# ENVIRONMENTAL STUDIES <br> Credits: 4 <br> Course Code: AEECC1 <br> COURSE TITLE: FUNDAMENTALS OF ENVIRONMENTAL STUDIES Lectures - 80 

## Unit 1: Basic of Environmental Studies

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

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

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

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

- 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
(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

- 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

- 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 <br> SahityerItihash (Prachin \& Madhyayug) | CC-1 | 6 | 75 |
| 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 <br> Padabali | CC-3 | 6 | 75 |
| 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 <br> Type | Credit | Marks |
| :--- | :--- | :--- | :--- |
| বাংলা সাহিত্যের ইতিহাস ( ১b-১-১৯৫০) <br> [Bangla SahityerItihas (1801-1950)] | CC-5 | 6 | 75 |
| 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 <br> Type | Credit | Marks |
| :---: | :---: | :---: | :---: |
| 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 <br> Type | Credit | Marks |
| :--- | :--- | :--- | :--- |
| গল্প (Galpo) | CC-11 | 6 | 75 |
| প্রবন্ধ ও প্রাচ্য কাব্যতত্ত্ব (Prabandha O Prachya Kabyatattwa) | CC-12 | 6 | 75 |
| উনিশ শতকের বাংলা কাব্য ও প্রবন্ধ <br> (Unish Sataker Bangla Kabya O Prabandha) | DSE-1 | 6 | 75 |
| উনিশ শতকের বাংলা নাটক ও কথাসাহিত্য <br> (Unish Sataker Bangla Natak O Kathasahitya) | DSE-2 | 6 | 75 |
|  |  | 24 | 300 |

Semester - VI

| Course Title | Course <br> Type | Credit | Marks |
| :--- | :--- | :--- | :--- |
| সংস্কৃত ও ইংরেজি সাহিত্যের ইতিহাস <br> (Sanskrita O Ingreji Sahityer Itihas) | CC-13 | 6 | 75 |
| সাহিত্যের রূপ- রীতি ও সংর্দপ (Sahityer Rup- Riti O Sangrup) | CC-14 | 6 | 75 |
| ( বিশ শতকের স্বাধীনতা-পূর্ববর্তী বাংলা কথাসাহিত্য) (BishSataker <br> Swadhinata-purbabarti Bangla Kathasahitya) | DSE-3 | 6 | 75 |
| সাহিত্যবিষয়ক প্রবন্ধ ও লোকসাহিত্য <br> (SahityaBisayakPrabandha O Lakasahitya) | DSE-4 | 6 | 75 |
|  |  | 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 Discipline2 (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: <br> (PrabandhaSahitya : Bankimchandra\& Rabindranath) | CC-1A | 6 | 75 |
| 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 <br> ( Galpo : Pravat Kumar O Saratchandra) | CC-1B | 6 | 75 |
| 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 <br> (Bangla Sahityer Itihas) | CC-1C | 6 | 75 |
| Discipline 2(Other than Bengali) | CC-2C | 6 | 75 |
| English Language (L-2) | CC-(L-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-(L2-2) | 6 | 75 |
| রচনাশক্তির নৈপুণ্য (Rachanashaktir Naipunya) | SEC-2 | 2 | 50 |
|  |  | 20 | 275 |

## Semester- V

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

## Semester -VI

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



Burdwan-713104, West Bengal

## SYLLABUS FOR B.A. HONOURS PROGRAMME <br> IN <br> ENGLISH <br> UNDER SEMESTER WITH CBCS

(Effective from 2017-18)
Only ticked courses are chosen for reading and evaluation
ND stands for non-detailed study

| Type | Credits | Number of <br> Courses | Total <br> credits |
| :---: | :--- | :---: | :---: |
| CC | 6 credits per Course (5 <br> theory, 1 tutorial) | 14 | 84 |
| DSE | 6 credits per Course (5 <br> theory, 1 tutorial) | 4 | 24 |
| GE [any discipline other than <br> English] | 6 credits per Course (5 <br> theory, 1 tutorial) | 4 | 24 |
| AEC | AECC 1 - 4 credits, AECC 2 <br> -2 Credits | 2 | 6 |
| SEC | 2 credits per paper | 2 | 4 |
| Total |  |  | $\mathbf{1 4 2}$ |

## CORE COURSE (CC)

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

## DISCIPLINE SPECIFIC ELECTIVE (DSE)

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

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

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

## ABILITY ENHANANCEMENT COMPULSORY COURSE (AECC)

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

## SKILL ENHANANCEMENTCOURSE ( SEC)

$\checkmark$ SEC1: Translation OR Creative Writing
$\checkmark$ SEC2: ELT OR Film Studies

## B.A. Honours Programme in English under CBCS

Structure at a Glance

| Semester | Courses | Course type | Credit | Full <br> 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 |
|  | AECC | 2 | 50 |  |
|  | Commicative English/ | CIL |  |  |
| Sem.-III | 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 |
| Sem.-IV | 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 |
| Sem.-V | 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 |
| Sem.-VI | 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

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 |  |  | $\mathbf{1 2 2}$ |

## 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 <br> Structure at a Glance

| Semester | Courses | Course type | Credit | Full Marks |
| :---: | :---: | :---: | :---: | :---: |
| Sem.- I | Discipline- 1 (English) <br> Discipline- 2 (other than Eng.) <br> English Language <br> ENVS | ```Core Course (CC-1A) Core Course Core Language ( \(\mathrm{L}_{1}-1\) ) AECC-1``` | $\begin{aligned} & 6 \\ & 6 \\ & 6 \\ & 4 \end{aligned}$ | $\begin{aligned} & \hline 75 \\ & 75 \\ & 75 \\ & 100 \end{aligned}$ |
| Sem.- II | Discipline- 1 (English) <br> Discipline- 2 (other than Eng.) <br> Hindi/MIL <br> Communicative English/ MIL | Core Course (CC-1B) <br> Core Course <br> Core Language ( $\mathrm{L}_{2}-1$ ) <br> AECC-2 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem.-III | Discipline- 1 (English) <br> Discipline-2(other than Eng.) <br> English Language <br> Skill Enhancement Course | Core Course (CC-1C) <br> Core Course <br> Core Language ( $\mathrm{L}_{1}-2$ ) SEC-1 | $\begin{aligned} & 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem.-IV | Discipline- 1 (English) Discipline-2 (other than Eng.) Hindi/MIL <br> Skill Enhancement Course | Core Course (CC-1D) <br> Core Course <br> Core Language ( $\mathrm{L}_{2}-2$ ) SEC-2 | $\begin{aligned} & 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem.-V | Discipline Specific Course (English) Discipline Specific Course Generic Elective (other than English) Skill Enhancement Course | $\begin{aligned} & \hline \text { DSE- 1A } \\ & \text { DSE- 2A } \\ & \text { GE-1(Interdisciplinary) } \\ & \text { SEC-3 } \end{aligned}$ | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & \hline 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem.-VI | Discipline Specific Course(English) Discipline Specific Course Generic Elective (other than English) Skill Enhancement Course | $\begin{aligned} & \text { DSE- 1B } \\ & \text { DSE- 2B } \\ & \text { GE-2 (Interdisciplinary) } \\ & \text { SEC- } 4 \end{aligned}$ | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |



## Burdwan-713104, West Bengal

## SYLLABUS FOR B.A. HONOURS PROGRAMME

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

| Type | Credits | Number of <br> Courses | Total <br> credits |
| :---: | :--- | :---: | :---: |
| CC | 6 credits per Course (5 <br> theory, 1 tutorial) | 14 | 84 |
| DSE | 6 credits per Course (5 <br> theory, 1 tutorial) | 4 | 24 |
| GE [any discipline other than <br> Sanskrit] | 6 credits per Course (5 <br> theory, 1 tutorial) | 4 | 24 |
| AEC | AECC $1-4$ credits, AECC 2 <br> -2 Credits | 2 | 6 |
| SEC | 2 credits per paper | 2 | 4 |
| Total |  |  | $\mathbf{1 4 2}$ |

## CORE COURSE (CC)

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

## DISCIPLINE SPECIFIC ELECTIVE (DSE)

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

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

$\checkmark$ GE1 : SANSKRIT POETRY
$\checkmark$ GE2: SANSKRIT PROSE
$\checkmark$ GE3: SANSKRIT DRAMA
$\checkmark$ GE4 : SANSKRIT GRAMMAR

