ENVIRONMENTAL STUDIES

Credits: 4

Course Code: AEECC1

COURSE TITLE: FUNDAMENTALS OF ENVIRONMENTAL STUDIES

Lectures - 80

Unit 1: Basic of Environmental Studies

(06)

Definition, Nature, Scope and Importance; Components of environment: Environmental education

Unit 2: Natural Resources: Renewable & Non-renewable Resources

(15)

Nature and natural resources their conservation and associated problems:

- Forest resources: Uses, types and importance, Joint Forest Management & Tribal population,
 Deforestation and its effects
- Water resources: Distribution of water on Earth; Use, over exploitation of surface and ground water; Dams: Benefits and problems; Flood and Drought
- Mineral resources: Mineral resources in India; Use and exploitation, Social impacts of mining
- Food resources: World food problems and food insecurities.
- Energy resources: Renewable and Non-renewable energy sources; Use of alternate energy sources - Case studies
- Land resources: Land as a resource; Land degradation, landslides, soil erosion, desertification
- Use of resources for sustainable development

Unit 3: Ecology & Ecosystems

(12)

Concept of ecology, Population ecology, Community ecology

- Concept of an ecosystem, different types of ecosystem
- Food chains, food weds and ecological succession
- Energy flow in the ecosystem and energy flow models

Unit 4: Biodiversity & Conservation

(12)

- Biodiversity: Levels of biological diversity
- Values of biodiversity
- Hot-Spots of biodiversity, Mega-biodiversity countries
- Threat to biodiversity
- Threatened and endemic species of India
- Conservation of biodiversity (*In- situ* and *Ex-situ*)
- Ecosystem services: Ecological, Economical, Social, Ethical, Aesthetical and Informational values

Unit 5: Environmental Pollution & Management

(12)

- (a) Nature, Causes, Effects and Control measures of –
- (i) Air pollution
- (ii) Water pollution
- (iii) Soil pollution
- (iv) Noise pollution
- v) Nuclear hazards
- (b) Fireworks Pollution: Definition, Composition/Ingredients, effects, monitoring strategies
- Solid waste management: Causes, effects and disposal methods; Management of biomedical and municipal solid wastes
- Disaster management: Floods, Earthquake, Cyclone and Landslides

Unit 6: Environmental Policies & Practices

(15)

- Constitutional Provisions for protecting environment- Articles 48(A), 51 A (g)
- Environmental Laws: The Environment (Protection) Act, 1986; The Air (Prevention and Control of Pollution) Act, 1981; The Water (Prevention and Control of Pollution) Act 1974; Forest (Conservation) Act, 1980
- The wildlife Protection Act, 1972
- Climate change, Global warming, ENSO, Acid rain, Ozone layer depletion; Montreal and Kyoto Protocols

Unit 7: Human Communities & Environment

(08)

- Human population growth; Impacts on environment
- Population explosion Family Welfare Programme
- Environment and human health: Concept of health and disease; Common communicable and Non-communicable diseases; Public awareness
- Environment movements in India: Chipko Movements, Silent Valley Movement, Movements in Karnataka

Unit 8: Field Work Report/Project Report/Term paper (based on any one of the following topics and to be evaluated by internal teachers only)

- Environmental assets River/Forest/Grassland/Hill/Mountain etc.
- Environmental pollution Urban/Rural/Industrial/Agricultural
- Study of common Plants/Insect /Birds/Wild life *etc*.
- Study of simple ecosystems: Pond/River/Hill slope *etc*.
- Municipal solid waste management and handling.

B.A. Honours in Bengali

There will be six semesters in the three years B.A. Honours in Bengali. The curriculum consists 14 core courses (CC), 2 Ability Enhancement Compulsory Courses (AECC), 2 Skill Enhancement Courses (SEC) and 4 Discipline Specific Elective (DSE) courses and 4 Generic Elective (GE) courses.

Semester - I

Course Title	Course Type	Credit	Marks
বাংলা সাহিত্যের ইতিহাস(প্রাচীন ও মধ্যযুগ) Bangla	CC-1	6	75
SahityerItihash (Prachin & Madhyayug)			
ছন্দ, অলঙ্কার, Chhando, Alankar	CC-2	6	75
Any discipline other than Bengali	GE-1	6	75
ENVS	AECC-1	4	100
		22	325

Semester - II

Course Title	Course Type	Credit	Marks
বৈষ্ণব পদাবলি, শাক্ত পদাবলি BaishnabPadabali, Shakto	CC-3	6	75
Padabali			
রামায়ণ, অন্নদামঙ্গল Ramayana, Annadamangal	CC-4	6	75
Any discipline other than Bengali	GE-2	6	75
Communicative English/MIL	AECC-2	2	50
		20	275

Semester - III

Course Title	Course	Credit	Marks
	Туре		
বাংলা সাহিত্যের ইতিহাস (১৮০১-১৯৫০)	CC-5	6	75
[Bangla SahityerItihas (1801-1950)]			
ভাষাতত্ত্ব : (Bhasatattwa)	CC-6	6	75
উনিশ শতকের কাব্য (UnishShatakerKabya)	CC-7	6	75
Any discipline other than Bengali	GE-3	6	75
বাংলা ব্যাকরণ (Bangla Byakaran)	SEC-1	2	50
		26	350

Semester - IV

Course Title	Course	Credit	Marks
	Туре		
কবিতা (Kabita)	CC-8	6	75
উপন্যাস (Upanyas)	CC-9	6	75
নাটক (Natak)	CC-10	6	75
Any discipline other than Bengali	GE-4	6	75
রচনা শক্তির নৈপুণ্য (Rachanashaktir Naipunya)	SEC-2	2	50
		26	350

Semester - V

Course Title	Course	Credit	Marks
	Туре		
গল্প (Galpo)	CC-11	6	75
প্রবন্ধ ও প্রাচ্য কাব্যতত্ত্ব (Prabandha O Prachya Kabyatattwa)	CC-12	6	75
উনিশ শতকের বাংলা কাব্য ও প্রবন্ধ	DSE-1	6	75
(Unish Sataker Bangla Kabya O Prabandha)			
উনিশ শতকের বাংলা নাটক ও কথাসাহিত্য	DSE-2	6	75
(Unish Sataker Bangla Natak O Kathasahitya)			
		24	300

Semester - VI

Course Title	Course	Credit	Marks
	Туре		
সংস্কৃত ও ইংরেজি সাহিত্যের ইতিহাস	CC-13	6	75
(Sanskrita O Ingreji Sahityer Itihas)			
সাহিত্যের রূপ- রীতি ও সংরূপ (Sahityer Rup- Riti O Sangrup)	CC-14	6	75
(বিশ শতকের স্বাধীনতা-পূর্ববর্তী বাংলা কথাসাহিত্য) (BishSataker	DSE-3	6	75
Swadhinata-purbabarti Bangla Kathasahitya)			
সাহিত্যবিষয়ক প্রবন্ধ ও লোকসাহিত্য	DSE-4	6	75
(SahityaBisayakPrabandha O Lakasahitya)			
		24	300

B.A. GENERAL IN BENGALI

There will be six semesters in the three years B.A. Program in Bengali. The curriculum consists of 12 Core Courses (CC) of which 4 Core Courses are to be taken from Discipline 1 (Bengali), 4 Core Courses are to be taken from Discipline 2 (Any subject other than Bengali), 2 Core Courses are to be taken from English Language(L1), 2 Core Courses are to be taken from Hindi/MIL (L2), 2 Core Courses are to be taken from AECC- Core. 2 Generic Elective Courses (GE) and 4 Skill Enhancement Courses (SEC) (from the program in the subject selected by the candidate) and 4 Discipline Specific Elective Courses (DSE).

Semester- I

Course Title	Course Type	Credit	Marks
Discipline 1 (Bengali) প্রবন্ধসাহিত্য : বঙ্কিমচন্দ্র ও রবীন্দ্রনাথ:	CC-1A	6	75
(PrabandhaSahitya : Bankimchandra& Rabindranath)			
Discipline 2(Other than Bengali)	CC-2A	6	75
English Language (L1-1)	CC - (L1-1)	6	75
Environmental Studies	AECC-1	4	100
		22	325

Semester -II

Course Title	Course Type	Credit	Marks
Discipline 1 (Bengali) গল্প : প্রভাতকুমার ও শরৎচন্দ্র	CC-1B	6	75
(Galpo: Pravat Kumar O Saratchandra)			
Discipline 2(Other than Bengali)	CC-2B	6	75
Hindi/ MIL (L2) Bangla Chhotogalpo	CC-(L2-1)	6	75
Communicative English /MIL	AECC-2	2	50
		20	275

Semester- III

Course Title	Course Type	Credit	Marks
Discipline 1 (Bengali) : বাংলা সাহিত্যের ইতিহাস	CC-1C	6	75
(Bangla Sahityer Itihas)			
Discipline 2(Other than Bengali)	CC-2C	6	75
English Language (L ₁ -2)	CC-(L ₁ -2)	6	75
বাংলা ব্যাকরণ (Bangla Byakaran)	SEC-1	2	50
		20	275

Semester -IV

Course Title	Course Type	Credit	Marks
Discipline 1 (Bengali) ভাষাতত্ত্ব (Bhasatattwa)	CC-1D	6	75
Discipline 2(Other than Bengali)	CC-2D	6	75
Hindi/ MIL (L₂ - 2) বাংলা কবিতা (BanglaKabita)	CC-(L ₂ -2)	6	75
রচনাশক্তির নৈপুণ্য (Rachanashaktir Naipunya)	SEC-2	2	50
		20	275

Semester- V

Course Title	Course Type	Credit	Marks
Discipline 1 (Bengali)	DSE-1A	6	75
উনিশ শতকের বাংলা উপন্যাস (Unish Shataker Bangla			
Upanyas) OR,			
উনিশ শতকের বাংলা গল্প (Unish Shataker Bangla Galpo)			
Discipline 2(Other than Bengali)	DSE-2A	6	75
উনিশ শতকের বাংলা প্রবন্ধ (Unis Shataker Bangla	GE- 1	6	75
Prabandha)			
প্রবন্ধ ও প্রতিবেদন রচনা (Prabandha O Pratibedan	SEC-3	2	50
Rachana)			
		20	275

Semester -VI

Course Title	Course Type	Credit	Marks
Discipline 1 (Bengali) উনিশ শতকের বাংলা নাটক (Unish	DSE-1B	6	75
Shataker Bangla Natak)			
OR,			
উনিশ শতকের বাংলা প্রবন্ধ (Unish Shataker Bangla			
Prabandha)			
Discipline 2 (Other than Bengali)	DSE-2B	6	75
উনিশ শতকের বাংলা ভ্রমণসাহিত্য ও চিঠিপত্র (Unis Shataker	GE-2	6	75
Bangla Bhramansahitya O Chithipatra)			
ব্যবহারিক বাংলা চর্চা ও অনুবাদচর্চা	SEC-4	2	50
(ByabaharikBanglaCharcha O AnubadCharcha)			
		20	275

THE UNIVERSITY OF BURDWAN



SYLLABUS FOR B.A. HONOURS PROGRAMME IN ENGLISH

UNDER SEMESTER WITH CBCS

(Effective from 2017- 18)

Only ticked courses are chosen for reading and evaluation

ND stands for non-detailed study

Туре	Credits	Number of Courses	Total credits		
CC	6 credits per Course (5	14	84		
	theory, 1 tutorial)				
DSE	6 credits per Course (5	4	24		
	theory, 1 tutorial)				
GE [any discipline other than	6 credits per Course (5	4	24		
English]	theory, 1 tutorial)				
AEC	C AECC 1 – 4 credits, AECC 2		6		
	– 2 Credits				
SEC	2 credits per paper	2	4		
	Total				

CORE COURSE (CC)

- ✓ CC1: Indian Classical Literature
- ✓ CC2: European Classical Literature
- ✓ CC3: Indian Writing in English
- ✓ CC4: British Poetry, Drama (16th 17th Centuries), and Rhetoric & Prosody
- ✓ CC5: American Literature
- ✓ CC6: Popular Literature
- ✓ CC7: British Poetry and Drama (17th 18th Centuries)
- ✓ CC8: British Literature (18th Century)
- ✓ CC9: British Romantic Literature
- ✓ CC10: British Literature (19th Century)
- ✓ CC11: Women's Writing
- ✓ CC12: British Literature (Early 20th Century)
- ✓ CC13: Modern European Drama
- ✓ CC14: Postcolonial Literatures

DISCIPLINE SPECIFIC ELECTIVE (DSE)

- ✓ DSE1: Modern Indian Writing in English Translation OR Travel Writing
- ✓ DSE2: Partition Literature OR British Literature: Post-WWII
- ✓ DSE3: Literary Theory OR Research Methodology
- ✓ DSE4: Literary Criticism and History of the English Language OR Literature of the Indian Diaspora

