (Computer Science) – [I / II / III] Semester – [I / II/ III / IV / V / VI]	
Paper Code:	Paper: Name of Paper
Time: 3 Hours]	[Max. Marks: 50
Note: 1) All questions are compulsory and carry equal marks.	
2) Draw Neat and Labeled diagram and use supporting data wherever necessary.	
3) Avoid vague answers and write specific points/answer related to questions.	
Q1 Either (From Unit 1)	
a)	5
b)	5
Or	
c)	5
d)	5
Q2 Either (From Unit 2)	
a)	5
b)	5
Or	
c)	5
d)	5
Q3 Either (From Unit 3)	
a)	5
b)	5
Or	
c)	5
d)	5
Q4 Either (From Unit 4)	
a)	5
b)	5
Or	
c)	5
d)	5
Q5 Solve all questions	
a) (From Unit 1)	2 ^{1/2}
b) (From Unit 2)	2 ^{1/2}
c) (From Unit 3)	2 ^{1/2}
d) (From Unit 4)	2 ^{1/2}

GONDWANA UNIVERSITY

GADCHIROLI



**FACULTY OF SCIENCE AND
TECHNOLOGY**

Syllabus for the T.Y.B.Sc.

Semester V & VI

Program: B.Sc.

Course: Microbiology

Choice Based Credit System with Effect from the Academic Year

2019-2020

GONDWANA UNIVERSITY, GADCHIROL I

CHOICE BASED CREDIT SYSTEM

T.Y. B.Sc.

MICROBIOLOGY

(SEMESTER V)

(With effect from academic session 2019-20)

- There shall be two semesters in B.Sc. Part III. Each semester comprise of two theory papers, practical and internal assessment.
- The syllabus is based on six theory periods and six practical periods per week.
- Each theory paper divided into four units.
- **Scheme of examination:** The performance of the learners shall be evaluated into two parts. The learner's performance shall be assessed by Internal Assessment (college assessment) in the first part & by conducting the Semester End Examinations (conducted by university) in the second part.
- **Internal Assessment:** It is defined as the assessment of the learners on the basis of continuous evaluation as envisaged in the Credit based system by way of participation of learners in various academic and correlated activities in the given semester of the program.
- **Semester End Assessment:** It is defined as the assessment of the learners on the basis of Performance in the semester end Theory/ written/ Practical examination.
- The internal assessment marks assigned to each theory paper shall be awarded on the basis of Attendance/Assignment / Class test / Project assignment / Seminar / Case studies/ Quizzes/ Viva, any other innovative practice / activity.
- **The Semester End Examination for MICROBIOLOGY course will be as follows:**
 - External assessment- University examination : 50 marks each for DSE- I, DSE- II, DSE- III, DSE- IV (Any Two): Total 100 marks
 - Internal assessment- College Assessment : 10 marks each for DSE- I, DSE- II, DSE- III, DSE- IV (Any Two): Total 20 marks
(External assessment+ Internal assessment= Total - 120 Marks for theory)
 - One practical course: 30 marks(For any two selected from DSE)
 - The practical course will be concerning with the DSE theory papers.
- Duration of examination for each theory paper will be 3 hours.
- The practical examination shall be of 6 hours duration.
- Practical examination for odd semester will be at college level and for even semester at university level with external examiner.
- **Skill Enhancement Course (SEC):** The students have to choose one Skill Enhancement Course from a pool of courses designed to provide value-based and/or skill-based knowledge.
- Marks distribution for SEC: Theory- 15 marks, Exercise/Practical-35 Marks
- Assessment of skill Enhancement Course shall be done at college level.
- The B.Sc. students of Microbiology shall pay at least one visit to any Industry, Microbiological Research Institute as a study tour during three year (six semesters) degree course.
- The marks will be given for all examinations and they will be converted into grade points. The final grade card will have marks, credits, grades, grade points, SGPA & CGPA.