## ABILITY ENHANANCEMENT COMPULSORY COURSE (AECC)

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

## SKILL ENHANANCEMENTCOURSE (SEC)

$\checkmark$ SEC1: BASIC SANSKRIT OR ETHICAL AND MORAL ISSUES IN SANSKRIT
$\checkmark$ 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 <br> 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 |
|  | AECC | 2 | 50 |  |
|  | Commicative English/ | MIL | Core Course | 6 |
| Sem.-III | CC-V | Core Course | 75 |  |
|  | CC-VI | Core Course | 6 | 75 |
|  | CC-VII | GE-3 | Interdisciplinary(other than Sanskrit) | 6 |
| Skill based | 75 |  |  |  |
|  | SEC-1 | Core Course | 75 |  |
|  | CC-VIII | Core Course | 6 | 75 |
|  | CC-IX | Core Course | 6 | 75 |
|  | CC-X | GE-4 | Interdisciplinary(other than Sanskrit) | 6 |
| Sem.-V | Skill based | 75 |  |  |
|  | SEC-2 | Core Course | 75 |  |
|  | CC-XI | Core Course | 50 |  |
|  | CC-XII | DSE-1 | Discipline Specific Elective | 6 |
| Sem.-VI | DSE-2 | CC-XIII | Discipline Specific Elective | 75 |
|  | CC-XIV | Core Course | 75 |  |
|  | DSE-3 | Core Course | 6 | 75 |
|  | DSE-4 | Discipline Specific Elective | 6 | 75 |
|  |  | Discipline Specific Elective | 6 | 75 |
|  |  |  | 75 |  |

## THE UNIVERSITY OF BURDWAN



## Syllabus for B. A. General Programme <br> 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 |  | $\mathbf{1 2 2}$ |  |

## 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 <br> CBCS <br> Structure at a Glance

| Semester | Courses | Course type | Credit | Full Marks |
| :---: | :---: | :---: | :---: | :---: |
| Sem.- I | Discipline- 1 (Sanskrit) <br> Discipline- 2 (other than <br> Sanskrit) <br> English Language <br> ENVS | Core Course (CC-1A) Core Course <br> Core Language ( $\mathrm{L}_{1}-1$ ) AECC-1 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 4 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & \\ & 75 \\ & 100 \end{aligned}$ |
| Sem.- II | Discipline- 1 (Sanskrit) <br> Discipline- 2 (other than <br> Sanskrit) <br> Hindi/MIL <br> Communicative Sanskrit/ MIL | Core Course (CC-1B) Core Course <br> Core Language ( $\mathrm{L}_{2}-1$ ) AECC-2 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem.-III | Discipline- 1 (Sanskrit) <br> Discipline-2 (other than <br> Sanskrit) <br> English Language <br> Skill Enhancement Course | Core Course (CC-1C) Core Course <br> Core Language ( $\mathrm{L}_{1}-2$ ) SEC-1 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem.-IV | Discipline- 1 (Sanskrit) <br> Discipline-2(other than <br> Sanskrit) <br> Hindi/MIL <br> Skill Enhancement Course | Core Course (CC-1D) Core Course <br> Core Language ( $\mathrm{L}_{2}-2$ ) SEC-2 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \\ & \hline \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \\ & \hline \end{aligned}$ |
| Sem.-V | Discipline Specific Elective <br> (Sanskrit) <br> Discipline Specific Elective(other than Sanskrit) <br> Generic Elective (other than Sanskrit) <br> Skill Enhancement Course | DSE- 1A <br> DSE-2A <br> GE-1(Interdisciplinary) <br> SEC-3 | 6 <br> 6 <br> 6 <br> 2 | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 75 \\ & \hline \end{aligned}$ |
| Sem.-VI | Discipline Specific Elective (Sanskrit) <br> Discipline Specific Elective(other than Sanskrit) <br> Generic Elective (other than Sanskrit) <br> Skill Enhancement Course | DSE-1B <br> DSE-2B <br> GE-2 (Interdisciplinary) <br> SEC- 4 | 6 6 6 | $75$ <br> 75 <br> 75 <br> 50 |

UG Syllabus BA (Hons.) CBCS Pattern - 2017

| Semester | Courses Offered | Name of the Course/Paper | Credit | Full Marks |
| :---: | :---: | :---: | :---: | :---: |
|  | Core Courses (CC) |  |  |  |
| Semester-I | CC Paper - I | History of India I (From Earliest Times to 600 AD) | 6 | 75 |
|  | CC Paper - II | Social <br> Formations \& the Cultural Pattern of the Ancient World | 6 | 75 |
|  | Generic Elective (GE) (Students of History Hons. should take 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) |  |  |  |
|  | GE Paper - I | History of India From Earliest <br> Times to 300 AD) | 6 | 75 |
|  | Ability Enhancement Courses (AEC) |  |  |  |
|  | AECC Paper - I | Environmental Studies | 4 | 100 |
| Total | 4 |  | 22 | 325 |


| Semester | Courses Offered | Name of the Course/Paper | Credit | Full Marks |
| :---: | :---: | :---: | :---: | :---: |
|  | Core Courses (CC) |  |  |  |
| Semester - II | CC Paper - III | History of India II (600-1206 AD) | 6 | 75 |
|  | CC Paper - IV | Social <br> Formation and Cultural Pattern of the Medieval World | 6 | 75 |
|  | Generic Elective (GE) Generic Elective (GE) (Students of History Hons. should take Generic Elective Paper - II 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 - II | History of India From 300 to 1206 AD) | 6 | 75 |
|  | Ability Enhancement Courses (AEC) |  |  |  |
|  | 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 | CC Paper - V | History of India <br> III (1206-1525 <br> AD) | 6 | 75 |
|  | CC Paper - VI | Rise of Modern West - I ( $15^{\text {th }}$ \& $16^{\text {th }}$ Centuries) | 6 | 75 |
|  | CC Paper - VII | History of India IV (1526-1757 AD) | 6 | 75 |


|  | $\begin{array}{l}\text { Generic Elective (GE) Generic Elective (GE) (Students of } \\ \text { History Hons. should take Generic Elective Paper - III from } \\ \text { other discipline) However Hons. students belonging to } \\ \text { other disciplines have to take the following GE Paper if } \\ \text { they choose History as Generic Elective ) }\end{array}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | GE Paper - III | $\begin{array}{l}\text { History of India } \\ \text { From 1206- } \\ \text { 1707 AD) }\end{array}$ | 6 |$] 75$


| Semester | Courses Offered | Name of the Course/Paper | Credit | Full Marks |
| :---: | :---: | :---: | :---: | :---: |
|  | Core Courses (CC) |  |  |  |
| Semester - IV | CC Paper - VIII | Rise of Modern West - II ( $17^{\text {th }}$ \& $18^{\text {th }}$ 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 |
|  | 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 Enhancement Courses (SEC) |  |  |  |


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


| Semester | Courses Offered | Name of the Course/Paper | Credit | Full Marks |
| :---: | :---: | :---: | :---: | :---: |
|  | Core Courses (CC) |  |  |  |
| Semester - V | CC Paper - XI | History of Modern Europe I (1789 - 1870) | 6 | 75 |
|  | CC Paper - XII | Studying <br> History <br> Writing:Indian <br> \& Western | 6 | 75 |
|  | Discipline Specific <br> Elective (DSE) |  |  |  |
|  | 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 <br> History of the United States of America | 6 | 75 |


|  |  | $(1865-1945)$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Total | 4 |  | 24 | 300 |


| Semester | Courses Offered | Name of the Course/Paper | Credit | Full Marks |
| :---: | :---: | :---: | :---: | :---: |
|  | Core Courses (CC) |  |  |  |
| Semester - VI | CC Paper - XIII | History of Modern Europe II(1871-1945) | 6 | 75 |
|  | CC Paper - XIV | Making of the Contemporary World (1946 2000) | 6 | 75 |
|  | Discipline Specific Elective (DSE) |  |  |  |
|  | DSE Paper - III | History of Modern East <br> Asia (1840- <br> 1919 <br> OR <br> History of the USSR (19171945 | 6 | 75 |
|  | DSE Paper - IV | History of China \& Japan(19191949) <br> OR <br> History of the USSR (19451964 | 6 | 75 |
| Total | 4 |  | 24 | 300 |

UG Syllabus BA General CBCS Pattern - 2017

| Semester | Courses Offered | Name of the Course/Paper | Credit | Full Marks |
| :---: | :---: | :---: | :---: | :---: |
|  | Core Courses (CC) |  |  |  |
| Semester - I | 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 |
|  |  |  |  |  |
|  | 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 Course/Paper | Credit | Full Marks |
| :---: | :---: | :---: | :---: | :---: |
|  | Core Courses (CC) |  |  |  |
| Semester - II | Discipline - I History <br> CC Paper - I B | History of India <br> From 300 to 1206 <br> AD) | 6 | 75 |
|  | Discipline-2 Other subject CC Paper-2 B | To be taken from other discipline | 6 | 75 |
|  |  |  |  |  |
|  | 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 <br> CC Paper - 2 (C) | other discipline |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | English Language | English - 2 | 6 | 75 |
|  |  | 1 Enhancement Cou |  |  |
|  | SEC Paper - I | Museums \& Archives in India OR <br> Indian History \& Culture | 2 | 50 |
| Total | 4 |  | 20 | 275 |


