



**Multi- Disciplinary Elective Courses (MDEC) to be offered as a Compulsory  
Component of the Five-Year Integrated Masters (FYUGP +1 Year Masters) Programmes,  
Majuli University of Culture, Majuli, Assam**

**Preamble**

- A.** As per UGC's Curriculum and Credit Framework for the FYUGP in CBCS, Multi-Disciplinary Elective Courses covering the broad areas of Natural Science, Social Science, Humanities, Commerce etc. is a compulsory component to be pursued by all students across the disciplines. The primary objective of these courses is to provide the basic understanding of all subjects or disciplines besides the major subject of study so that the students can develop a broader spectrum of holistic knowledge and practical understanding of different problems, they will face in their future life.
- B.** The curriculum of the MDECs shall cover those relevant components of the disciplines, which the students have not studied during their higher secondary level of studies. Hence, there shall be three important conditions of the courses-
- An MDEC can be pursued by a student provided that he/ she has not studied the subject in higher secondary level.
  - A student pursuing a subject as major or minor in FYUGP+1 Year Masters Programme, shall not be allowed to opt the same subject as MDEC.
  - The standard of the course contents of the MDEC shall of higher secondary level.
- C.** Because of the fewer number of disciplines in the Majuli University of Culture, the University does have much scope for offering a bigger basket of MDEC. Looking into the ground reality, the University plans to engage part-time, guest or hired faculties for these courses.
- D.** In compliance to the directives of the NEP, 2020, the FYUGP of the Majuli University of Culture also plans to offer the following Courses of **Natural Science**-
- **Semester I : Chemistry in Daily Life I**
  - **Semester II : Basic Physics and its Applications**
  - **Semester III : Bioscience and Bioresource**
- A student opting Natural Science as MDEC shall have to continue it Semester I to Semester III.
- E.** Students can also opt the any one of following subjects as their MDEC from any of the baskets offered to them-

**Social Sciences:**

- A. Polity and Governance**

- **Semester I : Indian Constitution and Polity**
- **Semester II : Local Government and Developmental Policies in India**
- **Semester III : Human Rights and India**

**B. Study of Museum and Archeology**

- **Semester I: Museology**
- **Semester II: Art and Iconography**
- **Semester III: Epigraphy**

**Humanities:**

**C. Sankardeva -Madhabdeva Studies**

- **Semester I: Sankardeva Studies-A**
- **Semester II :Sankardeva Studies- B**
- **Madhabdeva Studies**

A student opting any one as MDEC shall have to continue it Semester I to Semester III.

**F.** The Curriculum and Syllabi of the MDECs of the Majuli University of Culture are prepared and recommended by a Common Board of Studies for Multi-disciplinary Elective, Value Added and Skill- enhancement Courses constituted by the University.

*Dangmai*

**COURSE STRUCTURE AND SYLLABI FOR MULTI-DISCIPLINARY  
ELECTIVE COURSES (MDEC) FOR THE FIVE-YEAR INTEGRATED  
MASTERS (FYUGP+1YEAR MASTERS) PROGRAMME**

| SEMESTER-I   |  |               |        |             |
|--------------|--|---------------|--------|-------------|
| Course Code  | Course Title                                       | Offered Dept. | Credit | Remarks     |
| -MDE1011A    | Indian Constitution and Polity                     | MDEC Board    | 3      | Opt any one |
| ASMMDE1011B  | Sankardeva Studies-I                               | Assamese      | 3      |             |
| -MDE1011C    | Chemistry in Daily Life                            | MDEC Board    | 3      |             |
| HSTMDE1011D  | Museology  | History       | 3      |             |
| SEMESTER-II  |  |               |        |             |
| -MDE1021A    | Local Government and Development Policies in India | MDEC Board    | 3      | Opt any one |
| ASMMDE1021B  | Sankardeva Studies-II                              | Assamese      | 3      |             |
| -MDE1021C    | Basic Physics and its applications                 | MDEC Board    | 3      |             |
| HSTMDE1021D  | Art and Iconography                                | History       | 3      |             |
| SEMESTER-III |  |               |        |             |
| -MDE2031A    | Human Right and India                              | MDEC Board    | 3      | Opt any one |
| ASMMDE2031B  | Madhabdeva Studies                                 | Assamese      | 3      |             |
| -MDE2031C    | Bioscience and Bioresource                         | MDEC Board    | 3      |             |
| HSTMDE2031D  | Epigraphy  | History       | 3      |             |

*Shangmai*

# SYLLABI OF POLITY AND GOVERNANCE

## PREAMBLE

In line with the NEP 2020, the UGC developed a new student-centric "Curriculum and Credit Framework for Undergraduate Programmes (CCFUP)" that incorporates a flexible Choice-Based Credit System (CBCS), a multidisciplinary approach, and multiple entry and exit options. In order to upgrade the existing CBCS in the Universities through providing more flexibility, multi-or inter-disciplinarity in the curriculum, the UGC has developed 'Curricular Framework and Credit System for FYUGP' by taking into account all relevant policy recommendations of NEP, 2020." The FYUGP aims to equip students with capacities in various fields, including the arts, humanities, languages, natural sciences, social sciences, and ethical social engagement. It also focuses on developing soft skills such as complex problem-solving, critical thinking, and communication skills, alongside specialization in chosen majors and minors.

In context of the above, as a multi-disciplinary elective subject from social science discipline, the subject- '***Polity and Governance*** ' from the larger domain of political science splitting into three courses as- (1) *Indian Constitution and Polity*, (2) *Local Government and Developmental Policies in India* and (3) *Human Rights and India*. All these courses have specific learning objectives and graduate attributes. As a subject, it aims to provide information and exposures in the areas of the Constitution of India, governance structures, political institutions, public policies, local-self governments and rural development, citizenship, rights and duties as Indian and global citizen, etc. and finally developing knowledge and practice of human and constitutional values, gender sensitivity and citizenship skills.