GENERIC ELECTIVE (GE) [For learners from other discipline(s)]

- ✓ GE1 : Poetry & Short Story
- ✓ GE2 : Essay, Drama and Novel
- ✓ GE3 : Contemporary India: Women and Empowerment
- ✓ GE4 : Academic Writing and Composition

ABILITY ENHANANCEMENT COMPULSORY COURSE (AECC)

- ✓ AECC 1: Environmental Studies(to follow ENVS syllabus)
- ✓ AECC 2: Communicative English / MIL

SKILL ENHANANCEMENTCOURSE (SEC)

- ✓ SEC1: Translation OR Creative Writing
- ✓ SEC2: ELT OR Film Studies

B.A. Honours Programme in English under CBCS Structure at a Glance

Semester	Courses	Course type	Credit	Full
				Marks
Sem I	CC-I	Core Course	6	75
	CC-II	Core Course	6	75
	GE- 1	Interdisciplinary(other than English)	6	75
	ENVS	AECC 1	4	100
Sem II	CC-III	Core Course	6	75
	CC-IV	Core Course	6	75
	GE-2	Interdisciplinary(other than English)	6	75
	Communicative English/	AECC	2	50
	MIL			
SemIII	CC-V	Core Course	6	75
	CC-VI	Core Course	6	75
	CC-VII	Core Course	6	75
	GE-3	Interdisciplinary(other than English)	6	75
	SEC- 1	Skill based	2	50
SemIV	CC-VIII	Core Course	6	75
	CC-IX	Core Course	6	75
	CC-X	Core Course	6	75
	GE-4	Interdisciplinary(other than English)	6	75
	SEC- 2	Skill based	2	50
SemV	CC-XI	Core Course	6	75
	CC-XII	Core Course	6	75
	DSE- 1	Discipline Specific Elective	6	75
	DSE- 2	Discipline Specific Elective	6	75
SemVI	CC-XIII	Core Course	6	75
	CC-XIV	Core Course	6	75
	DSE- 3	Discipline Specific Elective	6	75
	DSE- 4	Discipline Specific Elective	6	75

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Syllabus for B. A. General Programme

in

English

UNDER SEMESTER WITH CBCS (Effective from 2017- 18)

Type	Credits	Number of Courses	Total Credits
CC	6 Credits per Course (5 theory, 1 tutorial)	12	72
DSE	6 Credits per Course (5 theory, 1 tutorial)	4	24
GE	6 Credits per Course (5 theory, 1 tutorial)	2	12
AEC	AECC 1 – 4 Credits, AECC 2 – 2 Credits	2	6
SEC	2 Credits per Course	4	8
	Total		122

CORE COURSE (CC)

CC1A: Poetry & Short Story CC1B: Essay, Drama & Novel

CC1C: Contemporary India: Women and Empowerment

CC1D: Academic Writing and Composition

Core Language (L1/1): Language, Variety and Stylistics Core Language: (L1/2): Language, Imagination & Creativity

DISCIPLINE SPECIFIC ELECTIVE (DSE)

DSE1: British Literature OR Environment & Literature

DSE2: Indian Literature in Translation OR Literary Cross Currents

GENERIC ELECTIVE (GE) [For learners from other discipline(s)]

GE1: Gender & Human Rights GE2: Environment & Literature

ABILITY ENANCEMENT COMPULSORY COURSE (AECC)

AECC - 1: Environmental Studies (to follow ENVS syllabus)

AECC - 2: Communicative English

SKILL ENHANANCEMENT COURSE (SEC)

SEC1: Translation Studies OR Creative Writing

SEC2: ELT OR Film Studies

SEC3: Technical Writing OR Business Communication

SEC4: Soft Skills OR Spoken English

B.A. General Programme in English under CBCS Structure at a Glance

Semester	Courses	Course type	Credit	Full Marks
Sem I	Discipline- 1 (English)	Core Course (CC-1A)	6	75
	Discipline- 2 (other than Eng.)	Core Course	6	75
	English Language	Core Language (L ₁ -1)	6	75
	ENVS	AECC-1	4	100
Sem II	Discipline- 1 (English)	Core Course (CC-1B)	6	75
	Discipline- 2 (other than Eng.)	Core Course	6	75
	Hindi/MIL	Core Language (L ₂ -1)	6	75
	Communicative English/ MIL	AECC-2	2	50
SemIII	Discipline- 1 (English)	Core Course (CC-1C)	6	75
	Discipline-2(other than Eng.)	Core Course	6	75
	English Language	Core Language (L ₁ -2)	6	75
	Skill Enhancement Course	SEC-1	2	50
SemIV	Discipline- 1 (English)	Core Course (CC-1D)	6	75
	Discipline-2(other than Eng.)	Core Course	6	75
	Hindi/MIL	Core Language (L ₂ -2)	6	75
	Skill Enhancement Course	SEC-2	2	50
SemV	Discipline Specific Course (English)	DSE- 1A	6	75
	Discipline Specific Course	DSE- 2A	6	75
	Generic Elective (other than English)	GE-1(Interdisciplinary)	6	75
	Skill Enhancement Course	SEC-3	2	50
SemVI	Discipline Specific Course(English)	DSE- 1B	6	75
	Discipline Specific Course	DSE- 2B	6	75
	Generic Elective (other than English)	GE-2 (Interdisciplinary)	6	75
	Skill Enhancement Course	SEC- 4	2	50

THE UNIVERSITY OF BURDWAN



SYLLABUS FOR B.A. HONOURS PROGRAMME

IN SANSKRIT UNDER SEMESTER WITH CBCS (Effective from 2017- 18)

Туре	Credits	Number of Courses	Total credits	
CC	6 credits per Course (5 theory, 1 tutorial)	14	84	
DSE	6 credits per Course (5 theory, 1 tutorial)	4	24	
GE [any discipline other than Sanskrit]	6 credits per Course (5 theory, 1 tutorial)	4	24	
AEC	AECC 1 – 4 credits, AECC 2 – 2 Credits	2	6	
SEC	2 credits per paper	2	4	
Total				

CORE COURSE (CC)

- ✓ CC1: CLASSICAL SANSKRIT LITERATURE POETRY
- ✓ CC2: CRITICAL SURVEY OF SANSKRIT LITERATURE
- ✓ CC3: CLASSICAL SANSKRIT LITERATURE PROSE
- ✓ CC4: SELF MANAGEMENT IN GITA
- ✓ CC5: CLASSICAL SANSKRIT LITERATURE DRAMA
- ✓ CC6: POETICS AND LITERARY CRITICISM
- ✓ CC7: INDIAN SOCIAL INSTITUTION AND POLITY
- ✓ CC8: INDIAN EPIGRAPHY AND CHRONOLOGY
- ✓ CC9: MODERN SANSKRIT LITERATURE
- ✓ CC10: SANSKRIT AND WORLD LITERATURE
- ✓ CC11: VEDIC LITERATURE
- ✓ CC12: SANSKRIT GRAMMAR
- ✓ CC13: INDIAN ONTOLOGY AND EPISTEMILOGY
- ✓ CC14: SANSKRIT COMPOSITION AND COMMUNICATION

DISCIPLINE SPECIFIC ELECTIVE (DSE)

- ✓ DSE1: DRAMATURGY OR MAXIMS IN SANSKRIT LANGUAGE
- ✓ DSE2: ELEMENTS OF LINGUISTICS OR TECHNIQUE OF SANSKRIT LANGUAGE
- ✓ DSE3: FUNDAMENTALS OF AYURVEDA OR ENVIRONMENTAL AWARENESS IN SANSKRIT
- ✓ DSE4: ART OF BALANCED LIVING OR INDIAN SYSTEM OF LOGIC

GENERIC ELECTIVE (GE) [For learners from other discipline(s)]

- ✓ GE1: SANSKRIT POETRY
- ✓ GE2: SANSKRIT PROSE
- ✓ GE3: SANSKRIT DRAMA
- ✓ GE4 : SANSKRIT GRAMMAR

ABILITY ENHANANCEMENT COMPULSORY COURSE (AECC)

- ✓ AECC 1: Environmental Studies(to follow ENVS syllabus)
- ✓ AECC 2: Communicative English / MIL

SKILL ENHANANCEMENTCOURSE (SEC)

- ✓ SEC1: BASIC SANSKRIT OR ETHICAL AND MORAL ISSUES IN SANSKRIT
- ✓ SEC2: SPOKEN SANSKRIT OR POLITICAL THOUGHT IN SANSKRIT LITERATURE

B.A. Honours in Sanskrit under CBCS **Structure at a Glance**

Semester	Courses	Course type	Credit	Full
				Marks
Sem I	CC-I	Core Course	6	75
	CC-II	Core Course	6	75
	GE- 1	Interdisciplinary(other than Sanskrit)	6	75
	ENVS	AECC 1	4	100
Sem II	CC-III	Core Course	6	75
	CC-IV	Core Course	6	75
	GE-2	Interdisciplinary(other than Sanskrit)	6	75
	Communicative English/	AECC	2	50
	MIL			
SemIII	CC-V	Core Course	6	75
	CC-VI	Core Course	6	75
	CC-VII	Core Course	6	75
	GE-3	Interdisciplinary(other than Sanskrit)	6	75
	SEC- 1	Skill based	2	50
SemIV	CC-VIII	Core Course	6	75
	CC-IX	Core Course	6	75
	CC-X	Core Course	6	75
	GE-4	Interdisciplinary(other than Sanskrit)	6	75
	SEC-2	Skill based	2	50
SemV	CC-XI	Core Course	6	75
	CC-XII	Core Course	6	75
	DSE- 1	Discipline Specific Elective	6	75
	DSE- 2	Discipline Specific Elective	6	75
SemVI	CC-XIII	Core Course	6	75
	CC-XIV	Core Course	6	75
	DSE- 3	Discipline Specific Elective	6	75
	DSE- 4	Discipline Specific Elective	6	75

THE UNIVERSITY OF BURDWAN



Syllabus for B. A. General Programme

in

Sanskrit

UNDER SEMESTER WITH CBCS (Effective from 2017- 18)

Type	Credits	Number of Courses	Total Credits
CC	6 Credits per Course (5 theory, 1 tutorial)	12	72
DSE	6 Credits per Course (5 theory, 1 tutorial)	4	24
GE	6 Credits per Course (5 theory, 1 tutorial)	2	12
AEC	AECC 1 – 4 Credits, AECC 2 – 2 Credits	2	6
SEC	2 Credits per Course	4	8
	Total		122

CORE COURSE (CC)

CC1A: SANSKRIT POETRY
CC1B: SANSKRIT PROSE
CC1C: SANSKRIT DRAMA

CC1D: SANSKRIT GRAMMAR

DISCIPLINE SPECIFIC ELECTIVE (DSE)

DSE1: EPIGRAPHY OR PHILOSOPHY, RELIGION AND CULTURE IN SANSKRIT

TRADITION

DSE2: MAXIMS IN SANSKRIT LANGUAGE OR LITERARY CRITICISM

GENERIC ELECTIVE (GE) [For learners from other discipline(s)]

GE1: INDIAN SOCIAL INSTITUTION AND POLITY OR POLITICAL THOUGHT IN

SANSKRIT

GE2: ETHICAL ISSUES IN SANSKRIT LITERATURE OR SANSKRIT METRE AND

COMPOSITION

ABILITY ENANCEMENT COMPULSORY COURSE (AECC)

AECC - 1: Environmental Studies (to follow ENVS syllabus)

AECC - 2: Communicative Sanskrit

SKILL ENHANANCEMENT COURSE (SEC)