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


| Semester | Courses Offered | Name of the <br> Course/Paper | Credit | Full Marks |
| :--- | :--- | :--- | :--- | :---: |
|  | Discipline Specific Eledtive (DSE) |  |  |  |
| Semester - V | DSE Paper - I A <br> History | Some Aspects of <br> Society \& Economy | 6 | 75 |


|  |  | of Modern Europe: ( $15^{\text {th }}$ to $18^{\text {th }}$ <br> Century) OR <br> Political History of Modern Europe: $\left(15^{\text {th }} \text { to } 18^{\text {th }}\right.$ <br> Century) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | DSE Paper-2 A Other Subject | To be taken from other discipline | 6 | 75 |
|  |  | Elective (GE) For O | discip |  |
|  | GE Paper - I | Women's Studies in India OR Some Perspectives on Women's Rights in India | 6 | 75 |
|  |  | Il Enhancement Cou | SEC |  |
|  | SEC - III | Understanding Popular Culture OR <br> An Introduction to Archaeology | 2 | 50 |
| Total | 4 |  | 20 | 275 |


| Semester | Courses Offered | Name of the Course/Paper | Credit | Full Marks |
| :---: | :---: | :---: | :---: | :---: |
|  | Discipline Specific Eledtive (DSE) |  |  |  |
| Semester - VI | 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 |
|  | Generic Elective (GE) For Other Disciplines |  |  |  |
|  | GE Paper - II |  <br> Education in India OR History of Indian Journalism | 6 | 75 |
|  | Skill Enhancement Courses (SEC) |  |  |  |
|  | SEC - IV | Art Appreciation : An Understanding to Indian Art Or | 2 | 50 |


|  |  | Orality \& Oral <br> Culture in India |  |  |
| :---: | :---: | :--- | :--- | :--- |
| Total | 4 |  | 20 | 275 |

## COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM FOR B.Sc. HONOURS IN GEOLOGY

Semester-wise course structure

| $\begin{aligned} & \underset{y}{x} \\ & \underset{y}{\lambda} \end{aligned}$ | 留 | $\begin{aligned} & \text { CORE } \\ & \text { COURSE (CC) } \\ & (14) \end{aligned}$ | ABILITY ENHANCEMENT COURSE (AECC) <br> (2) | SKILL ENHANCEMENT COURSE (SEC) <br> (2) | DISCIPLINE SPECIFIC ELECTIVE (DSE) <br> (4) | GENERIC ELECTIVE (GE) <br> (4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \underset{\sim}{\underset{y}{x}} \\ & \mathbb{y} \end{aligned}$ | I | CC-1. EARTH SYSTEM SCIENCE <br> CC-2. MINERAL SCIENCE | ENVIRONMENTAL STUDIES |  |  | GE-1 <br> (Any discipline other than Geology) |
|  | II | CC-3. ELEMENTS OF GEOCHEMISTRY <br> CC-4. STRUCTURAL GEOLOGY | COMMUNICATIVE <br> ENGLISH/MIL |  |  | GE-2 <br> (Any discipline other than Geology) |
|  | III | CC-5. IGNEOUS PETROLOGY <br> CC-6. SEDIMENTOLOGY <br> CC-7. PALEONTOLOGY |  | SEC-I <br> (Field Work) |  | GE-3 <br> (Any discipline other than Geology) |
|  | IV | CC-8. METAMORPHIC PETROLOGY <br> CC-9. PRINCIPLES OF STRATIGRAPHY AND PRECAMBRIAN STRATIGRAPHY OF INDIA <br> CC-10. PHANEROZOIC STRATIGRAPHY OF INDIA |  | SEC-II <br> (Field Work) |  | GE-4 <br> (Any discipline other than Geology) |
| 弪 | V | CC-11. <br> HYDROGEOLOGY <br> CC-12. ECONOMIC GEOLOGY |  |  | $\begin{aligned} & \text { DSE - } 1 \\ & \text { DSE - } 2 \end{aligned}$ |  |
|  | VI | CC-13. GEOMORPHOLOGY, REMOTE SENSING \& GIS <br> CC-14. ENGINEERING GEOLOGY |  |  | $\begin{aligned} & \text { DSE - } 3 \\ & \text { DSE - } 4 \end{aligned}$ |  |

## Detail course structure

|  | COURSE OPTED | COURSE NAME |  | MARKS |  |  | No. of hours L-T-P <br> Per <br> Week |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IA | ESE | TOTAL |  |
| I | Ability Enhancement: compulsory course - 1 | Environmental Studies | 4 | -- | 100 | 100 |  |
|  | Core Course - 1 | Earth System Science (Th) | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Core Course - 2 | Mineral Science (Th) | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Generic Elective - 1 | GE - 1 | 6 | As to be by other | ribed <br> pline | 75 |  |
|  | Total |  | 20 |  |  | 325 |  |
| II | Ability Enhancement: compulsory course - 2 | Communicative English/ MIL | 2 | -- | 50 | 50 |  |
|  | Core Course - 3 | Elements of Geochemistry (Th) | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Core Course - 4 | Structural Geology (Th) | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Generic Elective - 2 | GE - 2 | 6 | As to be prescribed by other discipline |  | 75 |  |
|  | Total |  | 20 |  |  | 275 |  |
| III | Core Course - 5 | Igneous Petrology (Th) | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Core Course - 6 | Sedimentology (Th) | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Core Course - 7 | Paleontology (Th) | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Generic Elective - 3 | GE - 3 | 6 | As to by oth | cribed cipline | 75 |  |
|  | Skill Enhancement Course - 1 | Field Work | 2 | 10 | 40 | 50 | 0-0-4 |
|  | Total |  | 26 |  |  | 350 |  |
| IV | Core Course - 8 | Metamorphic Petrology (Th) | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Core Course - 9 | Principles of Stratigraphy and Precambrian Stratigraphy of India (Th) | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | 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 by other | ribed line | 75 |  |
|  | Skill Enhancement Course - 2 | Field Work | 2 | 10 | 40 | 50 | 0-0-4 |
|  | Total |  | 26 |  |  | 350 |  |
|  |  |  |  |  |  |  |  |


| V | Core Course - 11 | Hydrogeology (Th)Practical |  | 4 | 15 | 40 | 75 | 4-0-0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2 |  | 20 |  | 0-0-4 |
|  | Core Course - 12 | Economic Geology (Th) |  | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  |  | ical | 2 |  | 20 |  | 0-0-4 |
|  | Discipline Specific Elective - 1 | DSE -1 | Theory | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Discipline Specific Elective - 2 | DSE - 2 | Theory | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Total |  |  | 24 |  |  | 300 |  |
| VI | Core Course - 13 | Geomorphology, Remote Sensing and GIS (Th) |  | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  |  |  | 2 |  | 20 |  | 0-0-4 |
|  | Core Course - 14 | Engineering Geology (Th) |  | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  |  |  | 2 |  | 20 |  | 0-0-4 |
|  | Discipline Specific Elective - 3 | DSE - 3 | Theory | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Discipline Specific Elective - 4 | DSE-4 | Theory | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | Total |  |  | 24 |  |  | 300 |  |
|  | TOTAL OF ALL SEMESTERS |  |  | 142 |  |  | 1900 |  |