SCHEME OF TEACHING AND EXAMINATION: B.Sc. Semester V (MICROBIOLOGY)

Semester	Paper No.	DSE T/P	Paper code	Title of Paper: Discipline Specific Elective (Any Two)	Periods / week	Max Marks		Total Marks	Credits	Total: Th+ Pract	
						External (U.A.)	Internal(C.A.)				
V	IX	DSE-I	USMBT-09	Medical Microbiology	6	50	10	60	2	150	
	X	DSE-II	USMBT-10	Bioinstrumentation	6	50	10	60	2		
	XI	DSE-III	USMBT-11	Virology	6	50	10	60	2		
	XII	DSE-IV	USMBT-12	Pharmaceutical Microbiology	6	50	10	60	2		
		Practical	USMBP-05	DSE Practical (Concerning with selected DSE theory papers). Any two Practical courses from USMB P-05,USMBP-06,USMBP-07,USMBP-08	6	30	-	30	2		
			USMBP-06								
			USMBP-07								
			USMBP-08								
		paper No.	SEC	Paper code	Skill Enhancement Course (Any one) (College level)	Credit	Theory	Exercise	Total	Credits	Total Marks
		I	SEC I	USMBSEC-01	Microbial Diagnosis in Health Clinics	2	15	35	50	2	50
	II	SEC II	USMBSEC-02	Fermented Food and Microbial Quality Control in Food	2	15	35	50	2		

Internal Assessment for DSE Theory Paper:

S.No	Type of Evaluation	Marks	
		Paper I	Paper II
1	Minimum Two Class Test	04	04
2	Attendance, Active participation in routine class activities/seminars etc.	03	03
3	One assignment	03	03
	Total	10	10

Distribution of Marks in DSE Practical Examination:

S.No	External assessment	Marks
1	Experimental work	20
2	Practical record	05
3	Viva-voce	05
	Total	30

QUESTION PAPER PATTERN

- a. Question paper will consist of five questions and each question will be of 10 marks.
- b. All questions will be compulsory and with internal choice.
- c. The first four questions will be from the four units separately.
- d. Fifth question will be compulsory with questions from each of the four units having equal weight age and there will be no internal choice.

T.Y. B.Sc. Semester V (CBCS) MICROBIOLOGY

Time: 3 Hours

Max. Marks: 50

Note: A) All questions are compulsory and carry equal marks

B) Draw well labeled diagrams wherever necessary

- Q 1. Long answer type question from Unit I 10 Marks
OR
a) Short answer type question from Unit I 2½ Marks each
b) Short answer type question from Unit I
c) Short answer type question from Unit I
d) Short answer type question from Unit I
- Q 2. Long answer type question from Unit II 10 Marks
OR
a) Short answer type question from Unit II 2½ Marks each
b) Short answer type question from Unit II
c) Short answer type question from Unit II
d) Short answer type question from Unit II
- Q 3. Long answer type question from Unit III 10 Marks
OR
a) Short answer type question from Unit III 2½ Marks each
b) Short answer type question from Unit III
c) Short answer type question from Unit III
d) Short answer type question from Unit III
- Q 4. Long answer type question from Unit IV 10 Marks
OR
a) Short answer type question from Unit IV 2½ Marks each
b) Short answer type question from Unit IV
c) Short answer type question from Unit IV
d) Short answer type question from Unit IV
- Q 5. Solve any 10 out of 12 questions (3 questions from each unit) 10 Marks

GONDWANA UNIVERSITY

GADCHIROLI



**FACULTY OF SCIENCE AND
TECHNOLOGY**

Syllabus for the T.Y.B.Sc.

Semester VI

Program: B.Sc.

Course: Microbiology

Choice Based Credit System with Effect from the Academic Year

2019–2020

GONDWANA UNIVERSITY, GADCHIROLI

CHOICE BASED CREDIT SYSTEM

T.Y.B.Sc.

MICROBIOLOGY

(SEMESTER VI)

(With effect from academic session 2019-20)

- There shall be two semesters in B.Sc. Part III. Each semester comprise of two theory papers, practical and internal assessment.
- The syllabus is based on six theory periods and six practical periods per week.
- Each theory paper divided into four units.
- **Scheme of examination:** The performance of the learners shall be evaluated into two parts. The learner's performance shall be assessed by Internal Assessment (college assessment) in the first part & by conducting the Semester End Examinations (conducted by university) in the second part.
- **Internal Assessment:** It is defined as the assessment of the learners on the basis of continuous evaluation as envisaged in the Credit based system by way of participation of learners in various academic and correlated activities in the given semester of the program.
- **Semester End Assessment:** It is defined as the assessment of the learners on the basis of Performance in the semester end Theory/ written/ Practical examination.
- The internal assessment marks assigned to each theory paper shall be awarded on the basis of Attendance/Assignment / Class test / Project assignment / Seminar / Case studies/ Quizzes/ Viva, any other innovative practice / activity.
- **The Semester End Examination for MICROBIOLOGY course will be as follows:**
 - External assessment- University examination : 50 marks each for DSE- I, DSE- II, DSE- III, DSE- IV (Any Two): Total 100 marks
 - Internal assessment- College Assessment : 10 marks each for DSE- I, DSE- II, DSE- III, DSE- IV (Any Two): Total 20 marks
(External assessment+ Internal assessment= Total - 120 Marks for theory)
 - One practical course: 30 marks(For any two selected from DSE)
 - The practical course will be concerning with the DSE theory papers.
- Duration of examination for each theory paper will be 3 hours.
- The practical examination shall be of 6 hours duration.
- Practical examination for odd semester will be at college level and for even semester at university level with external examiner.
- **Skill Enhancement Course (SEC):** The students have to choose one Skill Enhancement Course from a pool of courses designed to provide value-based and/or skill-based knowledge.
- Marks distribution for SEC: Theory- 15 marks, Exercise/Practical-35 Marks
- Assessment of skill Enhancement Course shall be done at college level.
- The B.Sc. students of Microbiology shall pay at least one visit to any Industry, Microbiological Research Institute as a study tour during three year (six semesters) degree course.
- The marks will be given for all examinations and they will be converted into grade points. The final grade card will have marks, credits, grades, grade points, SGPA & CGPA.