SEC1: BASIC ELEMENTS OF AYURVEDA OR YOGASUTRA OF PATANJALI

SEC2: INDIAN THEATRE OR BASIC SANSKRIT PART-I

SEC3: SANSKRIT COMPOSITION OR BASIC SANSKRIT PAERT-II

SEC4: VEDIC LITERATURE OR MORAL VALUES IN SANSKRIT LITERATURE

B.A. General Programme in Sanskrit under CBCS

Structure at a Glance

Semester	Courses	Course type	Credit	Full Marks
Sem I	Discipline- 1 (Sanskrit)	Core Course (CC-1A)	6	75
	Discipline- 2 (other than	Core Course	6	75
	Sanskrit)			
	English Language	Core Language (L ₁ -1)	6	75
	ENVS	AECC-1	4	100
Sem II	Discipline- 1 (Sanskrit)	Core Course (CC-1B)	6	75
	Discipline- 2 (other than	Core Course	6	75
	Sanskrit)			
	Hindi/MIL	Core Language (L ₂ -1)	6	75
	Communicative Sanskrit/ MIL	AECC-2	2	50
SemIII	Discipline- 1 (Sanskrit)	Core Course (CC-1C)	6	75
	Discipline-2 (other than	Core Course	6	75
	Sanskrit)			
	English Language	Core Language (L ₁ -2)	6	75
	Skill Enhancement Course	SEC-1	2	50
SemIV	Discipline- 1 (Sanskrit)	Core Course (CC-1D)	6	75
	Discipline-2(other than	Core Course	6	75
	Sanskrit)			
	Hindi/MIL	Core Language (L ₂ -2)	6	75
	Skill Enhancement Course	SEC-2	2	50
SemV	Discipline Specific Elective	DSE- 1A	6	75
	(Sanskrit)			
	Discipline Specific Elective(other	DSE- 2A	6	75
	than Sanskrit)			
	Generic Elective (other than Sanskrit)	GE-1(Interdisciplinary)	6	75
	Skill Enhancement Course	SEC-3	2	50
SemVI	Discipline Specific Elective	DSE- 1B	6	75
	(Sanskrit)			
	Discipline Specific Elective(other	DSE- 2B	6	75
	than Sanskrit)			
	Generic Elective (other than	GE-2 (Interdisciplinary)	6	75
	Sanskrit)			
	Skill Enhancement Course	SEC- 4	2	50

UG Syllabus BA (Hons.) CBCS Pattern – 2017

Semester	Courses Offered	Name of the	Credit	Full Marks	
		Course/Paper			
	Core Courses (CC)				
		History of India			
	CC Danor I	I (From Earliest		75	
	CC Paper - I	Times to 600	6	/5	
		AD)			
		Social			
		Formations &			
	CC Paper - II	the Cultural	6	75	
		Pattern of the			
		Ancient World			
	Generic Elective (GE) (Students of History Hons. should take				
Semester-I	Generic Elective Paper-I from other disciplines) However				
	Hons. students belonging to other disciplines have to take				
	the following GE Paper if they choose History as Generic				
	Elective)				
		History of India			
	CE Banas I	History of India From Earliest		75	
	GE Paper - I		6	75	
	GE Paper - I	From Earliest	6	75	
	·	From Earliest Times to 300	-		
	Ability	From Earliest Times to 300 AD)	ırses (AEC)		
	·	From Earliest Times to 300 AD) Enhancement Cou	-		
Total	Ability	From Earliest Times to 300 AD) Enhancement Cou	ırses (AEC)		

Semester	Courses Offered	Name of the	Credit	Full Marks	
		Course/Paper			
		Core Courses (C	CC)		
		History of India			
	CC Paper - III	II (600 - 1206	6	75	
		AD)			
		Social			
		Formation and			
	CC Paper - IV	Cultural Pattern	6	75	
		of the Medieval			
		World			
	Generic Elective (GE) Generic Elective (GE) (Students of				
Semester - II	History Hons. sho	uld take Generic E	Elective Pa	per – II from	
	other discipline)	However Hons.	students	belonging to	
	other disciplines	have to take the	following	GE Paper if	
	they choose Histor	ry as Generic Elect	ive)		
		History of India			
	GE Paper - II	From 300 to	6	75	
		1206 AD)			
	Ability	Enhancement Co	urses (AEC	C)	
	AECC Danor II	Communicative	2	50	
	AECC Paper - II	English/MIL		50	
Total	4		20	275	

Semester	Courses Offered	Name of the	Credit	Full Marks
		Course/Paper		
		Core Courses (C	CC)	
		History of India		
	CC Paper - V	III (1206 - 1525	6	75
		AD)		
		Rise of Modern		
Semester - III	CC Paper - VI	West – I (15 th &	6	75
		16 th Centuries)		
		History of India		
	CC Paper - VII	IV (1526 - 1757	6	75
		AD)		

	Generic Elective (GE) Generic Elective (GE) (Students of History Hons. should take Generic Elective Paper – III from other discipline) However Hons. students belonging to other disciplines have to take the following GE Paper if they choose History as Generic Elective)			
	GE Paper - III	History of India From 1206- 1707 AD)	6	75
	Skill	Enhancement Cou	rses (SEC)	
	SEC Paper - I	Archives & Museums in India Or Understanding Heritage	2	50
Total	5		26	350

Semester	Courses Offered	Name of the	Credit	Full Marks	
		Course/Paper			
		Core Courses (CC	C)		
	CC Paper - VIII	Rise of Modern West – II (17 th & 18 th Centuries)	6	75	
	CC Paper - IX	History of India - V (1758 - 1857)	6	75	
	CC Paper - X	History of India VI (1858 - 1964)	6	75	
Semester - IV	Generic Elective (GE) Generic Elective (GE) (Students of History Hons. should take Generic Elective Paper –IV from other discipline) However Hons. students belonging to other disciplines have to take the following GE Paper if they choose History as Generic Elective)				
	GE Paper - IV	History of India From 1707-1950 AD)	6	75	
	Skill	Skill Enhancement Courses (SEC)			

	SEC Paper - II	Understanding Popular Culture Or Art Appreciation: An introduction to Indian Art	2	50
Total	5		26	350

Semester	Courses Offered	Name of the Course/Paper	Credit	Full Marks
	Core Courses (CC)	, ,		
	CC Paper - XI	History of Modern Europe I (1789 - 1870)	6	75
	CC Paper - XII	Studying History Writing:Indian & Western	6	75
	Discipline Specific Elective (DSE)			
Semester - V	DSE Paper - I	Life & Culture in Pre-Colonial Bengal OR History of the United States of America (1776-1864)	6	75
	DSE Paper - II	Life & Culture in Colonial Bengal OR History of the United States of America	6	75

		(1865 - 1945)		
Total	4		24	300

Semester	Courses Offered	Name of the	Credit	Full Marks	
		Course/Paper			
		Core Courses (C	CC)		
		History of			
	CC Paper - XIII	Modern Europe	6	75	
		II(1871-1945)			
		Making of the			
	CC Paper - XIV	Contemporary	6	75	
	CC Faper - XIV	World (1946 –		/3	
		2000)			
	Disc	Discipline Specific Elective (DSE)			
		History of			
	DSE Paper - III	Modern East			
		Asia (1840-	6	75	
Semester - VI		1919			
Semester VI		OR		/3	
		History of the			
		USSR (1917 -			
		1945			
		History of			
		China &			
		Japan(1919-			
	DSE Paper - IV	1949)	6	75	
	DSET aper 1V	OR		/3	
		History of the			
		USSR (1945-			
		1964			
Total	4		24	300	

UG Syllabus BA General CBCS Pattern – 2017

Semester	Courses Offered	Name of the	Credit	Full
		Course/Paper		Marks
		Core Courses (CC)		
	Discipline - I History CC Paper – I A	History of India From Earliest Times to 300 AD)	6	75
	Discipline - 2 Other subject CC Paper – 2 A	To be taken from other discipline	6	75
Semester - I				
	Eng. Language (Core Course)	English - I	6	75
	Ability Enhancement Courses (AECC)			
	AECC Paper - I	Environmental Studies	4	100
Total	4		22	325

Semester	Courses Offered	Name of the	Credit	Full Marks
		Course/Paper		
		Core Courses (CC)		1
	Discipline - I History CC Paper – I B	History of India From 300 to 1206 AD)	6	75
	Discipline - 2 Other subject CC Paper – 2 B	To be taken from other discipline	6	75
Semester - II				
	Hindi/MIL (Core Course)	Language - 2	6	75
	Ability Enhancement Core Courses (AECC)			
	AECC Paper - II	Communicative English/ MIL	2	50
Total	4		20	275
Semester	Courses Offered	Name of the Course/Paper	Credit	Full Marks
		Core Courses (CC)		
Semester - III	Discipline - I History CC Paper – I (C)	History of India From 1206-1707 AD)	6	75
	Discipline - 2 Other	To be taken from	6	75

	subject	other discipline		
	CC Paper – 2 (C)			
	English Language	English - 2	6	75
	Ski	II Enhancement Course	s (AEC)	
		Museums &		
		Archives in India		
	SEC Paper - I	OR	2	50
		Indian History &		
		Culture		
Total	4		20	275

Semester	Courses Offered	Name of the	Credit	Full Marks
		Course/Paper		
		Core Courses (CO	C)	
	Discipline - I	History of India		
	History	From 1707 - 1950	6	75
	CC Paper – I D	AD)		
	Discipline - 2	Social Formations &		
	Other subject	the Cultural Pattern	6	75
	CC Paper – 2 D	of the Ancient World		
	Hindi/MIL (Core	Language - 2	c	75
	Course)		6	75
Semester - IV	S	kill Enhancement Cour	ses (SEC)	
		Understanding		
		Heritage		
		OR		
		Ethnographic		
	SEC Paper - II	Practices in India:	2	50
		Tradition of		
		Embroidery, Textile		
		making, Knitting,		
		Handicrafts		
Total	4		20	275

Courses Offered	Name of the	Credit	Full Marks	
	Course/Paper			
Discipline Specific Eledtive (DSE)				
DSE Paper – I A Some Aspects of 6				
	Dis	Course/Paper Discipline Specific Eledti DSE Paper – I A Some Aspects of	Course/Paper Discipline Specific Eledtive (DSE) DSE Paper – I A Some Aspects of	

		of Modern Europe: (15 th to 18 th Century) OR Political History of Modern Europe:		
		(15 th to 18 th Century)		
	DSE Paper – 2 A Other Subject	To be taken from other discipline	6	75
	Generic Elective (GE) For Other Dis			es
	GE Paper - I	Women's Studies in India OR Some Perspectives on Women's Rights in India	6	75
	Sk	ill Enhancement Cour	ses (SEC)	
	SEC - III	Understanding Popular Culture OR An Introduction to Archaeology	2	50
Total	4		20	275

Semester	Courses Offered	Name of the	Credit	Full Marks
		Course/Paper		
		Discipline Specific Eledt	ive (DSE)	
	DSE Paper – I B History	Some Aspects of European History (1789 - 1945)	6	75
	DSE Paper – 2 B Other Subject	To be taken from other discipline	6	75
Semester - VI	Generic Elective (GE) For Other Disciplines			
	GE Paper - II	Gender & Education in India OR History of Indian Journalism	6	75
	S	Skill Enhancement Courses (SEC)		
	SEC - IV	Art Appreciation: An Understanding to Indian Art Or	2	50

		Orality & Oral Culture in India		
Total	4		20	275
				_

$\frac{\text{COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM FOR B.Sc. HONOURS}{\text{IN GEOLOGY}}$

Semester-wise course structure

YEAR	SEMESTER	CORE COURSE (CC) (14)	ABILITY ENHANCEMENT COURSE (AECC) (2)	SKILL ENHANCEMENT COURSE (SEC) (2)	DISCIPLINE SPECIFIC ELECTIVE (DSE) (4)	GENERIC ELECTIVE (GE) (4)
FIRST YEAR	I	CC-1. EARTH SYSTEM SCIENCE CC-2. MINERAL SCIENCE	ENVIRONMENTAL STUDIES			GE-1 (Any discipline other than Geology)
FIRST	П	CC-3. ELEMENTS OF GEOCHEMISTRY CC-4. STRUCTURAL GEOLOGY	COMMUNICATIVE ENGLISH/MIL			GE-2 (Any discipline other than Geology)
	III	CC-5. IGNEOUS PETROLOGY CC-6. SEDIMENTOLOGY CC-7. PALEONTOLOGY		SEC-I (Field Work)		GE-3 (Any discipline other than Geology)
SECOND YEAR	IV	CC-9. PRINCIPLES OF STRATIGRAPHY AND PRECAMBRIAN STRATIGRAPHY OF INDIA CC-10. PHANEROZOIC STRATIGRAPHY OF INDIA		SEC-II (Field Work)		GE-4 (Any discipline other than Geology)
YEAR	V	CC-11. HYDROGEOLOGY CC-12. ECONOMIC GEOLOGY			DSE - 1 DSE - 2	
THIRD Y	VI	CC-13. GEOMORPHO- LOGY, REMOTE SENSING & GIS CC-14. ENGINEERING GEOLOGY			DSE - 3 DSE - 4	