Semester-wise course structure

|  | COURSE OPTED | COURSE NAME |  | MARKS |  |  | No. of hours L-T-P (Per week) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IA | ESE | TOTAL |  |
| I | Ability Enhancement: compulsory course - I | Environmental Studies | 4 | --- | 100 | 100 |  |
|  | DISCIPLINE 1 (Geography) | $\begin{aligned} & \text { Core Course ( CC - 1A ) } \\ & \text { Geotectonics and Geomorphology } \end{aligned}$ | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical Scale and Cartography | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 2 ( other subject ) | Core Course( CC -2 A ) As to be offered by other department | 6 | 15 | 60 | 75 |  |
|  | (English Language) | Core Language ( $\mathrm{L}_{1}-1$ ) | 6 | 15 | 60 | 75 | 5-1-0 |
|  | Total |  | 22 |  |  | 325 |  |
| II | Ability Enhancement: compulsory course - 2 | Communicative English/ MIL | 2 | --- | 50 | 50 |  |
|  | DISCIPLINE 1 (Geography) | Core Course ( CC - 1B ) Climatology, Soil and Biogeography | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical Surveying and Levelling | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 2 ( other subject ) | Core Course ( CC - 2B ) <br> As to be offered by other department | 6 | 15 | 60 | 75 |  |
|  | (Hindi/ MIL ) | Core Language ( $\mathrm{L}_{2}-1$ ) | 6 | 15 | 60 | 75 | 5-1-0 |
|  | Total |  | 20 | 15 |  | 275 | $4-0-0$ |
| III | DISCIPLINE 1 (Geography) | Core Course (CC - 1C ) Human Geography | 4 |  | 40 | 75 |  |
|  |  | Practical <br> Map Projection and Map Interpretation | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 2 ( other subject ) | Core Course ( $\mathrm{CC}-2 \mathrm{C}$ ) <br> As to be offered by other department | 6 | 15 | 60 | 75 |  |
|  | (English Language) | Core Language ( $\mathrm{L}_{1}-2$ ) | 6 | 15 | 60 | 75 | 5-1-0 |
|  | Skill Enhancement Course | SEC- 1 :Computer Basics and Computer Applications <br> OR <br> Remote Sensing | 2 | 10 | 40 | 50 |  |
|  | Total |  | 20 |  |  | 275 | 4-0-0 |
| IV | DISCIPLINE 1 <br> (Geography) | Core Course (CC-1D ) Environmental Geography | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical (Field work) | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 2 ( other subject ) | Core Course ( CC - 2D ) <br> As to be offered by other department | 6 | 15 | 60 | 75 |  |
|  | (Hindi/ MIL ) | Core Language ( $\mathrm{L}_{2}-2$ ) | 6 | 15 | 60 | 75 | 5-1-0 |
|  | Skill Enhancement Course | SEC- 2 : Regional Planning and Development OR GIS based Project Report (Practical) | 2 | 10 | 40 | 50 |  |
|  |  | Total | 20 |  |  | 275 |  |


| V | DISCIPLINE 1 <br> ( Geography ) | DSE - 1A : Geography of India or <br> Economic Geography | 4 | 15 | 40 | 75 | $\begin{gathered} 4-0-0 \\ \hline 0-0-4 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Practical (Field work) | 2 |  | 20 |  |  |
|  | DISCIPLINE 2 ( other subject ) | DSE-2A : As to be offered by other department | 6 | 15 | 60 | 75 |  |
|  | Generic Elective | GE-1 <br> Any discipline other than Core Disciplines including Core Languages | 6 | 15 | 60 | 75 |  |
|  | Skill Enhancement Course | SEC- 3: Field Techniques and Survey based Project Report (Practical) OR <br> Collection, Mapping and Interpretation of Climate Data | 2 | 10 | 40 | 50 |  |
|  |  | Total | 20 |  |  | 275 |  |
| VI | DISCIPLINE 1 <br> ( Geography ) | DSE- 1B : Disaster Management or Geography of Tourism | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical (Field work) | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 2 ( other subject ) | DSE - 2B: As to be offered by other department | 6 | 15 | 60 | 75 |  |
|  | Generic Elective | GE-2 <br> Any discipline other than core Disciplines including Core Languages | 6 | 15 | 60 | 75 |  |
|  | Skill Enhancement Course | SEC- 4 : Collection, Mapping and Interpretation of Pedological Data OR Rocks and Minerals and their megascopic identification | 2 | 10 | 40 | 50 |  |
|  |  | Total | 20 |  |  | 275 |  |
|  | TOTAL OF ALL SEMESTERS |  | 122 |  |  | 1700 |  |

COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM FOR B. SC. GENERAL IN GEOGRAPHY
Semester-wise course structure

|  | COURSE OPTED | COURSE NAME |  | MARKS |  |  | No. of hours L-T-P (Per week) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IA | ESE | TOTAL |  |
| I | Ability Enhancement: compulsory course - I | Environmental Studies | 4 |  | 100 | 100 |  |
|  | DISCIPLINE 1 <br> ( Geography ) | Core Course ( $\mathrm{CC}-1 \mathrm{~A}$ ) Geotectonics and Geomorphology | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical : Scale and Cartography | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 2 <br> ( Other Subject ) | Core Course ( CC - 2A ) <br> As to be offered by other department | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 3 <br> ( Other Subject ) | Core Course ( CC - 3A ) As to be offered by other department | 4 | 15 | 60 | 75 | 4-0-0 |
|  |  | Practical As to be offered by other department | 2 |  |  |  | 0-0-4 |
|  |  | Total | 22 |  |  | 325 |  |
|  |  |  |  |  |  |  |  |
| II | Ability Enhancement: compulsory course - 2 | Communicative English/ MIL | 2 |  | 50 | 50 |  |
|  | DISCIPLINE 1 <br> ( Geography ) | Core Course ( CC - 1B ) Climatology, Soil and Biogeography | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical : Surveying and Levelling | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 2 <br> ( Other Subject ) | Core Course ( CC - 2B ) As to be offered by other department | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical <br> As to be offered by other department | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 3 <br> ( Other Subject ) | Core Course ( CC - 3B ) As to be offered by other department | 4 | 15 | 60 | 75 | 4-0-0 |
|  |  | Practical As to be offered by other department | 2 |  |  |  | 0-0-4 |
|  |  | Total | 20 |  |  | 275 |  |
| III | DISCIPLINE 1 <br> ( Geography ) | Core Course (CC - 1C ) Human Geography | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical : Map Projection and Map Interpretation | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 2 <br> ( Other Subject ) | Core Course (CC - 2C ) As to be offered by other department | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical As to be offered by other department | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 3 <br> ( Other Subject ) | Core Course (CC - 3C ) <br> As to be offered by other department | 4 | 15 | 60 | 75 | 4-0-0 |
|  |  | Practical As to be offered by other department | 2 |  |  |  | 0-0-4 |
|  | Skill Enhancement Course | SEC- 1 :Computer Basics and Computer Applications OR Remote Sensing | 2 | 10 | 40 | 50 | 0-0-4 |
|  | Total |  | 20 |  |  | 275 |  |
| IV | DISCIPLINE 1 <br> ( Geography ) | Core Course ( CC-1D ) Environmental Geography | 4 | 15 | 40 | 75 | 4-0-0 |