SCHEME OF TEACHING AND EXAMINATION: B.Sc. Semester VI (MICROBIOLOGY)

Semester	Paper No.	DSE T/P	Paper code	Discipline Specific Elective Title of Paper: (Any Two)	Periods / week	Max Marks		Internal(C.A.)	Total Marks	Credits	Total: Thr+ Pract
						External (U.A.)					
V I	XIII	DSE-I	USMBT-13	Recombinant DNA Technology	6	50	10	60	2	150	
	XI V	DSE-II	USMBT-14	Immunology	6	50	10	60	2		
	XV	DSE-III	USMBT-15	Bioinformatics	6	50	10	60	2		
	XV I	DSE-IV	USMBT-16	Microbes in Sustainable Agriculture and Development	6	50	10	60	2		
		Practical	USMBP-09 USMBP-10 USMBP-11 USMBP-12	DSE Practical (Concerning with selected DSE theory papers). <u>Any two Practical</u> courses from USMBP-09, USMBP-10, USMBP-11, USMBP-12	6	30	-	30	2		
		Paper No.	SEC	Paper code	Skill Enhancement Course (Any one) (College level)	Credit	Theory	Exercise	Total	Credits	Total Marks
	III	SEC III	USMBSEC-03	Biofertilizers and Biopesticides	2	15	35	50	2	50	
IV	SEC IV	USMBSEC-04	Mushroom and Spirulina Cultivation	2	15	35	50	2			

Internal Assessment for DSE Theory Paper:

S.No	Type of Evaluation	Marks	
		Paper I	Paper II
1	Minimum Two Class Test	04	04
2	Attendance, Active participation in routine class activities/seminars etc.	03	03
3	One assignment	03	03
	Total	10	10

Distribution of Marks in DSE Practical Examination:

S.No	External assessment	Marks
1	Experimental work	20
2	Practical record	05
3	Viva-voce	05
	Total	30

QUESTION PAPER PATTERN

- e. Question paper will consist of five questions and each question will be of 10 marks.
- f. All questions will be compulsory and with internal choice.
- g. The first four questions will be from the four units separately.
- h. Fifth question will be compulsory with questions from each of the four units having equal weightage and there will be no internal choice.

**T.Y. B.Sc. Semester VI
(CBCS)
MICROBIOLOGY**

Time: 3 Hours**Max. Marks: 50**

- Note: A) All questions are compulsory and carry equal marks
B) Draw well labeled diagrams wherever necessary**

- Q 1. Long answer type question from Unit I 10 Marks
OR
a) Short answer type question from Unit I 2½ Marks each
b) Short answer type question from Unit I
c) Short answer type question from Unit I
d) Short answer type question from Unit I
- Q 2. Long answer type question from Unit II 10 Marks
OR
a) Short answer type question from Unit II 2½ Marks each
b) Short answer type question from Unit II
c) Short answer type question from Unit II
d) Short answer type question from Unit II
- Q 3. Long answer type question from Unit III 10 Marks
OR
a) Short answer type question from Unit III 2½ Marks each
b) Short answer type question from Unit III
c) Short answer type question from Unit III
d) Short answer type question from Unit III
- Q 4. Long answer type question from Unit IV 10 Marks
OR
a) Short answer type question from Unit IV 2½ Marks each
b) Short answer type question from Unit IV
c) Short answer type question from Unit IV
d) Short answer type question from Unit IV
- Q 5. Solve any 10 out of 12 questions (3 questions from each unit) 10 Marks