Detail course structure

SEMESTER	COURSE OPTED	COURSE NAME	CREDIT	IA	MARKS ESE	TOTAL	No. of hours L-T-P Per Week
	Ability Enhancement: compulsory course – 1	Environmental Studies	4		100	100	
	Core Course – 1	Earth System Science (Th) Practical	4 2	15	40 20	75	4-0-0 0-0-4
I	Core Course – 2	Mineral Science (Th)	4	15	40	75	4-0-0
	Generic Elective – 1	Practical GE – 1	6	As to be pr		75	0-0-4
		Total	20	by onler un	Стрине	325	
	Ability Enhancement: compulsory course - 2	Communicative English/ MIL	2		50	50	
	Core Course - 3	Elements of Geochemistry (Th) Practical	4 2	15	40 20	75	4-0-0 0-0-4
II	Core Course - 4	Structural Geology (Th) Practical	4 2	15	40	75	4-0-0 0-0-4
	Generic Elective – 2	GE - 2	6	As to be p	rescribed	75	001
		Total	20			275	
	Core Course - 5	Igneous Petrology (Th)	4	15	40	75	4-0-0
	Core Course - 3	Practical	2		20		0-0-4
	Core Course - 6	Sedimentology (Th)	4	15	40	75	4-0-0
		Practical (TI)	2	1.5	20	75	0-0-4
III	Core Course - 7	Paleontology (Th) Practical	2	15	20	75	4-0-0 0-0-4
	Generic Elective - 3	GE - 3	6	As to be prescribed by other discipline 75			
	Skill Enhancement Course - 1	Field Work	2	10	40	50	0-0-4
		Total	26			350	
	Core Course - 8	Metamorphic Petrology (Th)	4	15	40	75	4-0-0
	Core Course - 9	Practical Principles of Stratigraphy and Precambrian Stratigraphy of	4	15	20 40	75	0-0-4 4-0-0
		India (Th) Practical	2	1	20		0-0-4
IV	Core Course - 10	Phanerozoic Stratigraphy of India (Th)	4	15	40	75	4-0-0
		Practical	2		20		0-0-4
	Generic Elective - 4	GE - 4	6	As to be proby other dis		75	
	Skill Enhancement Course - 2	Field Work	2	10	40	50	0-0-4
		Total	26			350	

V	Core Course - 11	Hydi	rogeology (Th)	4	15	40	75	4-0-0
			Practical			20		0-0-4
	Core Course - 12	Econor	Economic Geology (Th) Practical		15	40	75	4-0-0
	Core Course - 12					20		0-0-4
	Discipline Specific	DSE - 1	Theory	4	15	40	75	4-0-0
	Elective - 1		Practical	2		20		0-0-4
	Discipline Specific	DSE - 2	Theory	4	15	40	75	4-0-0
	Elective - 2	DSE - Z	Practical	2		20		0-0-4
		Total		24			300	
			rphology, Remote	4	15	40	75	4-0-0
	Core Course - 13	Sensii	ng and GIS (Th)		10		, 6	
			Practical	2		20		0-0-4
	Core Course - 14	Enginee	ring Geology (Th)	4	15	40	75	4-0-0
VI	Core Course - 14	Practical		2		20		0-0-4
V1	Discipline Specific	DSE - 3	Theory	4	15	40	75	4-0-0
	Elective - 3	DSE - 3	Practical	2		20		0-0-4
	Discipline Specific	DSE - 4	Theory	4	15	40	75	4-0-0
	Elective - 4	DSE - 4	Practical	2		20		0-0-4
	Total			24	•		300	
	TOTAL OF ALL SEMESTERS			142			1900	

COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM FOR **BA** GENERAL IN GEOGRAPHY

Semester-wise course structure

SEMESTER	COURSE OPTED	COURSE NAME	CREDIT		MARK	No. of hours L-T-P (Per	
SE			_	IA	ESE	TOTAL	week)
	Ability Enhancement: compulsory course - I	Environmental Studies	4		100	100	
	DISCIPLINE 1	Core Course (CC – 1A) Geotectonics and Geomorphology Practical	4	15	40	75	4-0-0
I	(Geography)	Scale and Cartography	2	1.5	20	7.5	0-0-4
	DISCIPLINE 2 (other subject)	Core Course(CC – 2A) As to be offered by other department	6	15	60	75	
	(English Language)	Core Language (L ₁ -1)	6	15	60	75	5-1-0
		Total	22			325	
	Ability Enhancement: compulsory course - 2	Communicative English/ MIL	2		50	50	
	DISCIPLINE 1	Core Course (CC – 1B) Climatology, Soil and Biogeography	4	15	40	75	4-0-0
II	(Geography)	Practical Surveying and Levelling	2		20		0-0-4
	DISCIPLINE 2 (other subject)	Core Course (CC – 2B) As to be offered by other department	6	15	60	75	
	(Hindi/ MIL)	Core Language (L ₂ -1)	6	15	60	75	5-1-0
		Total	20			275	
		Core Course (CC – 1C)	4	15	40	75	4-0-0
	DISCIPLINE 1	Human Geography Practical			20		0-0-4
	(Geography)	Map Projection and Map	2		20		0-0-4
		Interpretation					
	DISCIPLINE 2 (other	Core Course (CC – 2C)		15	60	75	
	subject)	As to be offered by other department	6				
III	(English Language)	Core Language (L ₁ -2)	6	15	60	75	5-1-0
	Skill Enhancement Course	SEC- 1 :Computer Basics and Computer Applications OR	2	10	40	50	
		Remote Sensing					
		Total	20			275	
	DISCIPLINE 1	Core Course (CC- 1D)	4	15	40	75	4-0-0
	(Geography)	Environmental Geography					
	, 0 1 .,	Practical (Field work)	2	1.7	20	7.5	0-0-4
	DISCIPLINE 2 (other	Core Course (CC – 2D)	6	15	60	75	
IV	subject)	As to be offered by other department		15	60	75	5-1-0
17	(Hindi/ MIL)	Core Language (L ₂ -2) SEC- 2: Regional Planning and	6	13	00	13	J-1-U
	Skill Enhancement	Development OR GIS based	2	10	40	50	
	Course	Project Report (Practical)					
		Total	20			275	

		DCE 14 Cooperator of India					
		DSE – 1A: Geography of India					
	DISCIPLINE 1	or	4		40		4-0-0
	(Geography)	Economic Geography	4	15		75	
		Practical (Field work)	2		20		0-0-4
	DISCIPLINE 2 (other	DSE - 2A: As to be offered by	_	15	60	75	
	subject)	other department	6				
	-	GE-1		15	60	75	
	Carraria Elastica	Any discipline other than Core					
V	Generic Elective	Disciplines including Core	6				
		Languages					
		SEC- 3: Field Techniques and	2	10	40	50	
	G1 111 F2 1	Survey based Project Report					
	Skill Enhancement	(Practical) OR					
	Course	Collection, Mapping and					
		Interpretation of Climate Data					
	Total					275	
		DSE- 1B : Disaster Management	20	15	40	75	4-0-0
	DISCIPLINE 1	Or	4	13	40	13	4-0-0
		-	4				
	(Geography)	Geography of Tourism					
		Practical (Field work)	2		20		0-0-4
	DISCIPLINE 2 (other	DSE – 2B: As to be offered by other	6	15	60	75	
	subject)	department	U				
		GE-2		15	60	75	
VI	Generic Elective	Any discipline other than core	6				
VI	Ocheric Elective	Disciplines including Core	0				
		Languages					
		SEC- 4 : Collection, Mapping					
	Skill Enhancement	and Interpretation of Pedological Data OR	2	10	40	50	
			2	10	40	30	
	Course	Rocks and Minerals and their					
		megascopic identification					
	Total					275	
	TOTAL (OF ALL SEMESTERS	122	_		1700	

COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM FOR B. Sc. GENERAL IN GEOGRAPHY

Semester-wise course structure

SEMESTER	COURSE OPTED	COURSE NAME	CREDIT	TA	MARKS IA ESE TOTAL		
N N	Ability Enhancement:	F ' 16' 1'	4	IA	100	101AL 100	week)
	compulsory course - I	Environmental Studies		1.7	40	7.5	4.0.0
	DISCIPLINE 1	Core Course (CC – 1A) Geotectonics and Geomorphology	4	15	40	75	4-0-0
	(Geography)	Practical: Scale and Cartography	2		20		0-0-4
I	DISCIPLINE 2	Core Course (CC – 2A) As to be offered by other department	4	15	40	75	4-0-0
	(Other Subject)	Practical	2		20		0-0-4
		Core Course (CC – 3A)		15	60	75	4-0-0
	DISCIPLINE 3	As to be offered by other department Practical	4				0.0.4
	(Other Subject)	As to be offered by other department	2				0-0-4
		Total	22			325	
	Ability Enhancement:		2		50	50	
	compulsory course - 2	Communicative English/ MIL	2		30	30	
		Core Course (CC – 1B)	4	15	40	75	4-0-0
	DISCIPLINE 1 (Geography)	Climatology, Soil and Biogeography					
		Practical: Surveying and Levelling	2		20		0-0-4
	DIGGIDI INTE A	Core Course (CC – 2B)		15	40	75	4-0-0
II	DISCIPLINE 2 (Other Subject)	As to be offered by other department Practical	4		20		0-0-4
	(c z sisjest)	As to be offered by other department	2				
	DISCIPLINE 3	Core Course (CC – 3B) As to be offered by other department	4	15	60	75	4-0-0
	(Other Subject)	Practical	_				0-0-4
	(amer adeject)	As to be offered by other department	2				
		Total	20			275	
	DISCIPLINE 1	Core Course (CC – 1C) Human Geography	4	15	40	75	4-0-0
	(Geography)	Practical: Map Projection and Map			20		0-0-4
	. 017/	Interpretation	2				
	DISCIPLINE 2	Core Course (CC – 2C) As to be offered by other department	4	15	40	75	4-0-0
	(Other Subject)	Practical	2		20		0-0-4
		As to be offered by other department	2				
III	DISCIPLINE 3	Core Course (CC – 3C) As to be offered by other department	4	15	60	75	4-0-0
	(Other Subject)	Practical	2				0-0-4
	<u> </u>	As to be offered by other department	2	10	40	50	0.0.1
	Skill Enhancement	SEC- 1 :Computer Basics and Computer Applications OR	2	10	40	50	0-0-4
	Course	Remote Sensing					
		Total	20			275	
	DISCIPLINE 1	Core Course (CC- 1D)		15	40	75	4-0-0
IV	(Geography)	Environmental Geography	4				

		Practical (Field work)	2		20		0-0-4
		Core Course (CC- 2D)	4	15	40	75	4-0-0
	DISCIPLINE 2	As to be offered by other department	-				
	(Other Subject)	Practical			20		0-0-4
	(Sinci Subject)	As to be offered by other department	2		20		001
		Core Course (CC- 3D)		15	60	75	4-0-0
	DISCIPLINE 3	As to be offered by other department	6	10		, 0	
	(Other Subject)	Practical		1 1			0-0-4
	(As to be offered by other department					
-		SEC- 2 :: Regional Planning and					0-0-4
	Skill Enhancement	Development OR GIS based	2	10	40	50	
	Course	Project Report (Practical)					
		Total	20			275	
		DSE – 1A : Geography of India or	20	15	40	75	4-0-0
	DISCIPLINE 1		4	13	10	7.5	100
	(Geography)	Economic Geography	2		20		0.0.4
		Practical (Field work) DSE- 2A: As to be offered by other	2	15	20 40	75	0-0-4 4-0-0
	DISCIPLINE 2	department	4	13	40	13	4-0-0
	(Other Subject)	Practical: As to be offered by other			20		0-0-4
		department	2		20		0-0-4
-	DISCIPLINE 3 (Other Subject)	DSE- 3A : As to be offered by other		15	60	75	4-0-0
\mathbf{v}		department	6	13	00	13	4-0-0
•		Practical: As to be offered by other		 			0-0-4
	(other subject)	department					0-0-4
		SEC- 3: Field Techniques and	2	10	40	50	0-0-4
	C1 '11 F-1	Survey based Project Report	_	10	10	20	00.
	Skill Enhancement	(Practical) OR Collection,					
	Course	Mapping and Interpretation of					
		Climate Data					
	Total					275	
				15	40	75	4-0-0
	DISCIPLINE 1	DSE- 1B : Disaster Management	4				
		or Geography of Tourism)					
	(Geography)	Practical (Field work)		1 1	20		0-0-4
		Tractical (Field Work)	2		20		001
-		DSE- 2B: As to be offered by other	4	15	40	75	4-0-0
	DISCIPLINE 2	department	4				
	(Other Subject)	Practical: As to be offered by other	2	1 1	20		0-0-4
		department	2				
VI		DSE- 3B: As to be offered by other	(15	60	75	4-0-0
	DISCIPLINE 3	department	6				
	(Other Subject)	Practical: As to be offered by other					0-0-4
		department					
		SEC- 4 : Collection, Mapping and					0-0-4
	Skill Enhancement	Interpretation of Pedological Data			,,	# 0	
	Course	OR	2	10	40	50	
	Course	Rocks and Minerals and their					
		megascopic identification					
\vdash		Total	20			275	
	TOTAL	OF ALL SEMESTERS	122			1700	