|  | DISCIPLINE 2 <br> ( Other Subject ) | Practical (Field work) | 2 |  | 20 |  | 0-0-4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Core Course (CC-2D) <br> As to be offered by other department | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical As to be offered by other department | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 3 <br> ( Other Subject ) | Core Course ( CC- 3D ) <br> As to be offered by other department | 6 | 15 | 60 | 75 | 4-0-0 |
|  |  | Practical <br> As to be offered by other department |  |  |  |  | 0-0-4 |
|  | Skill Enhancement Course | SEC- $2::$ Regional Planning and Development OR GIS based Project Report (Practical) | 2 | 10 | 40 | 50 | 0-0-4 |
|  | Total |  | 20 |  |  | 275 |  |
| V | DISCIPLINE 1 <br> ( Geography ) | DSE - 1A : Geography of India or Economic Geography | 4 | 15 | 40 |  | 4-0-0 |
|  |  | Practical (Field work) | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 2 <br> ( Other Subject ) | DSE- 2A : As to be offered by other department | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical : As to be offered by other department | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 3 <br> ( Other Subject ) | DSE- 3A : As to be offered by other department | 6 | 15 | 60 | 75 | 4-0-0 |
|  |  | Practical : As to be offered by other department |  |  |  |  | 0-0-4 |
|  | Skill Enhancement Course | SEC- 3: Field Techniques and Survey based Project Report (Practical) OR Collection, Mapping and Interpretation of Climate Data | 2 | 10 | 40 | 50 | 0-0-4 |
|  | Total |  | 20 |  |  | 275 |  |
| VI | DISCIPLINE 1 <br> ( Geography ) | DSE- 1B : Disaster Management or Geography of Tourism) | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical (Field work) | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 2 <br> ( Other Subject ) | DSE- 2B : As to be offered by other department | 4 | 15 | 40 | 75 | 4-0-0 |
|  |  | Practical : As to be offered by other department | 2 |  | 20 |  | 0-0-4 |
|  | DISCIPLINE 3 <br> ( Other Subject ) | DSE- 3B : As to be offered by other department | 6 | 15 | 60 | 75 | 4-0-0 |
|  |  | Practical : As to be offered by other department |  |  |  |  | 0-0-4 |
|  | Skill Enhancement Course | SEC- 4 : Collection, Mapping and Interpretation of Pedological Data OR <br> Rocks and Minerals and their megascopic identification | 2 | 10 | 40 | 50 | 0-0-4 |
|  |  | Total | 20 |  |  | 275 |  |
|  | TOTA | 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 CC- 2 : POLITICAL THEORY GE - 1 (Any discipline other than Pol. Sc.) ENVS | Core Course Core Course Generic Elective AECC-1 | 6 <br> 6 <br> 6 <br> 4 | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 100 \end{aligned}$ |
| Sem-II | CC - 3 : INDIAN POLITICAL THOUGHT <br> CC - 4 : INDIAN GOVERNMENT AND POLITICS <br> GE - 2 (Any discipline other than Pol. Sc.) <br> Communicative English/MIL | Core Course Core Course Generic Elective AECC-2 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem-III | CC -5 : COMPARATIVE GOVERNMENT AND POLITICS <br> CC - 6 : PUBLIC ADMINISTRATION- Basic Theories <br> CC -7 : LOCAL GOVERNMENT IN INDIA <br> GE - 3 (Any discipline other than Pol. Sc.) <br> Skill Enhancement Course | Core Course Core Course Core Course <br> Generic Elective SEC-1 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & \hline 75 \\ & 75 \\ & 75 \\ & 75 \\ & 75 \end{aligned}$ |
| Sem-IV | CC - 8 : INTERNATIONAL RELATIONS <br> CC -9 : SOCIOLOGY AND POLITICS <br> CC- 10 INTERNATIONAL ORGANIZATIONS <br> GE - 4 (Any discipline other than Pol. Sc.) <br> Skill Enhancement Course | Core Course <br> Core Course <br> Core Course <br> Generic Elective SEC-2 | $6$ <br> 6 <br> 6 <br> 6 | $\begin{array}{\|l\|} \hline 75 \\ 75 \\ 75 \\ 75 \\ 50 \\ \hline \end{array}$ |
| Sem-V | CC-11 : SOCIAL MOVEMENTS IN INDIA <br> CC-12 : ELEMENTARY RESEARCH METHODS <br> IN POLITICAL SCIENCE <br> Discipline Specific Elective <br> Discipline Specific Elective | Core Course <br> Core Course <br> DSE-1 <br> DSE-2 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 6 \\ & 6 \end{aligned}$ | $\begin{gathered} \hline 75 \\ 75 \\ 75 \\ 75 \\ 75 \end{gathered}$ |
| Sem-VI | CC-13 : INDIAN FOREIGN POLICY <br> CC-14 :CONTEMPORARY ISSUES IN INDIA <br> Discipline Specific Course <br> Discipline Specific Course | Core Course <br> Core Course <br> DSE-3 <br> DSE-4 | 6 <br> 6 <br> 6 <br> 6 | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 75 \end{aligned}$ |

## 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.) <br> Discipline-2(other than Pol. Sc.) <br> English Language <br> ENVS | Core Course(CC-1) <br> Core Course(CC-1) <br> Core Course( $\mathrm{L}_{1}-1$ ) <br> AECC - 1 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 4 \end{aligned}$ | $\begin{aligned} & \hline 75 \\ & 75 \\ & 75 \\ & 100 \\ & \hline \end{aligned}$ |
| Sem-II | Discipline-1(Pol. Sc.) <br> Discipline-2(other than Pol. Sc.) <br> Hindi/MIL <br> Communicative English/MIL | Core Course(CC-2) <br> Core Course(CC-2) <br> Core Course( $\mathrm{L}_{2}-1$ ) <br> AECC - 2 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem-III | Discipline-1(Pol. Sc.) <br> Discipline-2(other than Pol. Sc.) <br> English Language <br> Skill Enhancement Course | Core Course(CC-3) <br> Core Course(CC-3) <br> Core Course ( $\mathrm{L}_{1}-2$ ) <br> SEC - 1 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem-IV | Discipline-1(Pol Sc) <br> Discipline-2(other than Pol sc) <br> Hindi/MIL <br> Skill Enhancement Course | $\begin{aligned} & \hline \text { Core Course(CC-4) } \\ & \text { Core Course(CC-4) } \\ & \text { Core Course(L2-2) } \\ & \text { SEC }-2 \end{aligned}$ | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem-V | Discipline Specific Elective Discipline Specific Elective Generic Elective (other than core Disciplines including Core Languages) Skill Enhancement Course | DSE-1A DSE-2A GE - 1(interdisciplinary) SEC - 3 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |
| Sem-VI | Discipline Specific Elective Discipline Specific Elective Generic Elective (other than Core Disciplines including Core Languages) Skill Enhancement Course | DSE-1B DSE-2B GE - 2(interdisciplinary) SEC - 4 | $\begin{aligned} & \hline 6 \\ & 6 \\ & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 75 \\ & 75 \\ & 75 \\ & 50 \end{aligned}$ |

## 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 14 Core 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 $\mathbf{7 5}$ marks, of which $\mathbf{6 0}$ marks is for Semester-End Examination (written) and $\mathbf{1 5}$ marks for Internal Assessment.

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

## B.A.(Honours) in Philosophy: $1^{\text {st }}$ Semester

Inthis semester, for the PhilosophyHonours Students theCoreCourses 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 ofPhilosophy.

| Course Code | Course Title | Course Type | L-T - P | Credit | Marks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CC- 1 | Outlines of Indian Philosophy-I | CoreCourse | $5-1-0$ | 6 | 75 |
| CC-2 | Outlines of Western Philosophy-I | CoreCourse | $5-1-0$ | 6 | 75 |
| GE-1 | Indian Philosophy | Interdisciplinary <br> (Generic Elective) | $5-1-0$ | 6 | 75 |
| AECC- 1 | ENVS | Ability Enhancement <br> Course | $4-0-0$ | 4 | 100 |

## B.A.(Honours) in Philosophy: $2^{\text {nd }}$ Semester

In this semester, for the Philosophy Honours Students theCoreCourses 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 ofPhilosophy.

| 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 <br> (Generic Elective) | $5-1-0$ | 6 | 75 |
| AECC-2 | Communicative Eng./ MIL | Ability Enhancement <br> 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 Coursearecompulsory; while they areto opt for one Interdisciplinary Generic ElectiveCoursefrom any subject otherthan Philosophy. Students of any otherHonourssubjectmayoptfortheInterdisciplinary GenericElective 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 Courseare compulsory; while they areto op for one Interdisciplinary Generic ElectiveCourse from any subject otherthan Philosophy. Students of anyother Honourssubjectmay optfor theInterdisciplinary GenericElective 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 <br> (Generic Elective) | $5-1-0$ | 6 | 75 |
| SEC- 2 | Philosophy of Human Rights | Skill Enhancement <br> Course | $2-0-0$ | 2 | 50 |

## B.A.(Honours) in Philosophy: $5^{\text {th }}$ 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 <br> Problems of Philosophy | Discipline Specific Elective | $5-1-0$ | 6 | 75 |

## B.A.(Honours) in Philosophy: 6th $^{\text {th }}$ 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- 13 | Philosophy in the Twentieth <br> Century: Indian | Core Course | $5-1-0$ | 6 | 75 |
| CC- 14 | Philosophy in the Twentieth <br> Century: Western | Core Course | $5-1-0$ | 6 | 75 |
| DSE-3 | Special Text: Rabindranath <br> Tagore: Sadhana | Discipline Specific <br> Elective | $5-1-0$ | 6 | 75 |
| DSE-4 | Special Text: Hume: An Enquiry <br> Concerning Human Understanding | Discipline Specific <br> 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 EnhancementCourses, is of 75 marks; of which 60 marks isforSemester-EndExamination(written)and $\mathbf{1 5}$ marks for Internal Asse ssment.

SkillEnhancementCourse is of50 marks; of which 40 marksisfor Semester-EndExamination(written)and
10 marks for Internal Assessment.