**SEMESTER-I**  
**SUBJECT- SOCIAL SCIENCE**  
**COURSE TITLE: INDIAN CONSTITUTION AND POLITY**  
**NATURE OF COURSE: MDEC**  
**COURSE CODE: ...MDE1011A**  
**TOTAL CREDIT: 03**  
**TOTAL MARKS: 100**  
**DISTRIBUTION OF MARKS: 60(END-SEM) + 40(IN-SEM)**

**Objectives:** The objective of this Course is to have a thorough as well as a comprehensive understanding the polity and governance of India, its constitutional framework, democratic values and their implications; structure of the governments, federalism, public administration and public policies, which tend to ensure the social justice and holistic welfare to its citizens. The course also endeavours to develop the values for good and responsible citizenship aiming to grow the conscience of greater Indianness among the learner citizens.

**Course Contents:**

| Unit         | Topics and Contents  | Lecture   | Tutorial  | Marks Assigned |
|--------------|--|-----------|-----------|----------------|
| I            | <b>Introduction to the Constitution of India :</b> <ul style="list-style-type: none"> <li>• Evolution</li> <li>• Preamble</li> <li>• Key features</li> <li>• Nature of Indian democracy</li> </ul>     | 10        | 10        | 20             |
| II           | <b>Structure of the Governments:</b> <ul style="list-style-type: none"> <li>• Union Government</li> <li>• State Government</li> <li>• Federalism of India</li> <li>• Centre-State Relations</li> </ul> | 10        | 10        | 20             |
| III          | <b>Public Administration and Bureaucracy:</b> <ul style="list-style-type: none"> <li>• Civil service and governance</li> <li>• Social justice</li> <li>• Public policies and social Welfare</li> </ul> | 10        | 10        | 20             |
| <b>Total</b> |  | <b>30</b> | <b>30</b> | <b>60</b>      |

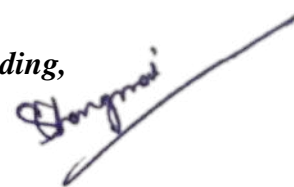
**MODES OF ASSESSMENT:**

**IN-SEMESTER ASSESSMENT: 40%**

- Two Sessional Examination - **20 %**
  - Home Assignment 10%
  - Others (Any one) – **10%**
- Group Discussion/Seminar presentation/Debate/Quiz etc.

**End Sem Examination: 60%**

*The Examination shall be conducted with MCQs to assess the basic understanding, critical and evaluative skills of the students.*



**Learning Outcome:**

- The learners will be able to understand the basic features of Indian polity and governance as well as the growth of the nation through political processes.
- They will be able to evaluate their roles as the citizens of India and can critically assess or justify the responsibilities entrusted upon the various agencies and individuals through the constitutional provisions.
- The learners will be able to understand and evaluate the role and functions of the bureaucracy and can evaluate the public policies meant for the citizens.

**Suggested Readings:**

- Reddy, N. (2023): *Essentials of Indian Polity Constitution & Governance*, GK Publications, New Delhi
- Basu, D.D. (2018): *Introduction to the Constitution of India*, Lexis Nexis
- Laxmikant, M (2019): *Indian Polity*, McGraw Hill, Noida.

**SEMESTER -II**  
**SUBJECT- SOCIAL SCIENCE**  
**COURSE TITLE: LOCAL GOVERNMENT AND DEVELOPMENTAL**  
**POLICIES IN INDIA**  
**NATURE OF COURSE: MDEC**  
**COURSE CODE: ---MDE1021A**  
**TOTAL CREDIT: 03**  
**TOTAL MARK:100**  
**DISTRIBUTION OF MARKS: 60 (END-SEM) + 40 (IN-SEM)**

**Objectives:** This course is designed to make the students aware about the concept and significance of local self-government in India. They will explore the historical evolution and development and the constitutional provisions and legal framework governing local self-government in India. This course intends to train the students to critically analyze the challenges and issues faced by local self-government institutions in India.

**Course Contents:**

| Unit | Topics and Contents   | Lecture | Tutorial | Marks Assigned |
|------|---|---------|----------|----------------|
| I    | <b>Introduction to Local Governance :</b> <ul style="list-style-type: none"><li>• Meaning and Evolution of local governance in India</li><li>• Gandhian principles</li><li>• Types of local governments: Panchayati Raj Institutions, Urban Local Bodies and Autonomous</li></ul> | 8       | 4        | 12             |

|              |   |           |           |           |
|--------------|---|-----------|-----------|-----------|
|              | Councils <ul style="list-style-type: none"> <li>Constitutional provisions and legal framework for local governance</li> </ul>   |           |           |           |
| <b>II</b>    | <b>Structure and Functions of Panchayati Raj Institutions (PRIs)</b> <ul style="list-style-type: none"> <li>Three-tier system: Gram Panchayat, Panchayat Samiti, and Zila Parishad</li> <li>Roles and responsibilities of PRIs in rural development</li> <li>Planning and implementation of development programmes</li> </ul> | 8         | 4         | 12        |
| <b>III</b>   | <b>Structure and Functions of Urban Local Bodies (ULBs)</b> <ul style="list-style-type: none"> <li>Municipal corporations, municipal councils, and nagar panchayats</li> <li>Urban planning and infrastructure development</li> <li>Service delivery and governance in urban areas</li> </ul>                                 | 8         | 4         | 12        |
| <b>IV</b>    | <b>Autonomous Councils</b> <ul style="list-style-type: none"> <li>Background, Constitutional framework</li> <li>Types and Structures</li> <li>Functioning of the Councils</li> </ul>  | 5         | 4         | 12        |
| <b>V</b>     | <b>Contemporary Issues of Local Governance</b> <ul style="list-style-type: none"> <li>Challenges and reforms</li> <li>Capacity building and empowerment</li> <li>Women participation</li> <li>E-governance and digital initiatives</li> </ul>   | 6         | 4         | 12        |
| <b>Total</b> |   | <b>35</b> | <b>20</b> | <b>60</b> |

#### **MODES OF ASSESSMENT:**

##### **IN-SEMESTER ASSESSMENT: 40%**

- Two Sessional Examination - **20 %**
- Home Assignment 10%
- Others (Any one) – **10%**  
Group Discussion/Seminar presentation/Debate/Quiz etc.