Structure of B.A. Honours in Political Science under Semester with CBCS

Semester	Course Title	Course Type	Credit	Full Marks
Sem-I	CC -1: WESTERN POLITICAL THOUGHT	Core Course	6	75
	CC- 2 : POLITICAL THEORY	Core Course	6	75
	GE - 1 (Any discipline other than Pol. Sc.)	Generic Elective		75
	ENVS	AECC-1	4	100
Sem-II	CC - 3 : INDIAN POLITICAL THOUGHT	Core Course	6	75
	CC - 4 : INDIAN GOVERNMENT AND POLITICS	Core Course	6	75
	GE - 2 (Any discipline other than Pol. Sc.)	Generic Elective	6	75
	Communicative English/MIL	AECC-2	2	50
Sem-III	CC -5 : COMPARATIVE GOVERNMENT AND POLITICS	Core Course	6	75
	CC - 6 : PUBLIC ADMINISTRATION- Basic Theories	Core Course	6	75
	CC -7: LOCAL GOVERNMENT IN INDIA	Core Course	6	75
	GE - 3 (Any discipline other than Pol. Sc.) Skill Enhancement Course	Generic Elective SEC-1	6 2	75 50
Sem-IV	CC - 8 : INTERNATIONAL RELATIONS	Core Course	6	75
	CC -9: SOCIOLOGY AND POLITICS	Core Course	6	75
	CC- 10 INTERNATIONAL ORGANIZATIONS	Core Course	6	75
	GE - 4 (Any discipline other than Pol. Sc.)	Generic Elective	6	75
	Skill Enhancement Course	SEC-2	2	50
Sem-V	CC-11 : SOCIAL MOVEMENTS IN INDIA	Core Course	6	75
	CC-12 : ELEMENTARY RESEARCH METHODS	Core Course	6	75
	IN POLITICAL SCIENCE			
	Discipline Specific Elective	DOE 1		7.5
	Discipline Specific Elective	DSE-1 DSE-2	6	75 75
Sem-VI	CC-13: INDIAN FOREIGN POLICY	Core Course	6	75
	CC-14 :CONTEMPORARY ISSUES IN INDIA	Core Course	6	75
	Discipline Specific Course	DSE-3	6	75
	Discipline Specific Course	DSE-4	6	75

CORE COURSE (CC) : 6 CREDITS EACH

CC-1: WESTERN POLITICAL THOUGHT

CC-2: POLITICAL THEORY

CC-3: INDIAN POLITICAL THOUGHT

CC-4: INDIAN GOVERNMENT AND POLITICS

CC -5: COMPARATIVE GOVERNMENT AND POLITICS

CC -6: PUBLIC ADMINISTRATION – BASIC THEORIES

CC-7: LOCAL GOVERNMENT IN INDIA

CC-8: INTERNATIONAL RELATIONS

CC-9: SOCIOLOGY AND POLITICS

CC-10: INTERNATIONAL ORGANIZATIONS

CC-11: SOCIAL MOVEMENTS IN INDIA

CC-12: ELEMENTARY RESEARCH METHODS IN POLITICAL SCIENCE

CC-13: INDIAN FOREIGN POLICY

CC-14: CONTEMPORARY ISSUES IN INDIA

DISCIPLINE SPECIFIC ELECTIVE (DSE)

DSE-1 : SELECT COMPARATIVE POLITICAL THOUGHT Or,
ADVANCED POLITICAL THEORY

DSE-2 : DEMOCRACY AND DECENTRALIZED GOVERNANCE Or,
UNDERSTANDING GOOD GOVERNANCE

DSE-3 : PUBLIC POLICY: CONCEPTS AND IMPLEMENTATION IN INDIA Or,
LOCAL GOVT. IN WEST BENGAL

DSE-4: UNDERSTANDING GLOBALIZATION Or,
POLITICAL ECONOMY OF INTERNATIONAL RELATIONS

GENERIC ELECTIVE (FOR THE STUDENTS OF OTHER DISCIPLINES)

GE-1:WESTERN POLITICAL THOUGHT

GE-2 :POLITICAL THEORY

GE-3: INDIAN POLITICAL THOUGHT

GE-4: INDIAN GOVERNMENT AND POLITICS

SKILL ENHANCEMENT COURSES(SEC)

SEC-1: LEGISLATIVE SUPPORT Or, PEACE AND CONFLICT RESOLUTION.

SEC-2 : PUBLIC OPINION AND SURVEY RESEARCH Or, DEMOCRATIC AWARENESS THROUGH LEGAL LITERACY.

Structure of B.A. General in Political Science under Semester with CBCS

Semester	Name of the Courses	Course Type	Credit	Full Marks
Sem-I	Discipline-1(Pol. Sc.)	Core Course(CC-1)	6	75
	Discipline-2(other than Pol. Sc.)	Core Course(CC-1)	6	75
	English Language	Core $Course(L_1-1)$	6	75
	ENVS	AECC - 1	4	100
Sem-II	Discipline-1(Pol. Sc.)	Core Course(CC-2)	6	75
	Discipline-2(other than Pol. Sc.)	Core Course(CC-2)	6	75
	Hindi/MIL	Core Course(L ₂ -1)	6	75
	Communicative English/MIL	AECC - 2	2	50
Sem-III	Discipline-1(Pol. Sc.)	Core Course(CC-3)	6	75
	Discipline-2(other than Pol. Sc.)	Core Course(CC-3)	6	75
	English Language	Core $Course(L_1-2)$	6	75
	Skill Enhancement Course	SEC -1	2	50
Sem-IV	Discipline-1(Pol Sc)	Core Course(CC-4)	6	75
	Discipline-2(other than Pol sc)	Core Course(CC-4)	6	75
	Hindi/MIL	Core $Course(L_2-2)$	6	75
	Skill Enhancement Course	SEC - 2	2	50
Sem-V	Discipline Specific Elective	DSE-1A	6	75
	Discipline Specific Elective	DSE-2A	6	75
	Generic Elective (other than core	GE - 1(interdisciplinary)	6	75
	Disciplines including Core Languages)			
	Skill Enhancement Course	SEC - 3	2	50
Sem-VI	Discipline Specific Elective	DSE-1B	6	75
	Discipline Specific Elective	DSE-2B	6	75
	Generic Elective (other than Core	GE - 2(interdisciplinary)	6	75
	Disciplines including Core Languages)			
	Skill Enhancement Course	SEC - 4	2	50

CORE COURSES (CC): 6 CREDITS EACH

CC- 1A: WESTERN POLITICAL THOUGHT

CC – 1B: POLITICAL THEORY

CC - 1C: INDIAN POLITICAL THOUGHT

CC – 1D: INDIAN GOVERNMENT AND POLITICS

DISCIPLINE SPECIFIC ELECTIVE (DSE)

DSE -1A: SELECT COMPARATIVE POLITICAL THEORIES Or,

DEMOCRACY AND DECENTRALIZED GOVERNANCE

DSE -1B : PUBLIC POLICY: CONCEPTS AND IMPLEMENTATION IN INDIA Or,
UNDERSTANDING GLOBALIZATION

GENERIC ELECTIVES(FOR DISCIPLINES OTHER THAN POL SC)(GE)

GE-1: INDIAN POLITICAL THOUGHT.

GE-2: INDIAN GOVERNMENT AND POLITICS.

SKILL ENHANCEMENT COURSES(SEC)

SEC - 1 : LEGISLATIVE PRACTICES AND PROCEDURES Or, ELECTORAL PRACTICES AND PROCEDURES

SEC - 2 : PUBLIC OPINION AND SURVEY RESEARCH Or, ENVIRONMENTAL AWARENESS

SEC - 3 : DEMOCRATIC AWARENESS THROUGH LEGAL LITERACY Or,
GENDER SENSITIZATION

SEC – 4: PEACE AND CONFLICT RESOLUTION Or, HUMAN RIGHTS EDUCATION

THREE-YEAR B.A. HONOURS IN PHILOSOPHY

(SIX-SEMESTER PATTERN)

(To be effective from 2017-2018)

There will be six semesters in the Three-Year B.A. (Honours) programme. It consists of 14Core Courses, 2 Ability Enhancement Courses, 2 Skill Enhancement Courses, 4 Discipline Specific Elective Courses and 4 Interdisciplinary Generic Elective Courses. Each Course, except Ability Enhancement Course and Skill Enhancement Course, is of 75 marks, of which 60 marks is for Semester-End Examination (written) and 15 marks for Internal Assessment.

Ability Enhancement Course will be as per General Instruction; while Skill Enhancement Course is of 50 marks, of which 40 marks is for Semester-End Examination (written) and 10 marks for Internal Assessment.

B.A.(Honours) in Philosophy: 1st Semester

In this semester, for the Philosophy Honours Students the Core Courses and the Ability Enhancement Course (centrally framed) are compulsory; while they are to opt for one Interdisciplinary Generic Elective Course from any subject other than Philosophy. Students of any other Honours subject may opt for the Interdisciplinary Generic Elective Course of Philosophy.

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
CC- 1	Outlines of Indian Philosophy—I	Core Course	5 - 1 - 0	6	75
CC- 2	Outlines of Western Philosophy—I	Core Course	5 - 1 - 0	6	75
GE- 1	Indian Philosophy	Interdisciplinary (Generic Elective)	5 - 1 - 0	6	75
AECC- 1	ENVS	Ability Enhancement Course	4-0-0	4	100

B.A.(Honours) in Philosophy: 2nd Semester

In this semester, for the Philosophy Honours Students the Core Courses and the Ability Enhancement Course (centrally framed) are compulsory; while they are to opt for one Interdisciplinary Generic Elective Course from any subject other than Philosophy. Students of any other Honours subject may opt for the Interdisciplinary Generic Elective Course of Philosophy.

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
CC-3	Outlines of Indian Philosophy—II	Core Course	5 - 1 - 0	6	75
CC- 4	Outlines of Western Philosophy—II	Core Course	5 - 1 - 0	6	75
GE- 2	Western Philosophy	Interdisciplinary (Generic Elective)	5 - 1 - 0	6	75
AECC- 2	Communicative Eng./ MIL	Ability Enhancement Course	2 -0 -0	2	50

B.A.(Honours) in Philosophy: 3rd Semester

In this semester, for the Philosophy Honours Students the Core Courses and the Skill Enhancement Course are compulsory; while they are to opt for one Interdisciplinary Generic Elective Course from any subject other than Philosophy. Students of any other Honours subject may opt for the Interdisciplinary Generic Elective Course of Philosophy.

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
CC- 5	Indian Ethics	Core Course	5 - 1 - 0	6	75
CC- 6	Western Ethics	Core Course	5 - 1 - 0	6	75
CC- 7	Indian Logic	Core Course	5 - 1 - 0	6	75
GE- 3	Logic	Interdisciplinary (Generic Elective)	5 - 1 - 0	6	75
SEC-1	Philosophy in Practice	Skill Enhancement Course	2 - 0 - 0	2	50

B.A.(Honours) in Philosophy: 4th Semester

In this semester, for the Philosophy Honours Students the Core Courses and the Skill Enhancement Course are compulsory; while they are to op for one Interdisciplinary Generic Elective Course from any subject other than Philosophy. Students of any other Honours subject may opt for the Interdisciplinary Generic Elective Course of Philosophy.

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
CC- 8	Western Logic-I	Core Course	5 - 1 - 0	6	75
CC- 9	Psychology	Core Course	5 - 1 - 0	6	75
CC- 10	Philosophy of Religion	Core Course	5 - 1 - 0	6	75
GE- 4	Contemporary Indian Philosophy	Interdisciplinary (Generic Elective)	5 - 1 - 0	6	75
SEC- 2	Philosophy of Human Rights	Skill Enhancement Course	2 - 0 - 0	2	50

B.A.(Honours) in Philosophy: 5th Semester

In this semester, for the Philosophy Honours Students, besides the two compulsory Core Courses there are two Discipline Specific Elective Courses containing Special Texts.

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
CC-11	Socio-Political Philosophy	Core Course	5 - 1 - 0	6	75
CC- 12	Western Logic-I I	Core Course	5 - 1 - 0	6	75
DSE- 1	Special Text: KaṭhopaniṢad	Discipline Specific Elective	5 - 1 - 0	6	75
DSE- 2	Special Text: B. Russell: The Problems of Philosophy	Discipline Specific Elective	5 - 1 - 0	6	75

$\textbf{B.A.} (\textbf{Honours}) \textbf{ in Philosophy: } \textbf{6}^{\textbf{th}} \textbf{ Semester}$

In this semester, for the Philosophy Honours Students, besides the two compulsory Core Courses there are two Discipline Specific Elective Courses containing Special Texts.