## B.A. Programme in Philosophy: ${ }^{\text {sts }}$ 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. Programmein Philosophy: $2^{\text {nd }}$ 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: ${ }^{\text {rd }}$ 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: $4^{\text {th }}$ 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. Programmein Philosophy: $5^{\text {th }}$ 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 |

## B.A. Programme in Philosophy: $\mathbf{6}^{\text {th }}$ Semester

| Course Code | Course Title | Course Type | L - T-P | Credit | Marks |
| :---: | :--- | :--- | :--- | :--- | :---: |
| DSE-1B | Tarkasamgraha (saptapadārtha) | Discipline Specific Elective | $5-1-0$ | 6 | 75 |
| GE- 2 | Western Philosophy | Interdisciplinary (Generic <br> 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 |  | Credit |  | Marks |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Core Course (14 papers) | $\begin{aligned} & \text { Theory + Practical } \\ & 14 \times(4+2)=84 \end{aligned}$ | $\begin{array}{\|l} \hline \text { Theory +Tutorial } \\ 14 \times(5+1)=84 \\ \hline \end{array}$ | $14 \times 75=1050$ |
| 2. | Elective Course (8 Papers) |  |  |  |
|  | A. DSE (4 Papers) | $4 \times(4+2)=24$ | $4 \times(5+1)=24$ | $4 \times 75=300$ |
|  | B. GE <br> (4 Papers) | $4 \times(4+2)=24$ | $4 \times(5+1)=24$ | $4 \times 75=300$ |
| 3. | Ability Enhancement Course |  |  |  |
|  | A. AECC (2 Papers) AECC1 (ENVS) AECC2 (English/MIL) | $\begin{aligned} & 4 \times 1=4 \\ & 2 \times 1=2 \end{aligned}$ | $\begin{aligned} & 4 \times 1=4 \\ & 2 \times 1=2 \end{aligned}$ | $\begin{gathered} 100 \\ 50 \end{gathered}$ |
|  | B. SEC (2 Papers) | $2 \times 2=4$ | $2 \times 2=4$ | $2 \times 50=100$ |
|  | Total Credit : | 142 | 142 | $\begin{array}{r} \hline \text { Total Marks }= \\ 1900 \end{array}$ |

Semester wise Course Structures

| Sem ester | Course Type | Course Code | Name of the Course | Credit <br> Pattern <br> (L:T:P) | Total class hrs./w eek | Marks | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | CC | BMH1CC01 | Calculus, Geometry \& Differential Equations | 5:1:0 | 6 | 75 | 6 |
|  |  | 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 |
| II | CC | BMH2CC03 | Real Analysis | 5:1:0 | 6 | 75 | 6 |
|  |  | 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 |
| III | CC | BMH3CC05 | Theory of Real Functions \& Introduction to Metric Spaces | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH3CC06 | Group Theory I | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH3CC07 | Numerical Methods \& Numerical Methods Lab | 4:0:2 | 8 | $\begin{gathered} 75 \\ (50+25) \\ \hline \end{gathered}$ | 6 |
|  |  | Choose any one from the following courses for Skill Enhancement Courses (SECs). |  |  |  |  |  |
|  | SEC | BMH3SEC11 | Logic and Sets | 2:0:0 | 2 | 50 | 2 |
|  |  | 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 |
| IV | CC | BMH4CC08 | Riemann Integration and Series of Functions | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH4CC09 | Multivariate Calculus | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH4CC10 | Ring Theory and Linear Algebra I | 5:1:0 | 6 | 75 | 6 |
|  |  | Choose any one from the following courses for Skill Enhancement Courses (SECs). |  |  |  |  |  |
|  | SEC | BMH4SEC21 | Graph Theory | 2:0:0 | 2 | 50 | 2 |
|  |  | 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. /week | Marks | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V | 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. |  |  |  |  |  |  |
|  | DSE | BMH5DSE11 | Linear Programming | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH5DSE12 | Number Theory | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH5DSE13 | Point Set Topology | 5:1:0 | 6 | 75 | 6 |
|  | Choose any one from the following courses for Discipline Specific Electives. |  |  |  |  |  |  |
|  | DSE | BMH5DSE21 | Probability \& Statistics | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH5DSE22 | Portfolio Optimization | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH5DSE23 | Boolean Algebra and Automata Theory | 5:1:0 | 6 | 75 | 6 |
| VI | CC | BMH5CC13 | Metric Spaces and Complex Analysis | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH5CC14 | Ring Theory and Linear Algebra II | 5:1:0 | 6 | 75 | 6 |
|  | Choose any one from the following courses for Discipline Specific Electives. |  |  |  |  |  |  |
|  | DSE | BMH6DSE31 | Mathematical Modeling | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH6DSE32 | Industrial Mathematics | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH6DSE33 | Group Theory II | 5:1:0 | 6 | 75 | 6 |
|  | Choose any one from the following courses for Discipline Specific Electives. |  |  |  |  |  |  |
|  | DSE | BMH6DSE41 | Bio Mathematics | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH6DSE42 | Differential Geometry | 5:1:0 | 6 | 75 | 6 |
|  |  | BMH6DSE43 | Mechanics II | 5:1:0 | 6 | 75 | 6 |
|  | Optional Dissertation or project work in place of one Discipline Specific Elective (DSE) Paper. |  |  |  |  |  |  |
|  | PW | BMH6PW01 | Project Work | 0:0:6 | 6 | 75 | 6 |

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

| Course |  | Credit |  | Marks |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Core Course <br> (8 papers) <br> 4 core papers each in 2 disciplines of choice | $\begin{aligned} & \text { Theory + Practical } \\ & 8 \times(4+2)=48 \end{aligned}$ | $\begin{aligned} & \text { Theory + Tutorial } \\ & 8 \times(5+1)=48 \end{aligned}$ | $8 \times 75=600$ |
| 2. | Language course (4 Papers) |  | $\begin{aligned} & \text { Theory +Tutorial } \\ & 4 \times(5+1)=24 \\ & \hline \end{aligned}$ | $4 \times 75=300$ |
| 3. | Elective Course <br> A. DSE (4 Papers) | $4 \times(4+2)=24$ | $4 \times(5+1)=24$ | $4 \times 75=300$ |
|  | B. GE (2 Papers) | $2 \times(4+2)=12$ | $2 \times(5+1)=12$ | $2 \times 75=150$ |
| 4. | Ability Enhancement Course |  |  |  |
|  | A. AECC (2 Papers) AECC1 (ENVS) AECC2 (English/MIL) | $\begin{aligned} & 4 \times 1=4 \\ & 2 \times 1=2 \end{aligned}$ | $\begin{aligned} & 4 \times 1=4 \\ & 2 \times 1=2 \end{aligned}$ | $\begin{gathered} 100 \\ 50 \end{gathered}$ |
|  | B. SEC (4 Papers) | $4 \times 2=8$ | $4 \times 2=8$ | $4 \times 50=200$ |
|  | Total Credit : | 122 | 122 | 1700 |

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

| Course |  | Credit |  | Marks |
| :--- | :--- | :--- | :--- | :---: |
| 1. | Core Course <br> (12 papers) <br> 4 core papers each in 3 <br> disciplines of choice | Theory + Practical <br> $12 \times(4+2)=72$ | Theory + Tutorial <br> $12 \times(5+1)=72$ | $12 \times 75=900$ |
| 2. | Elective Course <br> DSE (6 Papers) | $6 \times(4+2)=36$ | $6 \times(5+1)=36$ | $6 \times 75=450$ |
| 3. | Ability Enhancement <br> Course |  |  |  |
|  | A. AECC (2 Papers) <br> AECC1 (ENVS) <br> AECC2 (English/MIL) | $4 \times 1=4$ <br> $2 \times 1=2$ | $4 \times 1=4$ <br> $2 \times 1=2$ | 100 |
|  | B. SEC (4 Papers) | $4 \times 2=8$ | $4 \times 2=8$ | 50 |
|  | Total Credit : | $\mathbf{1 2 2}$ | $\mathbf{1 2 2}$ | $\mathbf{1 7 0 0}$ |

## B.A. Mathematics General Course Structure

| 苞 | Core Course (CC)(8) | Language Course (4) | Elective Course |  | Ability Enhancement Course |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | DSE(4) | GE(2) | AECC (2) | SEC (4) |
| I | CC1A (Mathematics) CC2A(Other discipline) | $L_{1}-1$ |  |  | AECC1 |  |
| II | CC1B (Mathematics) CC2B(Other discipline) | $\mathrm{L}_{2}-1$ |  |  | AECC2 |  |
| III | CC1C (Mathematics) CC2C(Other discipline) | $L_{1}-2$ |  |  |  | SEC1 <br> (Mathematics) <br> Or SEC1 (Other discipline) |
| IV | CCID (Mathematics) CC2D(Other discipline) | $\mathrm{L}_{2}-2$ |  |  |  | SEC2 <br> (Mathematics) <br> Or SEC2 (Other discipline) |
| V |  |  | DSE1A (Mathematics) DSE2A(Other discipline) | GE-1 (Other discipline) |  | SEC3 <br> (Mathematics) <br> Or SEC3 (Other discipline) |
| VI |  |  | DSE1B (Mathematics) DSE2B(Other discipline) | GE-2 <br> (Other discipline) |  | SEC4 (Mathematics) Or SEC4 (Other discipline) |