##### **End Sem Examination: 60%**

*The Examination shall be conducted with MCQs to assess the basic understanding, critical and evaluative skills of the students.*

#### **Learning Outcome:**



- The students will be able to assess the challenges and issues faced by local self-government institutions in India.
- The students will be able to explore the role of citizen participation and community engagement in local self-government.
- The students will be able to analyze the impact of local self-government on governance, service delivery, and socio-economic development at levels of local government.

#### **Suggested Readings:**

- Chatterjee, I. (2022): *Local Self Government*, Central Law Publications
- Chakraborty, B., RN. Pandey (2018): *Local Governance in India*, Sage Publications
- Chaudhury, SK, S. Sarkar (2012): *Autonomous District Council And Tribal Welfare*, Kalpaz Publications
- IGNOU BPAG172, (2022): *Governance: Issues and Challenges*, Shri Chakradhar Publications
- Kalam Abdul APJ, (2014): *Governance for Growth of India*, Rupa Publications

### **SEMESTER-III**

#### **SUBJECT- SOCIAL SCIENCE**

#### **COURSE TITLE: HUMAN RIGHTS AND INDIA**

#### **NATURE OF COURSE: MDEC**

#### **COURSE CODE: ---MDE2031A**

#### **TOTAL CREDIT: 03**

#### **Total Mark: 100**

#### **DISTRIBUTION OF MARKS: 60(END-SEM) + 40 (IN-SEM)**

**Objectives:** This course provides a comprehensive introduction to the field of human rights with special reference to India. Students will explore the theoretical foundations, historical development, and contemporary issues related to human rights. The course will analyze the principles, challenges, and institutions associated with the protection and promotion of human rights at the international, regional, and national levels.

#### **Course Contents:**

| <b>Unit</b> | <b>Topics and Contents</b>  | <b>Lecture</b> | <b>Tutorial</b> | <b>Marks Assigned</b> |
|-------------|---|----------------|-----------------|-----------------------|
| <b>I</b>    | <b>Introduction to Human Rights</b> <ul style="list-style-type: none"> <li>• Defining human rights</li> <li>• Historical evolution of human rights</li> <li>• Theories of human rights</li> <li>• Universal Declaration of Human</li> </ul> |                |                 |                       |
| <b>II</b>   | <b>Institutions and Mechanisms for Human Rights Protection</b> <ul style="list-style-type: none"> <li>• United Nations Human Rights Council (UNHRC)</li> <li>• International Criminal Court (ICC)</li> </ul>                                |                |                 |                       |



|              |  |  |  |  |
|--------------|--|--|--|--|
|              | <ul style="list-style-type: none"> <li>Non-governmental organizations (NGOs) and civil society</li> </ul>  |  |  |  |
| III          | <b>Contemporary Human Rights Issues</b> <ul style="list-style-type: none"> <li>Discrimination and equality</li> <li>Economic, social, and cultural rights</li> <li>Gender rights and women's rights</li> <li>Refugees and migration</li> </ul>   |  |  |  |
| IV           | <b>Human Rights, Democracy, and Development in context of India</b> <ul style="list-style-type: none"> <li>Human rights and democracy</li> <li>Human rights-based approach to development</li> <li>Human rights indicators and monitoring</li> </ul>                                     |  |  |  |
| V            | <b>Challenges to Human Rights in context of India</b> <ul style="list-style-type: none"> <li>Armed conflicts and humanitarian crises</li> <li>Terrorism and counter-terrorism measures</li> <li>Technology and human rights</li> <li>Environmental rights and climate justice</li> </ul> |  |  |  |
| <b>Total</b> |  |  |  |  |

#### MODES OF ASSESSMENT:

##### IN-SEMESTER ASSESSMENT: 40%

- Two Sessional Examination - 20 %
  - Home Assignment 10%
  - Others (Any one) – 10%
- Group Discussion/Seminar presentation/Debate/Quiz etc.

##### End Sem Examination: 60%

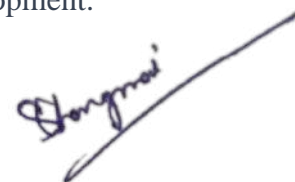
*The Examination shall be conducted with MCQs to assess the basic understanding, critical and evaluative skills of the students.*

##### Learning Outcome:

- The students will understand the key concepts, theories, and principles of human rights in international as well as Indian context.
- The students will be able to evaluate contemporary human rights challenges, such as discrimination, poverty, conflict, and gender inequality.
- The students will develop their skills for critical thinking to assess human rights violations and propose solutions.
- They will understand the interplay between human rights, democracy, and development.