-	-	3 1			
Course Code	Course Title	Course Type	L - T - P	Credit	Marks
CC- 13	Philosophy in the Twentieth Century: Indian	Core Course	5 - 1 - 0	6	75
CC- 14	Philosophy in the Twentieth Century: Western	Core Course	5 - 1 - 0	6	75
DSE- 3	Special Text: Rabindranath Tagore: Sadhana	Discipline Specific Elective	5 - 1 - 0	6	75
DSE- 4	Special Text: Hume: An Enquiry Concerning Human Understanding	Discipline Specific Elective	5 - 1 - 0	6	75

THREE - YEAR B.A. PROGRAM IN PHILOSOPHY

(SIX-SEMESTER PATTERN)

(To be effective from the academic session 2017-2019)

[Structure] There will be six semesters in the Three-Year B.A. programme. Each Course, except Skill Enhancement Courses, is of 75 marks; of which 60 marks is for Semester-EndExamination (written) and 15 marks for Internal Assessment.

SkillEnhancement Course is of **50** marks; of which **40** marks is for Semester-End Examination (written) and **10** marks for Internal Assessment.

B.A. Programme in Philosophy: 1st Semester

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
CC-1A	Indian Philosophy	Core Course	5 - 1 - 0	6	75

B.A. Programme in Philosophy: 2nd Semester

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
CC-1B	Western Philosophy	Core Course	5 - 1 - 0	6	75

B.A. Programme in Philosophy: 3rd Semester

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
CC-1C	Logic	Core Course	5 - 1 - 0	6	75
SEC-1	Philosophy in Practice	Skill Enhancement Course	2 - 0 - 0	2	50

B.A. Programme in Philosophy: 4th Semester

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
CC-1D	Contemporary Indian Philosophy	Core Course	5 - 1 - 0	6	75
SEC- 2	Philosophy of Human Rights	Skill Enhancement Course	2 - 0 - 0	2	50

B.A. Programme in Philosophy: 5th Semester

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
DSE- 1A	Philosophy of Religion	Discipline Specific Elective	5-1-0	6	75
GE- 1	Indian Philosophy	Interdisciplinary (Generic Elective)	5-1-0	6	75
SEC- 3	Philosophical Analysis	Skill Enhancement Course	2-0-0	2	50

$\textbf{B.A. Programme in Philosophy: } \textbf{6}^{th} \textbf{Semester}$

Course Code	Course Title	Course Type	L - T - P	Credit	Marks
DSE- 1B	Tarkasaṁgraha (saptapadārtha)	Discipline Specific Elective	5 - 1 - 0	6	75
GE- 2	Western Philosophy	Interdisciplinary (Generic Elective)	5 - 1 - 0	6	75
SEC- 4	Philosophy of Human Rights	Skill Enhancement Course	2 - 0 - 0	2	50

Outlines of Course Structures

The main components of this syllabus are as follows:

- 1. Core Course
- 2. Elective Course
- 3. Ability Enhancement Course

1. Core Course (CC)

A course, that should compulsorily be studied by a candidate as a core requirement, is termed as a core course.

2. Elective Course

- **2.1 Discipline** Specific Elective (DSE) Course: A course, which may be offered by the main discipline/subject of study, is referred to as Discipline Specific Elective.
- **2.2 Generic Elective (GE) Course:** An elective course, chosen generally from an unrelated discipline/subject of study with intention to seek an exposure, is called a Generic Elective Course.

3. Ability Enhancement Course (AEC)

The Ability Enhancement Course may be of two kinds:

- 3.1 Ability Enhancement Compulsory Course (AECC)
- 3.2 Skill Enhancement Course (SEC)

Details of Courses of B.A./B.Sc. (Honours) under CBCS

	Course	Cre	edit	Marks
1.	Core Course	Theory + Practical	Theory +Tutorial	14,75-1050
	(14 papers)	$14 \times (4+2) = 84$	$14 \times (5+1) = 84$	14×75= 1050
2.	Elective Course (8 Papers)			
	A. DSE	4×(4+2)=24	4×(5+1)=24	4×75= 300
	(4 Papers)			
	B. GE	$4 \times (4+2) = 24$	$4 \times (5+1) = 24$	4×75= 300
	(4 Papers)			
3.	Ability Enhancement Course			
	A. AECC (2 Papers)			
	AECC1 (ENVS)	4×1=4	4×1=4	100
	AECC2 (English/MIL)	2×1=2	2×1=2	50
	B. SEC (2 Papers)	2×2=4	2×2=4	2×50= 100
	Total Credit :	142	142	Total Marks = 1900

Semester wise Course Structures

Sem ester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./w eek	Marks	Credit		
	CC	BMH1CC01	Calculus, Geometry & Differential Equations	5:1:0	6	75	6		
I		BMH1CC02	Algebra	5:1:0	6	75	6		
	AECC		Environmental Studies	4:0:0	4	100	4		
	GE		To be offered by other discipline.				6		
	CC	BMH2CC03	Real Analysis	5:1:0	6	75	6		
II		BMH2CC04	Differential Equations and Vector Calculus	5:1:0	6	75	6		
	AECC		English/Modern Indian Language	2:0:0	2	50	2		
	GE		To be offered by other discipline.				6		
	CC	ВМН3СС05	Theory of Real Functions & Introduction to Metric Spaces	5:1:0	6	75	6		
		BMH3CC06	Group Theory I	5:1:0	6	75	6		
		ВМН3СС07	Numerical Methods & Numerical Methods Lab	4:0:2	8	75 (50+25)	6		
III		Choose any one from the following courses for Skill Enhancement Courses (SECs).							
111		BMH3SEC11	Logic and Sets	2:0:0	2	50	2		
	SEC	BMH3SEC12	Computer Graphics	2:0:0	2	50	2		
		BMH3SEC13	Object Oriented Programming in C++	2:0:0	2	50	2		
	GE		To be offered by other discipline.				6		
		BMH4CC08	Riemann Integration and Series of Functions	5:1:0	6	75	6		
	CC	BMH4CC09	Multivariate Calculus	5:1:0	6	75	6		
		BMH4CC10	Ring Theory and Linear Algebra I	5:1:0	6	75	6		
IV		Choose any	one from the following courses for Sl	kill Enhanc	ement Co	ourses (SE	ECs).		
_ '		BMH4SEC21	Graph Theory	2:0:0	2	50	2		
	SEC	BMH3SEC22	Operating System (Linux)	2:0:0	2	50	2		
		BMH3SEC23	MATLAB Programming	2:0:0	2	50	2		
	GE		To be offered by other discipline.				6		

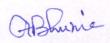
Sem ester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs.	Marks	Credit				
	CC	BMH5CC11	Partial Differential Equations and Applications	5:1:0	6	75	6				
		BMH5CC12	Mechanics I	5:1:0	6	75	6				
	Choose any one from the following courses for Discipline Specific Electives.										
		BMH5DSE11	Linear Programming	5:1:0	6	75	6				
V	DSE	BMH5DSE12	Number Theory	5:1:0	6	75	6				
		BMH5DSE13	Point Set Topology	5:1:0	6	75	6				
		Choose any o	one from the following courses for Disc	cipline Sp	ecific Electi	ives.					
		BMH5DSE21	Probability & Statistics	5:1:0	6	75	6				
	DSE	BMH5DSE22	Portfolio Optimization	5:1:0	6	75	6				
		BMH5DSE23	Boolean Algebra and Automata Theory	5:1:0	6	75	6				
		BMH5CC13	Metric Spaces and Complex Analysis	5:1:0	6	75	6				
	CC	BMH5CC14	Ring Theory and Linear Algebra II	5:1:0	6	75	6				
	Choose any one from the following courses for Discipline Specific Electives.										
		BMH6DSE31	Mathematical Modeling	5:1:0	6	75	6				
	DSE	BMH6DSE32	Industrial Mathematics	5:1:0	6	75	6				
X7X		BMH6DSE33	Group Theory II	5:1:0	6	75	6				
VI		Choose any o	one from the following courses for Disc	cipline Sp	ecific Electi	ives.					
		BMH6DSE41	Bio Mathematics	5:1:0	6	75	6				
	DSE	BMH6DSE42	Differential Geometry	5:1:0	6	75	6				
		BMH6DSE43	Mechanics II	5:1:0	6	75	6				
	Opt	ional Dissertation	or project work in place of one Discip	oline Speci	fic Elective (DSE) Par	er.				
	PW	BMH6PW01	Project Work	0:0:6	6	75	6				

Details of Courses of B.A. (General) under CBCS

	Course	Cr	edit	Marks
1.	Core Course (8 papers) 4 core papers each in 2 disciplines of choice	8 papers) Theory + Practical 8 core papers each in 2 $8\times(4+2)=48$ 8		8×75=600
2.	Language course (4 Papers)		Theory +Tutorial 4×(5+1)=24	4×75=300
3.	Elective Course A. DSE (4 Papers)	4×(4+2)=24	4×(5+1)=24	4×75=300
	B. GE (2 Papers)	2×(4+2)=12	2×(5+1)=12	2×75=150
4.	Ability Enhancement Course		in the same and the	
	A. AECC (2 Papers) AECC1 (ENVS) AECC2 (English/MIL)	4×1=4 2×1=2	4×1=4 2×1=2	100 50
	B. SEC (4 Papers)	4×2=8	4×2=8	4×50=200
	Total Credit:	122	122	1700

Details of Courses of B.Sc. (General) under CBCS

	Course	Cre	edit	Marks	
1.	Core Course (12 papers) 4 core papers each in 3 disciplines of choice	(12 papers) Theory + Practical 4 core papers each in 3 $12\times(4+2)=72$		12×75=900	
2.	Elective Course DSE (6 Papers)	6×(4+2)=36	6×(5+1)=36	6×75=450	
3.	Ability Enhancement Course		e de la companya de l		
	A. AECC (2 Papers) AECC1 (ENVS) AECC2 (English/MIL)	4×1=4 2×1=2	4×1=4 2×1=2	100 50	
	B. SEC (4 Papers)	4×2=8	4×2=8	4×50=200	
	Total Credit :	122	122	1700	



B.A. Mathematics General Course Structure

ster	take the	Language_	Elective Course		Ability Enhancement Course		
Semester	Core Course (CC)(8)	Course (4)	DSE(4)	GE(2)	AECC (2)	SEC (4)	
I	CC1A (Mathematics) CC2A(Other discipline)	L ₁ -1			AECC1	3012	
Ш	CC1B (Mathematics) CC2B(Other discipline)	L ₂ -1			AECC2		
Ш	CC1C (Mathematics) CC2C(Other discipline)	L ₁ -2				SEC1 (Mathematics) Or SEC1 (Other discipline)	
IV	CC1D (Mathematics) CC2D(Other discipline)	L ₂ -2		. 15		SEC2 (Mathematics) Or SEC2 (Other discipline)	
V			DSE1A (Mathematics) DSE2A(Other discipline)	GE-1 (Other discipline)		SEC3 (Mathematics) Or SEC3 (Other discipline)	
VI			DSE1B (Mathematics) DSE2B(Other discipline)	GE-2 (Other discipline)		SEC4 (Mathematics) Or SEC4 (Other discipline)	

B.Sc. Mathematics General Course Structure

Semester	Core Course	Discipline Specific Elective	Ability	Enhancement Course
Semo	(CC)(12)	(DSE)(6)	AECC (2)	SEC (4)
	CC1A (Mathematics)	T TO THE PERSON		
I	CC2A(Other discipline)	7	AECC1	
	CC3A(Other discipline)			
	CC1B (Mathematics)			
II	CC2B(Other discipline)		AECC2	Telegraph of the second
	CC3B(Other discipline)			
	CC1C (Mathematics)			SEC1 (Mathematics)
III	CC2C(Other discipline)			Or
	CC3C(Other discipline)			SEC1 (Other discipline)
	CC1D (Mathematics)			SEC2 (Mathematics)
IV	CC2D(Other discipline)			Or
	CC3D(Other discipline)			SEC2 (Other discipline)
		DSE1A(Mathematics)	123	SEC3 (Mathematics)
V		DSE2A(Other discipline)	9(6)(3)	Or
		DSE3A(Other discipline)	yelection.	SEC3 (Other discipline)
		DSE1B(Mathematics)		SEC4 (Mathematics)
VI	The second of the	DSE2B(Other discipline)		Or
	18 1 18 1 18 1 18 1 18 1 18 1 18 1 18	DSE3B(Other discipline)		SEC4 (Other discipline)
			The second secon	A STATE OF THE STA



Core Courses of Mathematics:

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
I	CC	BMG1CC1A	Differential Calculus	5:1:0	6	75	6
П	CC	BMG2CC1B	Differential Equations	5:1:0	6	75	6
III	CC	BMG3CC1C	Real Analysis	5:1:0	6	75	6
IV	CC	BMG4CC1D	Algebra	5:1:0	6	75	6

Discipline Specific Electives (DSE)

Choices for BMG5DSE1A (Choose any one)