## B.Sc. Mathematics General Course Structure

| 른0E.in | Core Course$(\mathrm{CC})(12)$ | Discipline Specific Elective (DSE)(6) | Ability Enhancement Course |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | AECC (2) | SEC (4) |
| I | CC1A (Mathematics) CC2A(Other discipline) CC3A(Other discipline) |  | AECC1 |  |
| II | CC1B (Mathematics) CC2B(Other discipline) CC3B(Other discipline) |  | AECC2 |  |
| III | CC1C (Mathematics) CC2C(Other discipline) CC3C(Other discipline) |  |  | SEC1 (Mathematics) <br> Or <br> SEC1 (Other discipline) |
| IV | CC1D (Mathematics) CC2D(Other discipline) CC3D(Other discipline) |  |  | SEC2 (Mathematics) <br> Or <br> SEC2 (Other discipline) |
| V |  | DSE1A(Mathematics) DSE2A(Other discipline) DSE3A(Other discipline) |  | SEC3 (Mathematics) <br> Or <br> SEC3 (Other discipline) |
| VI |  | DSE1B(Mathematics) DSE2B(Other discipline) DSE3B(Other discipline) |  | SEC4 (Mathematics) <br> Or <br> SEC4 (Other discipline) |

## Core Courses of Mathematics :

| Semester | Course <br> Type | Course Code | Name of the Course | Credit <br> Pattern <br> (L:T:P) | Total <br> class <br> hrs./week | Marks | Credit |
| :---: | :---: | :--- | :--- | :---: | :---: | :---: | :---: |
| I | CC | BMG1CC1A | Differential Calculus | $5: 1: 0$ | 6 | 75 | 6 |
| II | 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 <br> Type | Course Code | Name of the Course | Credit <br> Pattern <br> (L:T:P) | Total <br> class <br> hrs./week | Marks | Credit |
| :---: | :---: | :--- | :--- | :--- | :---: | :---: | :---: |
|  | DSE | BMG5DSE1A1 | Matrices | $5: 1: 0$ | 6 | 75 | 6 |
|  | 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 <br> Type | Course Code | Name of the Course | Credit <br> Pattern <br> (L:T:P) | Total <br> class <br> hrs./week | Marks | Credit |
| :---: | :---: | :--- | :--- | :--- | :---: | :---: | :---: |
|  | 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 <br> Type | Course Code | Name of the Course | Credit <br> Pattern <br> $(\mathbf{L}: \mathrm{T}:$ P $)$ | Total <br> class <br> hrs./week | Marks | Credit |
| :---: | :---: | :--- | :--- | :--- | :---: | :---: | :---: |
|  | SEC | BMG3SEC11 | Logic and Sets | $2: 0: 0$ | 2 | 50 | 2 |
|  | SEC | BMG3SEC12 | Analytical Geometry | $2: 0: 0$ | 2 | 50 | 2 |
|  | SEC | BMG3SEC13 | Integral Calculus | $2: 0: 0$ | 2 | 50 | 2 |

Choices for SEC 2 (Choose any one)

| Semester | Course <br> Type | Course Code | Name of the Course | Credit <br> Pattern <br> (L:T:P) | Total <br> class <br> hrs./week | Marks | Credit |
| :---: | :---: | :---: | :--- | :---: | :---: | :---: | :---: |
| IV | SEC | BMG4SEC21 | Vector Calculus | $2: 0: 0$ | 2 | 50 | 2 |
|  | 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 <br> Type | Course Code | Name of the Course | Credit <br> Pattern <br> (L:T:P) | Total <br> class <br> 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 <br> Type | Course Code | Name of the Course | Credit <br> Pattern <br> (L:T:P) | Total <br> class <br> hrs./week | Marks | Credit |
| :---: | :---: | :---: | :--- | :---: | :---: | :---: | :---: |
| VI | SEC | BMG6SEC41 | Boolean Algebra | $2: 0: 0$ | 2 | 50 | 2 |
|  | SEC | BMG6SEC42 | Transportation and <br> 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
or
3.Intellectual Property Right

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

|  | DISCIPLINE <br> CORE COURSE <br> (6) | Ability <br> Enhancement <br> Compulsory <br> Course <br> (AECC) (4/2) | Skill <br> Enhancement <br> Course <br> (SEC) (2) | Discipline Specific <br> Elective DSE (6) |
| :--- | :--- | :--- | :--- | :--- |
| SEM-I | Discipline- 1 (BOT) <br> CC- 1A:Biodiversity <br> (Microbes, Algae, Fungi <br> and Archegoniate) | ENVS |  |  |

## CREDIT DISTRIBUTION

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

| Course type | Description | Number of Courses |  | Credit |
| :---: | :---: | :---: | :---: | :---: |
|  |  | B. Sc. (Honours) | B.Sc. (Regular) |  |
| 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 |  |

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

## Consider Chemistry as Discipline 1

$\mathbf{1}^{\text {st }}$ Semester

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

$2^{\text {nd }}$ Semester

| Course Code | Course Title | Course Type | Credit <br> per <br> course | Marks |
| :---: | :---: | :---: | :---: | :---: |
| Discipline 1 <br> (Chemistry) | Core Course CC-1B from <br> Chemistry: <br>  <br> Generic Elective P2) <br> States of matter \& chemical <br> kinetics, chemical bonding, <br> molecular structure, P-block <br> elements (Theo+Prac) | Core Course (CC) - II | $4+2$ | 75 |
| Discipline 2 <br> (other subject) | As to be offered by the other <br> department(s) | Core Course (CC) - II | 6 | 75 |
| Discipline 3 <br> (other subject) | As to be offered by the other <br> department(s) | Core Course (CC) - II | 6 | 75 |
| AECC-2 | Communicative Eng./MIL | Ability Enhancement <br> Compulsory Course - II | 2 | 50 |
| TOTAL | 20 | 275 |  |  |

## $3^{\text {rd }}$ Semester

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

$4^{\text {th }}$ Semester

| Course Code | Course Title | Course Type | Credit <br> per <br> course | Marks |
| :---: | :---: | :---: | :---: | :---: |
| Discipline 1 <br> (Chemistry) |  <br> Generic Elective P4) | Core Course (CC) - IV | $4+2$ | 75 |
| Solution phase equilibria, <br> conductance, electrochemistry, <br> analytical \& environmental <br> chemistry (Theo+Prac) | Core Course (CC) - IV | 6 | 75 |  |
| Discipline 2 <br> (other <br> subject) | As to be offered by the other <br> department(s) | Core Course (CC) - IV | 6 | 75 |
| Discipline 3 <br> (other <br> subject) | As to be offered by the other <br> department(s) | Skill Enhancement Course | 2 | 50 |
| SEC-2 | Pharmaceutical chemistry | 20 | 275 |  |

$5^{\text {th }}$ Semester

| Course Code | Course Title | Course Type | Credit <br> per <br> course | Marks |
| :---: | :---: | :---: | :---: | :---: |
| SEC-3 | Basics \& Application of Computer in |  |  |  |
| Chemistry | Skill Enhancement Course | 2 | 50 |  |
| Discipline 1 <br> (Chemistry) |  <br> Generic Elective P5 <br> Transition metal \& co-ordination <br> chemistry, analytical and industrial <br> chemistry (Theo+Prac) | Discipline Specific Elective | $4+2$ | 75 |
| Discipline 2 <br> (other <br> subject) | DSE-2A: As to be offered by the <br> other department(s) | Discipline Specific Elective | 6 | 75 |
| Discipline 3 <br> (other <br> subject) | DSE-3A: As to be offered by the <br> other department(s) | Discipline Specific Elective | 6 | 75 |
| TOTAL | 20 | 275 |  |  |

$6^{\text {th }}$ Semester

| Course Code | Course Title | Course Type | Credit <br> per <br> course | Marks |
| :---: | :---: | :---: | :---: | :---: |
| SEC-4 | Polymer Chemistry | Skill Enhancement Course | 2 | 50 |
| Discipline 1 <br> (Chemistry) |  <br> Functional group organic chemistry <br> and industrial chemistry <br> (Theo+Prac) | Discipline Specific Elective | $4+2$ | 75 |
| Discipline 2 <br> (other <br> subject) | DSE-2B: As to be offered by the <br> other department(s) | Discipline Specific Elective | 6 | 75 |
| Discipline 3 <br> (other <br> subject) | DSE-3B: As to be offered by the <br> other department(s) | Discipline Specific Elective | 6 | 75 |
| TOTAL | 20 | 275 |  |  |