##### Suggested Readings:

- Agarwal, HO. (2023): *Human Rights*, Central Law Publication, New Delhi
- Deshpande, BA. (2022): *Human Rights*, Central Law Publication, New Delhi



- IGNOU CHR 12 (2022): *Human Rights: In India*, Shri Chakradhar Publications
  - Parekh, PH (2021): *Human Rights Year Book 2015-16 Commitment and Practice*, Universal Law Publishing, New Delhi
- 

*Shingrai*

**SYLLABI OF  
SANKARDEVA-MADAHAVDEVA STUDIES  
SUBJECT- HUMANITIES  
NATURE OF THE COURSE- MDEC**

**প্ৰস্তাৱনা:** Five-Year Integrated Masters (FYUGP +1 Year Masters) Programmes ৰ MDEC ৰ Humanities পাঠ্যক্ৰমত “শংকৰদেৱ-মাধৱদেৱ অধ্যয়ন” শীৰ্ষক এক পাঠ্য গ্ৰহণ কৰা হৈছে। এই পাঠত শংকৰদেৱ আৰু মাধৱদেৱৰ জীৱন, সাহিত্য, কৰ্ম, দৰ্শন আৰু তেখেতলোকৰ বিষয়ে পৰৱৰ্তী সময়ত হোৱা বিভিন্ন আলোচনা সম্পৰ্কে ছাত্ৰ-ছাত্ৰীক অৱগত কৰোৱাৰ প্ৰয়াস কৰা হৈছে। প্ৰথম আৰু দ্বিতীয় ষাণ্মাসিকত শংকৰদেৱৰ বিষয়ে আৰু তৃতীয় ষাণ্মাসিকত মাধৱদেৱ সম্পৰ্কীয় পাঠ্য প্ৰস্তুত কৰা হৈছে।

**SEMESTER-I  
SUNJECT: HUMANITIES  
TITLE OF THE COURSE: শংকৰদেৱঅধ্যয়ন- (ক)  
(SANKARDEVA STUDIES-(A)  
COURSE CODE: ASMMDE1011B  
NATURE OF THE COURSE: MDEC  
TOTAL CREDIT: 03  
TOTAL MARKS: 100 (ES. 60+ IA. 40)**

Name of Course Teacher: **Dr. Utpal Narayan Goswami**

**প্ৰস্তাৱনা:** শংকৰদেৱসম্পৰ্কে, শংকৰদেৱৰ সমকালীন সময়সম্পৰ্কে আৰু শংকৰদেৱক কেন্দ্ৰ কৰি শংকৰদেৱৰ পৰৱৰ্তী সময়ৰ পৰাসৃষ্টি হোৱা সাহিত্যৰাজিসম্পৰ্কে ছাত্ৰ-ছাত্ৰীক অৱগত কৰাবৰ বাবে ইকাক তখন প্ৰস্তুত কৰা হৈছে।

**পাঠ্যক্ৰমৰ উদ্দেশ্য:**

- ১/ ছাত্ৰ-ছাত্ৰীসকলক শংকৰদেৱৰ গুৰুত্বসম্পৰ্কে ধাৰণা প্ৰদান কৰা।
- ২/ ছাত্ৰ-ছাত্ৰীসকলক শংকৰদেৱ অধ্যয়নৰ উৎসসম্পৰ্কে ধাৰণা প্ৰদান কৰা।
- ৩/ বিভিন্ন সময়ত শংকৰদেৱ চৰ্চাকি দৰে হৈ আহিছে তাৰ ক্ৰমবিৱৰ্তনৰ এক ধাৰণা প্ৰদান কৰা।

**শিকণৰ পৰিণতি:**

- ১/ ছাত্ৰ-ছাত্ৰীসকলক শংকৰদেৱ সম্পৰ্কে ধাৰণা লাভ কৰিব।
- ২/ শংকৰদেৱক বিভিন্ন সাহিত্যিক বিভিন্ন ধৰণে কেনেদৰে প্ৰকাশ কৰিছে তাৰ সম্পৃষ্ট ধাৰণা লাভ কৰিব।

**মূল্যায়নৰ ধৰণ:**

- গৃহ কৰ্ম- ১০%
- মৌখিক পৰীক্ষা/ আলোচনা পত্ৰ/ দলীয় আলোচনা- ১০%
- সাময়িক পৰীক্ষা- ২০ %
- চূড়ান্ত ষাণ্মাসিক পৰীক্ষা- ৬০ %

| গোট | বিষয়                    | পাঠদান | অনুশিক্ষন | ব্যৱহাৰিক | নম্বৰ |
|-----|--------------------------|--------|-----------|-----------|-------|
| ১   | শংকৰদেৱ আৰু সমকালীন সময় | ১০     | ২         | -         | ১৫    |

|   |   |    |   |   |    |
|---|---|----|---|---|----|
| ২ | চৰিতসাহিত্যতশংকৰদেৱ ( নিৰ্বাচিতপাঠ)<br>১/ গুৰুচৰিতকথা   | ৯  | ২ | - | ১৫ |
| ৩ | আধুনিকভাষাতশংকৰদেৱ ( নিৰ্বাচিতপাঠ)<br>১/ লক্ষ্মীনাথবেজবৰুৱাঃশ্ৰীশ্ৰীশংকৰদেৱ   | ৮  | ২ | - | ১৫ |
| ৪ | সৃষ্টিশীলসাহিত্যতশংকৰদেৱ( নিৰ্বাচিতপাঠ ,<br>যিকোনোএখন)<br>১/ চৈয়দআব্দুলমালিকঃধন্যনৰতনুভাল<br>২/ লক্ষ্মীনন্দনবৰাঃযাকেৰিনাহিকেউপাম<br>৩/ নিৰুপমামহন্তঃসৰ্বগুণাকৰ | ১০ | ২ | - | ১৫ |
|   | মুঠ   | ৩৭ | ৮ | - | ৬০ |