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
	DSE	BMG5DSE1A1	Matrices	5:1:0	6	75	6
V	DSE	BMG5DSE1A2	Mechanics	5:1:0	6	75	6
	DSE	BMG5DSE1A3	Linear Algebra	5:1:0	6	75	6

Choices for DSE1B (Choose any one)

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
VI	DSE	BMG6DSE1B1	Numerical Methods	5:1:0	6	75	6
	DSE	BMG6DSE1B2	Complex Analysis	5:1:0	6	75	6
	DSE	BMG6DSE1B3	Linear Programming	5:1:0	6	75	6

Skill Enhancement Courses (SEC)

Choices for SEC 1 (Choose any one)

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
	SEC	BMG3SEC11	Logic and Sets	2:0:0	2	50	2
III	SEC	BMG3SEC12	Analytical Geometry	2:0:0	2	50	2
	SEC	BMG3SEC13	Integral Calculus	2:0:0	2	50	2

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Choices for SEC 2 (Choose any one)

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
	SEC	BMG4SEC21	Vector Calculus	2:0:0	2	50	2
IV	SEC	BMG4SEC22	Theory of Equations	2:0:0	2	50	2
	SEC	BMG4SEC23	Number Theory	2:0:0	2	50	2

Choices for SEC 3 (Choose any one)

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
V	SEC	BMG5SEC31	Probability and Statistics	2:0:0	2	50	2
	SEC	BMG5SEC32	Mathematical Finance	2:0:0	2	50	2
	SEC	BMG5SEC33	Mathematical Modeling	2:0:0	2	50	2

Choices for SEC 4 (Choose any one)

Semester	Course Type	Course Code	Name of the Course	Credit Pattern (L:T:P)	Total class hrs./week	Marks	Credit
VI	SEC	BMG6SEC41	Boolean Algebra	2:0:0	2	50	2
	SEC	BMG6SEC42	Transportation and Game Theory	2:0:0	2	50	2
	SEC	BMG6SEC43	Graph Theory	2:0:0	2	50	2



Details of Courses

Core Courses –Botany

- 1A. Biodiversity (Microbes, Algae, Fungi and Archegoniate)
- 1B. Plant Ecology and Taxonomy
- 1C. Plant Anatomy and Embryology
- 1D. Plant Physiology and Metabolism

Discipline Specific Electives-Botany (Any two)

DSE 1A (any one)

- 1. Economic Botany and Biotechnology
 - or
- 2. Analytical Techniques in Plant Sciences

or

3. Bioinformatics

DSE 1B (any one)

1.Cell Biology, Genetics and Molecular Biology

or

2.Research Methodology

or

3.Dissertation

Ability Enhancement Compulsory Courses

- 1. Environmental Studies (ENVS)
- 2. Communicative English /MIL

Skill Enhancement Courses (SEC)-Botany

SEC –1 (any One)

1. Biofertilizers

or

2. Herbal Technology

SEC -2 (any one)

1. Medicinal Botany

Or

2. Floriculture

SEC –3 (any one)

1. Nursery and Gardening

or

2. Plant Diversity and Human Welfare

SEC -4 (any one)

1.Ethnobotany

or

2. Mushroom Cultivation Technology

Ωt

3.Intellectual Property Right

Scheme for choice based credit system in B. Sc. with Botany

	DISCIPLINE CORE COURSE (6)	Ability Enhancement Compulsory	Skill Enhancement Course	Discipline Specific Elective DSE (6)
		Course (AECC) (4/2)	(SEC) (2)	
SEM-I	Discipline- 1 (BOT) CC- 1A:Biodiversity (Microbes, Algae, Fungi and Archegoniate) Discipline- 2 (Other) Discipline- 3 (Other)	ENVS		
SEM-II	Discipline- 1 (BOT) CC- 1B:Plant Ecology and Taxonomy Discipline- 2 (Other) Discipline- 3 (Other)	Communicative English /MIL		
SEM-III	Discipline- 1 (BOT) CC- 1C:Plant Anatomy and Embryology Discipline- 2 (Other) Discipline- 3 (Other)		SEC – 1	
SEM-IV	Discipline- 1 (BOT) CC- 1D:Plant Physiology and Metabolism Discipline- 2 (Other) Discipline- 3 (Other)		SEC - 2	
SEM-V			SEC – 3	DSE – 1A(BOT) :Economic Botany and Biotechnology/ Analytical Techniques in Plant Sciences/ Bioinformatics DSE – 2A(Other) DSE – 3A(Other)
SEM-VI			SEC – 4	DSE – 1B (BOT) :Cell and Molecular Biology/ Research Methodology/ Dissertation DSE – 2B (Other) DSE – 3B (Other)

CREDIT DISTRIBUTION

SEMESTER	COURSE OPTED	COURSE NAME	CREDIT
	AECC – 1	ENVS	4
	Core Course -1A (BOTANY) – TH	Biodiversity (Microbes, Algae,	4
		Fungi and Archegoniate)	4
SEM – I	Core Course -1A (BOTANY) – PR	Biodiversity (Microbes, Algae,	2
Total Credit -		Fungi and Archegoniate)	2
22	Core Course -2A (OTHER) – TH		4
	Core Course -2A (OTHER) – PR		2
	Core Course -3A (OTHER) – TH		4
	Core Course -3A (OTHER) – PR		2
	AECC –2	Communicative English /MIL	2
	Core Course -1B (BOTANY) – TH	Plant Ecology and Taxonomy	4
SEM – II	Core Course -1B (BOTANY) – PR	Plant Ecology and Taxonomy	2
Total Credit -	Core Course -2B (OTHER) – TH		4
20	Core Course -2B (OTHER) – PR		2
	Core Course -3B (OTHER) – TH		4
	Core Course -3B (OTHER) – PR		2
	Core Course -1C (BOTANY) – TH	Plant Anatomy and Embryology	4
	Core Course -1C (BOTANY) – PR	Plant Anatomy and Embryology	2
SEM – III	Core Course -2C (OTHER) – TH		4
Total Credit -	Core Course -2C (OTHER) – PR		2
20	Core Course -3C (OTHER) – TH		4
	Core Course -3C (OTHER) – PR		2
	Skill Enhancement Course – 1	SEC – 1	2
	Core Course -1D (BOTANY) – TH	Plant Anatomy and Embryology	4
	Core Course -1D (BOTANY) – PR	Plant Anatomy and Embryology	2
SEM – IV	Core Course -2D (OTHER) – TH		4
Total Credit -	Core Course -2D (OTHER) – PR		2
20	Core Course -3D (OTHER) – TH		4
	Core Course -3D (OTHER) – PR		2
	Skill Enhancement Course – 2	SEC – 2	2
	Discipline Specific Elective	DSE - 1A(Botany) Theory	4
	Discipline Specific Elective	DSE - 1A(Botany) Practical	2
SEM – V	Discipline Specific Elective	DSE - 2A(Other) Theory	4
Total Credit -	Discipline Specific Elective	DSE - 2A(Other) Practical	2
20	Discipline Specific Elective	DSE - 3A (Other) Theory	4
	Discipline Specific Elective	DSE - 3A (Other) Practical	2
	Skill Enhancement Course – 3	SEC – 3	2
	Discipline Specific Elective	DSE - 1B (Botany) Theory	4
	Discipline Specific Elective	DSE - 1B (Botany) Practical	2
SEM – VI	Discipline Specific Elective	DSE - 2B (Other) Theory	4
Total Credit -	Discipline Specific Elective	DSE - 2B (Other) Practical	2
20	Discipline Specific Elective	DSE - 3B (Other) Theory	4
	Discipline Specific Elective	DSE -3B (Other) Practical	2
	Skill Enhancement Course – 4	SEC – 4	2
TOTAL			122

Type of Courses

	Number of Courses		es	
Course type	Description	B. Sc. (Honours)	B.Sc. (Regular)	Credit
CC	Core Course	14	12 (4 papers each from 3 disciplines of choice)	6
DSE	Discipline Specific Elective	4	6 (2 papers each from 3 discipline of choice including interdisciplinary papers)	6
GE	Generic Elective	4	-	6
AECC (ENVS & ENGLISH/MIL)	Ability Enhancement Compulsory Course	(1+1)	(1+1)	(4+2)
SEC	Skill Enhancement Course	2	4	2
TOTAL CREDIT		142	122	

B.Sc. (General) Course In CHEMISTRY

Let 1, 2, 3 are three different disciplines of study

Consider Chemistry as Discipline 1

1st Semester

Course Code	Course Title	Course Type	Credit per course	Marks
Discipline 1 (Chemistry)	Core Course CC-1A from Chemistry: (Generic Elective T1 & Generic Elective P1) Atomic structure, chemical periodicity, acids and bases, redox reactions, general organic chemistry of aliphatic hydrocarbons (Theo+Prac)	Core Course (CC) – I	4+2	75
Discipline 2 (other subject)	As to be offered by the other department(s)	Core Course (CC) – I	6	75
Discipline 3 (other subject)	As to be offered by the other department(s)	Core Course (CC) – I	6	75
AECC-1	ENVS	Ability Enhancement Compulsory Course – I	4	100
	TOTAL		22	325

2nd Semester

2 Semester		1		
Course Code	Course Title	Course Type	Credit per course	Marks
Discipline 1 (Chemistry)	Core Course CC-1B from Chemistry: (Generic Elective T2 & Generic Elective P2) States of matter & chemical kinetics, chemical bonding, molecular structure, P-block elements (Theo+Prac)	Core Course (CC) – II	4+2	75
Discipline 2 (other subject)	As to be offered by the other department(s)	Core Course (CC) – II	6	75
Discipline 3 (other subject)	As to be offered by the other department(s)	Core Course (CC) - II	6	75
AECC-2	Communicative Eng./MIL	Ability Enhancement Compulsory Course – II	2	50
TOTAL				275

3rd Semester

Course Code	Course Title	Course Type	Credit per course	Marks
Discipline 1 (Chemistry)	Core Course CC-1C from Chemistry: (Generic Elective T3 & Generic Elective P3) Chemical energetic, equilibria, organic chemistry (Theo+Prac)	Core Course (CC) – III	4+2	75
Discipline 2 (other subject)	As to be offered by the other department(s)	Core Course (CC) – III	6	75
Discipline 3 (other subject)	As to be offered by the other department(s)	Core Course (CC) – III	6	75
SEC-1	Analytical clinical biochemistry	Skill Enhancement Course	2	50
TOTAL				275

4th Semester

Course Code	Course Title	Course Type	Credit per course	Marks
Discipline 1 (Chemistry)	Core Course CC-1D from Chemistry: (Generic Elective T4 & Generic Elective P4) Solution phase equilibria, conductance, electrochemistry, analytical & environmental chemistry (Theo+Prac)	Core Course (CC) – IV	4+2	75
Discipline 2 (other subject)	As to be offered by the other department(s)	Core Course (CC) – IV	6	75
Discipline 3 (other subject)	As to be offered by the other department(s)	Core Course (CC) – IV	6	75
SEC-2	Pharmaceutical chemistry	Skill Enhancement Course	2	50
TOTAL				275

5th Semester

Course Code	Course Title	Course Type	Credit per course	Marks
SEC-3	Basics & Application of Computer in Chemistry	Skill Enhancement Course	2	50
Discipline 1 (Chemistry)	DSE-1A: Generic Elective T5 & Generic Elective P5 Transition metal & co-ordination chemistry, analytical and industrial chemistry (Theo+Prac)	Discipline Specific Elective	4+2	75
Discipline 2 (other subject)	DSE-2A: As to be offered by the other department(s)	Discipline Specific Elective	6	75
Discipline 3 (other subject)	DSE-3A: As to be offered by the other department(s)	Discipline Specific Elective	6	75
TOTAL				275

6th Semester

Course Code	Course Title	Course Type	Credit per course	Marks
SEC-4	Polymer Chemistry	Skill Enhancement Course	2	50
Discipline 1 (Chemistry)	DSE-1B: Generic Elective T5 & Generic Elective P5 Functional group organic chemistry and industrial chemistry (Theo+Prac)	Discipline Specific Elective	4+2	75
Discipline 2 (other subject)	DSE-2B: As to be offered by the other department(s)	Discipline Specific Elective	6	75
Discipline 3 (other subject)	DSE-3B: As to be offered by the other department(s)	Discipline Specific Elective	6	75
TOTAL				275

Details of Courses under Undergraduate Program (B.Sc.)