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

Course

|  | Theory+Practical | Theory+Tutorials |
| :---: | :---: | :---: |
| I. Core Course (12 Papers) | $12 \mathrm{X} 4=48$ | $12 \times 5=60$ |
| 04 Courses from each of the 03 disciplines of choice |  |  |
| Core Course Practical / Tutorial* <br> ( 12 Practical/ Tutorials) | $12 \mathrm{X} 2=24$ | $12 \mathrm{X} 1=12$ |
| 04 Courses from each of the 03Disciplines of choice |  |  |
| II. Elective Course ( 6 Papers ) | $6 \times 4=24$ | $6 \mathrm{X} 5=30$ |
| Two papers from each discipline of choice including paper of interdisciplinary nature. |  |  |
| Elective Course Practical/Tutorials (6 Practical / Tutorials) | $6 \mathrm{X} 2=12$ | $6 \mathrm{X} 1=6$ |

Two Papers from each discipline of choice including paper of interdisciplinary nature

## III. Ability EnhancementCourses

1. Ability Enhancement Compulsory Course (2 Papers)
AECC- 1 : Environmental Studies
4X1=4
4X1=4
AECC- 2: Communicative English/ MIL
$2 \mathrm{X} 1=2$
$2 \mathrm{X} 1=2$
2. Skill Enhancement Course (Skill Based)
(4 Papers of 2 credits each)

Totalcredit=122
Total credit=122

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

| SEM. | CORE COURSE | Ability Enhancement <br> CompulsoryCourse <br> (AECC) | Skill Enhancement <br> Course (SEC) | Discipline Specific Elective (DSE) |
| :---: | :---: | :---: | :---: | :---: |
| I | $\begin{aligned} & \text { CC- 1A: Mechanics } \\ & \text { CC- 2A } \\ & \text { CC- 3A } \end{aligned}$ |  |  |  |
| II | CC-1B: Electricity and Magnetism CC- 2B CC- 3B | AECC- 2 : <br> Communicative English/ MIL |  |  |
| III | CC-1C $:$ Thermal Physics and Statistical Mechanics |  | SEC-1 | . |
|  | CC- 2C |  |  |  |
|  | CC-3C |  |  |  |
| IV | CC-1D: Waves and Optics |  | SEC -2 |  |
|  | CC-2D |  |  |  |
|  | CC-3D |  |  |  |
| V |  |  | SEC -3 | DSE-1 A |
|  |  |  |  | DSE-2 A |
|  |  |  |  | DSE-3 A |
| VI |  |  | SEC -4 | DSE-1 B |
|  |  |  |  | DSE-2 B |
|  |  |  |  | DSE-3 B |


| SEMESTER | COURSE OPTED | COURSE NAME | Credits |
| :---: | :---: | :---: | :---: |
| I | Ability Enhancement Compulsory Course ( AECC -1) | Environmental Studies | 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 | $\begin{array}{\|l\|} \hline 2 \\ \hline \end{array}$ |
|  | 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 |
| IV | Core course-1D ( Theory ) | Waves and Optics | 4 |
|  | 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 |
| V | Discipline Specific Elective -1A | Elements of Modern Physics OR Nuclear and Particle Physics | 6 |
|  | Discipline Specific Elective -2A | DSE-2A | 6 |
|  | Discipline Specific Elective -3A Skill Enhancement Course -3 | DSE-3A Computational Physics Skills | $\begin{array}{\|l\|} \hline 6 \\ 2 \end{array}$ |
| VI | Discipline Specific Elective -1B | Quantum Mechanics <br> OR <br> Digital, Analog and Instrumentation | 6 |
|  | Discipline Specific Elective -2B | DSE-2B | 6 |
|  | Discipline SpecificElective - 3B Skill Enhancement Course - 4 | DSE-3B Electrical Circuits and Network Skills | $\begin{array}{\|l\|} \hline 6 \\ 2 \end{array}$ |
| Total Credit |  |  | 122 |

## Physics

$\mathbf{1}$ credit $=\mathbf{1}$ hour/week for theory; $\mathbf{2}$ hours/week for practical
Core papers Physics (Credit: 06 each):

CC- 1A Mechanics
CC- 1B Electricity and Magnetism
CC- 1C: Thermal Physics and Statistical Mechanics
CC- 1D: Waves and Optics

Semester- I
Semester- II
Semester- III
Semester- IV

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

| DSE- 1: | Elements of Modern Physics <br> OR | Semester- V |
| :--- | :--- | :--- |
| Nuclear and Particle Physics | Semester- VI |  |
| DSE- 2: | Quantum Mechanics <br> OR |  |

## 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 $\mathbf{7 5}$ marks be as follows:
i) Class Attendance cum Internal Assessment : 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 Semester-end- Practical Examination of each paper, distribution of which may be as under:
a) Lab. Note Book : 05 Marks
b) Viva- voce : 05 Marks
c) Experiment : 10 marks
iii) 40 marks be allotted for Semester-end-Theoretical Examination 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

$$
=05 \times 02=10
$$

b) Answer 02 questions out of 04 carrying 05 marks each

$$
=02 \times 05=10
$$

c) Answer 02 questions out of 04 carrying 10 marks each

$$
=02 \times 10=20
$$

## However, questions, carrying 5 or $\mathbf{1 0}$ marks, need not necessarily to be a single question.

For paper, having tutorial (PHY-DSE-2), distribution of $\mathbf{7 5}$ marks be as follows:
i) Class Attendance cum Internal Assessment : $20 \%$ 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 Semester-end- Examination 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 $=10 \mathrm{x} 02=20$
b) Answer 04 questions out of 06 carrying 05 marks each $=04 x 05=20$
c) Answer 02 questions out of 04 carrying 10 marks each $=02 x 10=20$

## 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) Internal Assessment: $20 \%$ of 50 marks $=10$ marks be reserved for class test/ assignment/ seminar.
ii) 40 marks be allotted for Semester-end-Theoretical Examination 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 $=5 \times 2=10$
b) Answer 02 questions out of 04 carrying 05 marks each $=2 \times 5=10$
c) Answer 02 questions out of 04 carrying 10 marks each $=2 \times 10=20$

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


| VI | Skill Enhancement Course 4 | Community Nutrition and Health Statistics | 2 |
| :--- | :--- | :--- | :--- |
|  | Discipline Specific Elective-2 (Zoology) | Immunology or Insects, Vectors and Diseases | 4 |
|  | 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 |
|  |  |  | $\mathbf{1 2 2}$ |

## CREDIT DISTRIBUTION ACROSS COURSES

| I | CC- Zoology 1 A <br> (Animal Diversity) <br> CC- Other Subject 2A <br> CC- Other Subject 3A | Environmental <br> Studies |  |  |
| :--- | :--- | :--- | :--- | :--- |
| II | CC- Zoology 1B <br> (Comparative Anatomy <br> and Developmental <br> Biology of Vertebrates) <br> CC- Other Subject 2B <br> CC- Other Subject 3B | English <br> Communication/ M I <br> L |  |  |
| III | CC- Zoology 1C <br> (Physiology and <br> Biochemistry) <br> CC- Other Subject 2C <br> CC- Other Subject 3C |  |  |  |
| IV | CC- Zoology 1D <br> (Genetics and <br> Evolutionary Biology) <br> CC- Other Subject 2D <br> CC- Other Subject 3D |  |  |  |
| V |  |  |  |  |
|  |  |  | SEC-I: Apiculture |  |
|  |  |  | Siagnostics |  |


| Course Type | Number of Courses | Credits |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Theory | Practical | Theory + Practical |
| Core course (CC) | 12 Papers <br> (4 Papers each in 3 Disciplines of Choice) | $4 \times 12=48$ | $2 \times 12=24$ | 72 |
| Discipline specific elective courses <br> (DSE) | 6 Papers <br> (2 Papers each in 3 Disciplines of Choice) | $4 \times 6=24$ | $2 \times 6=12$ | 36 |
| Ability Enhancement compulsory course (AECC) | 2 Papers <br> (Compulsory Language Paper \& Environmental Stuides) | $\begin{aligned} & 4 \times 1=4 \\ & 2 \times 1=2 \end{aligned}$ |  | 6 |
| Skill Enhancement Course (SEC) | 4 Papers | $4 \times 2=8$ |  | 8 |
| Total |  | 86 | 36 | 122 |

## CORE COURSES

CC- 1A: Animal Diversity
CC- 1B: Comparative Anatomy and Developmental Biology of Vertebrates

CC- 1C: Physiology and Biochemistry
CC-1D: Genetics and Evolutionary Biology

## DISCIPLINE SPECIFIC ELECTIVE COURSES (DSE)

(Any two)

DSE 1A: Applied Zoology or
Aquatic Biology

DSE 1B: Immunology or
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