১ ঘণ্টাকৈ মুঠ পাঠদানৰ সময়ঃ ৩৭

১ ঘণ্টাকৈ মুঠ অনুশিক্ষণ সময়ঃ ৮

সৰ্বমুঠ ক্রেডিটঃ৩

#### প্ৰসংগপুথিঃ

- কথাগুৰুচৰিতঃ (সম্পা.)-উপেন্দ্ৰচন্দ্ৰলেখাৰু ,দত্তপাৰ্লিচিংকো.প্ৰা. লিগুৱাহাটী-২০০৬
- গুৰুচৰিতকথাঃ(সম্পা.) - মহেশ্বৰনেওগ,লয়াৰ্ছবুকষ্ট'ল,গুৱাহাটী-১৯৯৯
- শ্ৰীগুৰুচৰিতঃ ৰামানন্দদ্বিজ (সম্পা.)- সঞ্জীৱকুমাৰবৰকাকতী, বাণীমন্দিৰ, গুৱাহাটী-২০১৪
- মহাপুৰুষশ্ৰীশ্ৰীশংকৰদেৱআৰুমাধৱদেৱচৰিতঃদৈত্যবিঠাকুৰ, (সম্পা.) ৰাজমোহননাথ, লয়াৰ্ছবুক ষ্ট'ল, গুৱাহাটী-১৯৯৮
- মহাপুৰুষশ্ৰীশ্ৰীশংকৰদেৱআৰুশ্ৰীশ্ৰীমাধৱদেৱঃহৰিনাৰায়ণদত্তবৰুৱা, দত্তবৰুৱাআৰুকোম্পানী, গুৱাহাটী-০১
- সত্ৰ-সংস্কৃতিৰৰূপৰেখাঃকেশৱানন্দদেৱগোস্বামী,বনলতা, গুৱাহাটী-২০১৪
- শ্ৰীশ্ৰীশংকৰদেৱঃমহেশ্বৰনেওগ, চন্দ্ৰপ্ৰকাশ, গুৱাহাটী-২০১৬
- শ্ৰীশ্ৰীশংকৰদেৱআৰুশ্ৰীশ্ৰীমাধৱদেৱঃলক্ষ্মীনাথবেজবৰুৱা,জ্যোতিপ্ৰকাশ,গুৱাহাটী-২০১৬
- বাণীকান্তৰচনাৱলীঃমহেশ্বৰনেওগ(সম্পা.), অসমপ্ৰকাশনপৰিষদ,গুৱাহাটী-২০০৩
- মহাপুৰুষীয়াপৰম্পৰাতসত্ৰআৰুসংগীতঃবাপচন্দ্ৰমহন্ত, অসমসত্ৰমহাসভা, যোৰহাট-২০০৩
- অংকাৱলীঃকালিৰামমেধি,লয়াৰ্ছবুকষ্ট'ল, গুৱাহাটী-১৯৯৭
- শংকৰদেৱঅধ্যয়নপ্ৰসংগ, ঐতিহ্যআৰুপৰম্পৰাঃকেশৱানন্দদেৱগোস্বামী,গুৱাহাটী, বাণীমন্দিৰ-২০০৫
- তত্ত্বকথাঃলক্ষ্মীনাথবেজবৰুৱা, লয়াৰ্ছবুকষ্ট'ল,গুৱাহাটী-১৯৯০
- শ্ৰীমন্তশংকৰদেৱকৃতিআৰুকৃতিত্বঃশিৱনাথবৰ্মন ,গুৱাহাটী-১৯৯৭
- ঐতিহাসিকপটভূমিতমহাপুৰুষশংকৰদেৱআৰুমাধৱদেৱঃবাপচন্দ্ৰমহন্ত,যোৰহাট-১৯৮৭
- মহাপুৰুষশংকৰদেৱঃনবীনচন্দ্ৰশৰ্মা,বনলতা,গুৱাহাটী-১
- শংকৰদেৱৰনাট- ভাওনাঃপোণামহন্ত,বান্ধৱ,গুৱাহাটী-২০১৭

**SEMESTER-II**  
**SUNJECT: HUMANITIES**  
**TITLE OF THE COURSE: শংকৰদেৱঅধ্যয়ন- (খ)**  
**(SANKARDEVA STUDIES-II)**  
**COURSE CODE: ASMMDE1021B**  
**NATURE OF THE COURSE: MDEC**  
**TOTAL CREDIT: 03**  
**TOTAL MARKS: 100 (ES. 60+ IA. 40)**  
**Name of Course Teacher: Dr. Utpal Narayan Goswami**

প্ৰস্তাৱনাঃ শংকৰদেৱসম্পৰ্কে আৰু শংকৰদেৱৰ সাহিত্যৰাজি, দৰ্শনসম্পৰ্কে কাকতখন প্ৰস্তুত কৰা হৈছে।

পাঠ্যক্ৰমৰ উদ্দেশ্য:

- ১/ ছাত্ৰ-ছাত্ৰীসকলক শংকৰদেৱৰ গুৰুত্বসম্পৰ্কে ধাৰণা প্ৰদান কৰা।
- ২/ ছাত্ৰ-ছাত্ৰীসকলক শংকৰদেৱৰ সাহিত্যৰ ধাৰণা প্ৰদান কৰা।
- ৩/ শংকৰদেৱৰ মৌলিক চিন্তাসমূহক ছাত্ৰ-ছাত্ৰীৰ লগত পৰিচয় কৰাই দিয়া

শিকন পৰিণতি

- ১/ ছাত্ৰ-ছাত্ৰীসকলক শংকৰদেৱসম্পৰ্কে ধাৰণা লাভ কৰিব।
- ২/ শংকৰদেৱক বিভিন্ন সাহিত্যিক বিভিন্ন ধৰণে কেনেদৰে প্ৰকাশ কৰিছে তাৰ সম্পৃষ্ট ধাৰণা লাভ কৰিব