Course	*Credits		
	Theory+Practical	Theory+Tutorials	
I. Core Course (12 Papers)	12X4= 48	12X5=60	
04 Courses from each of the 03 discip	lines of choice		
Core Course Practical / Tutorial* (12 Practical/ Tutorials)	12X2=24	12X1=12	
04 Courses from each of the 03Discipl	ines of choice		
II. Elective Course (6 Papers) Two papers from each discipline of ch	6x4=24 noice including paper of in	6X5=30 terdisciplinary nature.	
Elective Course Practical/Tutorials (6 Practical / Tutorials) Two Papers from each discipline of ch	6X2=12 noice including paper of in	6X1=6 terdisciplinary nature	
III. Ability EnhancementCourses			
1. Ability Enhancement Compulsor	y Course (2 Papers)		
AECC- 1 : Environmental Studies	4X1=4	4X1=4	
AECC- 2: Communicative English/ N	MIL $2X1=2$	2X1=2	
2. Skill Enhancement Course (Skill)	Based) 4X2=8	4X2=8	
(4 Papers of 2 credits each)			
	Totalcredit=122	Total credit=122	

Proposed scheme for choice based credit system in B. Sc. with Physics

	CORE COURSE	Ability Enhancement	Skill Enhancement	Discipline Specific Elective
		CompulsoryCourse (AECC)	Course (SEC)	(DSE)
SEM.		AECC 1.		
	CC- 1A: Mechanics	AECC- 1: Environmental		
I	CC- 2A	Studies		
	CC-3A			
	CC-1B: Electricity and Magnetism	AECC- 2:		
		Communicative		
II	CC- 2B	English/ MIL		
	CC-3B			
	CC-1C: Thermal			
	Physics and Statistical		SEC-1	
III	Mechanics			
	CC- 2C			
	CC- 3C			
13.7	CC-1D: Waves and		CEC 2	
IV	Optics Optics		SEC -2	
	CC- 2D			
	CC- 3D		GEG 2	DOE 1 A
.,			SEC -3	DSE-1 A
V				DSE-2 A
			~~~ .	DSE-3 A
			SEC -4	DSE-1 B
VI				DSE-2 B
				DSE-3 B

SEMESTER	COURSE OPTED	COURSE NAME	Credits
I	Ability Enhancement Compulsory		
	Course (AECC -1)	<b>Environmental Studies</b>	4
	Core course-1A ( Theory)	Mechanics	4
	Core Course-1A: Practical/Tutorial	Mechanics Lab	2
	Core course-2A (Other discipline)		6
	Core Course-3A (Other discipline)		6
II	Ability Enhancement Compulsory Course (AECC- 2)	Communicative English/ MIL	2
	Core course-1B ( Theory )	Electricity and Magnetism	4
	Core Course-1B Practical/Tutorial Core course-2B (Other discipline)	Electricity and Magnetism Lab	2 6
	Core Course-3B (Other discipline)		6
III	Core course-1C ( Theory )	Thermal Physics and Statistical Mechanics	4
	Core Course-1C Practical/Tutorial	Thermal Physics and Statistical Mechanics Lab	2
	Core course-2C (Other discipline)		6
	Core Course-3C (Other discipline)		6
	Skill Enhancement Course -1	Renewable Energy and Energy Harvesting	2
	Core course-1D ( Theory )	Waves and Optics	4
IV	Core Course-1D Practical/Tutorial	Waves and Optics Lab	2
	Core course-2D (Other discipline)		6
	Core course-3D (Other discipline)		6
	Skill Enhancement Course -2	Weather Forecasting	2
		Elements of Modern Physics OR	
	Discipline Specific Elective -1A	Nuclear and Particle Physics	6
V	Discipline Specific Elective -2A	DSE-2A	6
	Discipline Specific Elective -3A Skill Enhancement Course -3	DSE-3A Computational Physics Skills	6 2
		Quantum Mechanics OR	
	Discipline Specific Elective -1B	Digital, Analog and Instrumentation	6
VI	Discipline Specific Elective -2B	DSE-2B	6
	Discipline SpecificElective – 3B	DSE-3B	6
	Skill Enhancement Course - 4	Electrical Circuits and Network Skills	2
Total Credit			122

# **Physics**

#### 1 credit = 1 hour/week for theory; 2 hours/week for practical

#### Core papers Physics (Credit: 06 each):

CC-1A Mechanics	Semester- I
CC-1B Electricity and Magnetism	Semester- II
CC- 1C: Thermal Physics and Statistical Mechanics	Semester- III
CC- 1D: Waves and Optics	Semester- IV

# **Discipline Specific Elective papers (Credit: 06 each) (DSE 1A, DSE 1B)**: (One each from Semesters – V and VI)

Demesters	v una vi)	
DCE 1.	Elements of Modern Physics OR	Compaton V
DSE- 1:	011	Semester- V
	Nuclear and Particle Physics	
	Quantum Mechanics	
DSE- 2:	OR	Semester- VI
	Digital, Analog and Instrumentation	

#### Skill Enhancement Course (Credit: 02 each)- SEC 1 to SEC 4

SEC-1.	Renewable Energy and Energy harvesting	Semester- III
SEC-2.	Weather Forecasting	Semester- IV
SEC- 3.	Computational Physics Skills	Semester- V
SEC- 4.	Electrical circuits and Network Skills	Semester- VI

#### For Papers having practical, distribution of 75 marks be as follows:

i) <u>Class Attendance cum Internal Assessment</u>: 20% of 75 marks = 15 marks of which 5 marks be reserved for theoretical class attendance in the following manner:

Attendance 50% & above but below 60% - 2 marks Attendance 60% & above but below 75% - 3 marks

Attendance 75% & above but below 90% - 4 marks

Attendance 90% & above - 5 marks

and 10 marks be reserved for class test/assignment/seminar (theoretical-5 & practical-5).

- ii) 20 marks be allotted for <u>Semester-end- Practical Examination</u> of each paper, distribution of which may be as under:
  - a) Lab. Note Book: 05 Marksb) Viva-voce : 05 Marksc) Experiment : 10 marks
- iii) 40 marks be allotted for <u>Semester-end-Theoretical Examination</u> of each paper (Duration of Exam: 2 hours), distribution of which may be as under:

a) Answer 05 questions out of 08 carrying 02 marks each b) Answer 02 questions out of 04 carrying 05 marks each c) Answer 02 questions out of 04 carrying 10 marks each = 02x05 = 10= 02x10 = 20

However, questions, carrying 5 or 10 marks, need not necessarily to be a single question.

#### For paper, having tutorial (PHY-DSE-2), distribution of 75 marks be as follows:

i) <u>Class Attendance cum Internal Assessment</u>: 20% of 75 marks = 15 marks of which 5 marks be reserved for class attendance ( both theoretical + tutorial ) in the following manner:

Attendance 50% & above but below 60% - 2 marks Attendance 60% & above but below 75% - 3 marks

Attendance 75% & above but below 90% - 4 marks

Attendance 90% & above - 5 marks

and 10 marks be reserved for class test/ assignment/ seminar ( theoretical- 5 & tutorial - 5 ). Minimum 15 classes be allotted for tutorial portion.

- ii) In the <u>Semester-end- Examination</u> of each paper (Duration of Exam : 3 hours), Question Paper be set for 60 marks, distribution of which may be as under:
- a) Answer 10 questions out of 15 carrying 02 marks each = 10x 02 = 20
- b) Answer 04 questions out of 06 carrying 05 marks each =  $04x \ 05 = 20$
- c) Answer 02 questions out of 04 carrying 10 marks each = 02x 10 = 20

However, questions, carrying 05 or 10 marks, need not necessarily to be a single question.

#### For each SEC paper, distribution of 50 marks be as follows:

- i) <u>Internal Assessment</u>: 20% of 50 marks = 10 marks be reserved for class test/ assignment/ seminar.
  - ii) 40 marks be allotted for <u>Semester-end-Theoretical Examination</u> of each paper (Duration of Exam : 2 hours), distribution of which may be as under:
  - a) Answer 05 questions out of 08 carrying 02 marks each = 5x2 = 10
  - b) Answer 02 questions out of 04 carrying 05 marks each = 2x5 = 10
  - c) Answer 02 questions out of 04 carrying 10 marks each = 2x10 = 20

However, questions, carrying 5 or 10 marks, need not necessarily to be a single question.

#### **Mode of Practical Examination**

**Centre:** Concerned College

**Convener:** The convener for each practical paper is to be nominated by the UGBS.

**Examiners:** One internal examiner of the concerned college and one external examiner are to be nominated by the UGBS. However, if any nominated external examiner does not accept the offer due to unavoidable circumstances to be substantiated by the document through proper channel, the Chairman of the UGBS can nominate the external examiner with the consultation of the convener.

# OUTLINE OF THE SEMESTER WISE COURSE STRUCTURE OF B.Sc. UNDER THE CHOICE BASED CREDIT SYSTEM (CBCS)

#### **SCHEME FOR CBCS CURRICULUM**

SEMESTER	COURSE NAME	COURSE DETAIL	CREDITS
	Ability Enhancement Compulsory Course –I	Environmental Studies	4
I	Core course–I (Zoology)	Animal Diversity	4
1	Core course –I Practical	Animal Diversity Lab	2
	Core course –I (Other Subject)		6
	Core course –I (Other Subject)		6
	Ability Enhancement Compulsory	English communication /M I L	2
	Core course–II (Zoology)	Comparative Anatomy & Developmental Biology of Vertebrates	4
II	Core course–II Practical	Comparative Anatomy & Developmental Biology of Vertebrates Lab	2
	Core course–II (Other Subject)		6
	Core course–II (Other Subject)		6
	Core course–III	Physiology and Biochemistry	4
***	Core course–III Practical	Physiology and Biochemistry Lab	2
III	Core course–III (Other Subject)		6
	Core course–III (Other Subject)		6
	Skill Enhancement Course–I	Apiculture	2
	Core course–IV	Genetics and Evolutionary Biology	4
IV	Core course–IV Practical	Genetics and Evolutionary Biology Lab	2
	Core course–IV (Other Subject)		6
	Core course–IV (Other Subject)		6
	Skill Enhancement Course-II	Medical Diagnostics	2
	Skill Enhancement Course- III	Sericulture	2
	Discipline Specific Elective–I (Zoology)	Aquatic Biology or Applied Zoology	4
V	Discipline Specific Elective–1Practical	Aquatic Biology or Applied Zoology Lab	2
V	Discipline Specific Elective–I (Other Subject)		6
	Discipline Specific Elective–I (Other Subject)		6

	Skill Enhancement Course 4	Community Nutrition and Health Statistics	2
	Discipline Specific Elective–2 (Zoology)	Immunology or Insects, Vectors and Diseases	4
VI	Discipline Specific Elective–2 Practical	Immunology or Insects, Vectors and Diseases Lab	2
	Discipline Specific Elective–II (Other subject)		6
	Discipline Specific Elective–II (Other subject)		6
			122

# **CREDIT DISTRIBUTION ACROSS COURSES**

I	CC- Zoology 1 A (Animal Diversity) CC- Other Subject 2A CC- Other Subject 3A	Environmental Studies		
II	CC- Zoology 1B (Comparative Anatomy and Developmental Biology of Vertebrates) CC- Other Subject 2B CC- Other Subject 3B	English Communication/ M I L		
Ш	CC- Zoology 1C (Physiology and Biochemistry) CC- Other Subject 2C CC- Other Subject 3C		SEC-I: Apiculture	
IV	CC- Zoology 1D (Genetics and Evolutionary Biology) CC- Other Subject 2D CC- Other Subject 3D		SEC-II: Medical Diagnostics	
V			SEC-III Sericulture	DSE-1A Zoology (Applied Zoology or Aquatic Biology) DSE-2A Other Subject DSE- 3A Other Subject
VI			SEC-IV Community Nutrition and Health Statistics	DSE-1B Zoology (Immunology or Insect, Vector and Diseases) DSE-2B Other Subject DSE-3B Other Subject

		Credits		
Course Type	Number of Courses	Theory	Practical	Theory + Practical
Core course (CC)	12 Papers (4 Papers each in 3 Disciplines of Choice)	4×12=48	2×12=24	72
Discipline specific elective courses (DSE)	6 Papers (2 Papers each in 3 Disciplines of Choice)	4×6=24	2×6=12	36
Ability Enhancement compulsory course (AECC)	2 Papers (Compulsory Language Paper & Environmental Stuides)	4×1=4 2×1=2		6
Skill Enhancement Course (SEC)	4 Papers	4×2=8		8
Total		86	36	122

#### **CORE COURSES**

CC- 1A: Animal Diversity CC- 1C: Physiology and Biochemistry

Biology of Vertebrates

#### DISCIPLINE SPECIFIC ELECTIVE COURSES (DSE)

#### (Any two)

DSE 1A: Applied Zoology or

Aquatic Biology

Insect, Vector and Diseases

#### SKILL ENHANCEMENT COURSES: ZOOLOGY

SEC 1: Apiculture

SEC 2: Medical Diagnostics

SEC 3: Sericulture

SEC 4: Community Nutrition and Health Statistics