মূল্যায়নৰ ধৰণঃ

- গৃহ কৰ্ম- ১০%
- মৌখিক পৰীক্ষা/ আলোচনা পত্ৰ/ দলীয় আলোচনা- ১০%
- সাময়িক পৰীক্ষা- ২০ %
- চূড়ান্ত ষাণ্মাসিক পৰীক্ষা- ৬০ %

| গোট | বিষয়   | পাঠদান | অনুশিক্ষন | ব্যৱহাৰিক | নম্বৰ |
|-----|---|--------|-----------|-----------|-------|
| ১   | শংকৰদেৱৰ সাহিত্য<br>ক/ পৰিচয়<br>খ/ শ্ৰেণীকৰণ<br>গ/ বিশেষত্ব  | ১২     | ২         | -         | ২০    |
| ২   | কীৰ্ত্তন ঘোষা<br>ক/ পৰিচয়<br>খ/ নিৰ্বাচিত পাঠ ( বিষয় শিক্ষকে প্ৰতিটো শিক্ষাবৰ্ষৰ বাবে এটাখণ্ড নিৰ্বাচন কৰি দিব। ) | ১২     | ২         | -         | ২০    |
| ৩   | বৰগীত আৰু নাটক  | ১৫     | ২         | -         | ২০    |

|  |    |   |   |    |
|--|----|---|---|----|
| <p>১/বৰগীত</p> <p>ক/পৰিচয়</p> <p>খ/ বিশেষত্ব</p> <p>গ/ নিৰ্বাচিত পাঠ (</p> <p>বিষয়শিক্ষকেপ্ৰতিটোশিক্ষাবৰ্ষৰবাবেএটাবৰগীতনিৰ্বাচনকৰিদিব।)</p> <p>২/ শংকৰদেৱৰনাটক</p> <p>ক/ অংকীয়ানাটকৰপৰিচয়আৰুৰৈশিষ্ট্য</p> <p>খ/ নিৰ্বাচিতনাট ( যিকোনোএখন)</p> <p>পাৰিজাতহৰণ , ৰুক্মিণীহৰণ , ৰামবিজয়</p> |    |   |   |    |
| মুঠ  | ৩৯ | ৬ | - | ৬০ |

১ ঘণ্টাকৈ মুঠ পাঠদানৰ সময়ঃ ৩৯

১ ঘণ্টাকৈ মুঠ অনুশিক্ষণ সময়ঃ ৬

সৰ্বমুঠ ক্রেডিটঃ ০৩

প্ৰসংগপুথিঃ

- অসমীয়ানাট্যসাহিত্য: সত্যেন্দ্ৰনাথশৰ্মা,গুৱাহাটী-১৯৭৩
- প্ৰৱন্ধগানৰপৰম্পৰাতবৰগীত: বাপচন্দ্ৰমহন্ত,যোৰহাট-
- বৰগীত, পৰম্পৰাআৰুপৰিৱেশনপদ্ধতিঃকেশৱানন্দদেৱগোস্বামী.ডিব্ৰুগড়-১৯৯৭
- অংকমালা: কেশৱানন্দদেৱগোস্বামী , বনলতা , ডিব্ৰুগড়-১ , গুৱাহাটী-১ , ২০১৪
- ভাৰতীয়পটভূমিতশংকৰীসাহিত্যআৰুসত্ৰীয়াসঙ্গীত: কেশৱানন্দদেৱগোস্বামী
- সত্ৰ-সংস্কৃতিৰৰূপৰেখাঃকেশৱানন্দদেৱগোস্বামী,বনলতা, গুৱাহাটী-২০১৪
- শ্ৰীশ্ৰীশংকৰদেৱঃমহেশ্বৰনেওগ, চন্দ্ৰপ্ৰকাশ, গুৱাহাটী-২০১৬
- শ্ৰীশ্ৰীশংকৰদেৱআৰুশ্ৰীশ্ৰীমাধৱদেৱঃলক্ষ্মীনাথবেজবৰুৱা,জ্যোতিপ্ৰকাশ,গুৱাহাটী-২০১৬
- বাণীকান্তৰচনাৱলীঃমহেশ্বৰনেওগ(সম্পা.), অসমপ্ৰকাশনপৰিষদ,গুৱাহাটী-২০০৩
- মহাপুৰুষীয়াপৰম্পৰাতসত্ৰআৰুসংগীতঃবাপচন্দ্ৰমহন্ত, অসমসত্ৰমহাসভা, যোৰহাট-২০০৩
- অংকাৱলীঃকালিৰামমেধি,লয়াৰ্ছবুকষ্ট'ল, গুৱাহাটী-১৯৯৭
- শংকৰদেৱঅধ্যয়নপ্ৰসংগ, ঐতিহ্যআৰুপৰম্পৰাঃকেশৱানন্দদেৱগোস্বামী,গুৱাহাটী, বাণীমন্দিৰ-২০০৫
- তত্ত্বকথাঃলক্ষ্মীনাথবেজবৰুৱা, লয়াৰ্ছবুকষ্ট'ল,গুৱাহাটী-১৯৯০
- শ্ৰীমন্তশংকৰদেৱকৃতিআৰুকৃতিত্ৱঃশিৱনাথবৰ্মন ,গুৱাহাটী-১৯৯৭
- ঐতিহাসিকপটভূমিতমহাপুৰুষশংকৰদেৱআৰুমাধৱদেৱঃবাপচন্দ্ৰমহন্ত,যোৰহাট-১৯৮৭
- The Neo-Vaishnavite Movement and The Satra Institution of Assam: Satyendra Nath Sarmah, Gauhati University, Guwahat-2016
- Sankardeva and His Times: Maheswar Neog, Lawyer's Book Stall, Guwahati-1998
- Studies to Vaishnava Literature and Culture of Assam, Asom Sahitya Sabha-1978

*Songmai*

**SEMESTER-III**  
**SUNJECT: HUMANITIES**  
**TITLE OF THE COURSE: মাধৱেদৱ অধ্যয়ন**  
**(MADHABDEVA STUDIES)**  
**COURSE CODE: ASMMDE2031B**  
**NATURE OF THE COURSE: MDEC**  
**TOTAL CREDIT: 03**  
**TOTAL MARKS: 100 (ES. 60+ IA. 40)**  
**Name of Course Teacher: Dr. Utpal Narayan Goswami**

প্ৰস্তাৱনা: মাধৱেদৱসম্পৰ্কে আৰু মাধৱেদৱৰ সাহিত্যৰাজি, দৰ্শনসম্পৰ্কে কাকতখন প্ৰস্তুত কৰা হৈছে।

পাঠ্যক্ৰমৰ উদ্দেশ্য:

- ছাত্ৰ-ছাত্ৰীসকলক মাধৱেদৱৰ গুৰুত্বসম্পৰ্কে ধাৰণা প্ৰদান কৰা।
- ছাত্ৰ-ছাত্ৰীসকলক মাধৱেদৱৰ সাহিত্যৰ ধাৰণা প্ৰদান কৰা।
- মাধৱেদৱৰ মৌলিক চিন্তাসমূহক ছাত্ৰ-ছাত্ৰীৰ লগত পৰিচয় কৰাই দিয়া

শিকন পৰিণতি

- ১/ ছাত্ৰ-ছাত্ৰীসকলক মাধৱেদৱসম্পৰ্কে ধাৰণা লাভ কৰিব।
- ২/ মাধৱেদৱৰ বিভিন্ন সাহিত্যকৰ্মৰ বিভিন্ন ধৰণে কেনেদৰে প্ৰকাশ কৰিছে তাৰ সম্পৃক্ত ধাৰণা লাভ কৰিব

মূল্যায়নৰ ধৰণ:

- গৃহ কৰ্ম- ১০%
- মৌখিক পৰীক্ষা/ আলোচনা পত্ৰ/ দলীয় আলোচনা- ১০%
- সাময়িক পৰীক্ষা- ২০ %
- চূড়ান্ত ষাণ্মাসিক পৰীক্ষা- ৬০ %

| গোট | বিষয়   | পাঠদান | অনুশিক্ষন | ব্যৱহাৰিক | নম্বৰ |
|-----|---|--------|-----------|-----------|-------|
| ১/  | মাধৱেদৱৰ জীৱন আৰু সাহিত্যৰ পৰিচয়   | ১০     | ৫         | -         | ২০    |
| ২/  | নিৰ্বাচিত পাঠ<br>ক/ বৰগীত (বিষয়শিক্ষকে প্ৰতিটো শিক্ষাবৰ্ষৰ বাবে দুটা বৰগীত নিৰ্বাচন কৰি দিব।)<br>খ/ বুৰুবা (চোৰধৰাবা পিম্পৰা-গুচোৱা)<br>গ/ নামঘোষা (নিৰ্বাচিত অংশ) | ১০     | ৫         | -         | ২০    |
| ৩/  | মাধৱেদৱ চৰ্চা<br>ক/ বেজবৰুৱা<br>খ/ মহেশ্বৰ নেওগ   | ১০     | ৫         | -         | ২০    |

|  |     |    |    |   |    |
|--|-----|----|----|---|----|
|  | মুঠ | ৩০ | ১৫ | - | ৬০ |
|--|-----|----|----|---|----|

১ ঘণ্টাকৈ মুঠ পাঠদানৰ সময়ঃ ৩০

১ ঘণ্টাকৈ মুঠ অনুশিক্ষণৰ সময়ঃ ১৫

মুঠ ক্রেডিটঃ ৩

প্ৰসংগপুথিঃ

- বৰগীত : বাপচন্দ্ৰমহন্ত , ষ্টুডেন্টষ্ট'ৰ , ১৯৯২
- বৰগীত, পৰম্পৰাআৰুপৰিৱেশনপদ্ধতি : কেশৱানন্দদেৱগোস্বামী , ১৯৯৭
- অংকাৱলী : কালিৰামমেধি ( সম্পা. ) , লয়াৰ্ছ বুক ষ্ট'ল, ১৯৯৭
- অংকমালা : কেশৱানন্দদেৱগোস্বামী ( সম্পা. ) গুৱাহাটী , ২০২২
- মহাপুৰুষশ্ৰীশ্ৰীশংকৰদেৱআৰুশ্ৰীশ্ৰীমাধৱদেৱঃবৰগীত ( সম্পা. ) : হৰিনাৰায়ণদত্তবৰুৱা , প্ৰকাশ – ১৯৫৮
- কীৰ্ত্তনঘোষাআৰুনাংঘোষা : মহেশ্বৰনেওগ ( সম্পা. ) , লয়াৰ্ছ বুক ষ্ট'ল, গুৱাহাটী , ২০২২
- মাধৱদেৱবাক্যমৃত : সূৰ্য্যহাজৰিকা ( সম্পা. ) বাণীমন্দিৰ , গুৱাহাটী , ২০১৫
- SRI SRIMADHABDEVA : Dayananda Pathak , publication Board , Assam 2008

*Shangrai*



# SYLLABI OF NATURAL SCIENCE

## SEMESTER -I

Subject: **Natural science**

Course Title: **Chemistry in Daily Life (I)**

Course Code:---**MDE1011C**

Nature of the Course: **MDEC**

Credit: **03**

Total Marks: **100**

Marks Distribution: **60(End Sem)+40 (In-Sem)**

### Course Objective:

- To understand the scope and significance of chemistry in various aspects of daily life.
- To explore how chemistry impacts our health, environment, food, medicines, and everyday products.
- To emphasize the role of chemistry in addressing global challenges, such as climate change and sustainability.

| Unit | Course Content  | Lecture | Tutorial | Marks Assigned |
|------|---|---------|----------|----------------|
| I    | <p><b>Introduction to Chemistry:</b></p> <p><b>Atoms and Elements:</b> Introduction to atoms as the building blocks of matter like structure of an atom, including protons, neutrons, and electrons, overview of the periodic table and its organization of elements, exploring the properties and characteristics of different elements.</p> <p><b>Chemical Reactions and Equations:</b> Definition of a chemical reaction and the concept of chemical equations, balancing chemical equations to represent the conservation of mass, types of chemical reactions, such as synthesis, decomposition, combustion, and oxidation-reduction reactions.</p> <p><b>Chemical Bonding and Molecular Structure:</b> Introduction to chemical bonding and its role in forming compounds, types of chemical bonds: ionic, covalent, and metallic bonds.</p> <p><b>Acids, Bases, and pH:</b> Definition of acids and bases according to the Arrhenius and Brønsted-Lowry theories, pH scale and its importance in measuring acidity or alkalinity, understanding acid-base reactions and their applications in daily life.</p> <p><b>Laboratory Techniques and Safety:</b> Basic laboratory equipment and their uses, safety protocols and best practices in handling chemicals, introduction to common laboratory techniques, such as measuring and mixing</p> | 30      | 4        | 30             |

|              |   |           |           |           |
|--------------|---|-----------|-----------|-----------|
|              | substances.   |           |           |           |
| II           | <b>Food Chemistry:</b><br><b>Dairy Products:</b> Composition of milk and milk products. Analysis of fat content, minerals in milk and butter. Qualitative analysis of caffeine in coffee and tea, detection of chicory in coffee, chloral hydrate in toddy<br><b>Food processing and packaging;</b> Food adulteration: definition and its importance, adulterants present in coffee, tea, milk, spices, grains and food colour; Difference between food adulteration and contamination.<br><b>Artificial sweeteners:</b> Aspartame, saccharin, dulcin, sucralose and sodium cyclamate.<br><b>Artificial food colorants:</b> Coal tar dyes and non-permitted colours and metallic salts. Analysis of pesticide residues in food.   | 10        | 3         | 15        |
| III          | <b>Environmental Chemistry:</b><br><b>Air Pollution:</b> Air pollutants, prevention and control, green house gases and acid rain, ozone hole and CFC's. Photochemical smog. Catalytic converters for mobile sources. Bhopal gas tragedy.<br><b>Hydrologic cycle:</b> Sources, criteria and standards of water quality-safe drinking water. Public health significance and measurement of water quality parameters- (Colour, turbidity, total solids, acidity, alkalinity, hardness, sulphate, fluoride, phosphate, nitrite, nitrate, BOD and COD). Water purification for drinking and industrial purposes.<br><b>Fertilisers:</b> Classification of Fertilizers- Straight Fertilizers, Compound/Complex Fertilizers, Fertilizer Mixtures. Manufacture and general properties of Fertilizer products- Urea and DAP. | 10        | 3         | 15        |
| <b>Total</b> |   | <b>50</b> | <b>10</b> | <b>60</b> |

#### MODES OF ASSESSMENT:

##### IN-SEMESTER ASSESSMENT: 40%

- Two Sessional Examination - 20 %
- Home Assignment 10%
- Others (Any one) – 10%

Group Discussion/Seminar presentation/Debate/Quiz etc.

##### End Sem Examination: 60%

*The Examination shall be conducted with MCQs to assess the basic understanding, critical and evaluative skills of the students.*

##### Course Outcome:

- To understand the basic concepts and principles of chemistry.
- To understand the general overview of chemistry and its role in daily life.

## Reference Books

- B. K. Sharma: introduction to Industrial Chemistry, Goel Publishing, Meerut (1998)
- Medicinal Chemistry by Ashtoush Kar.
- Drugs and Pharmaceutical Sciences Series, Marcel Dekker, Vol. II, INC, New York.
- Analysis of Foods – H.E. Cox: 13. Chemical Analysis of Foods – H.E. Cox and Pearson.
- Foods: Facts and Principles. N. Shakuntala Many and S. Swamy, 4th ed. New Age International (1998)
- Physical Chemistry – P I Atkins and J. de Paula – 7th Ed. 2002, Oxford University Press.
- Handbook on Fertilizer Technology by Swaminathan and Goswamy, 6th ed. 2001, FAI.

## SEMESTER -II

Subject: **Natural science**

Course Title: **Basic Physics and its Applications**

Course Code:---**MDE1021C**

Nature of the Course: **MDEC**

Credit: **03**

Total Marks: **100**

Marks Distribution: **60(End Sem)+40 (In-Sem)**

## Course Objectives(C.O):

- Introduce students to the fundamental principles and concepts that underpin Physics.
- Develop students' capacity to employ physics' principles in the analysis and interpretation of natural phenomena.
- Foster critical thinking and problem-solving skills through physics-oriented exercises.
- Enhance students' awareness of the interdisciplinary relevance of Physics in various fields.
- Cultivate an appreciation for the scientific method and its application within the realm of Physics.

| Unit | Course Content  | Lecture | Tutorial | Marks Assigned |
|------|---|---------|----------|----------------|
| I    | <b>Mechanics:</b><br><i>Mathematical preliminaries:</i> Vectors, Scalars, Elementary concepts of differentiation and integration for describing motion<br>Concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion.<br>Law of conservation of linear momentum and its applications.<br>Uniform circular motion: Centripetal force, examples | 9       | 3        | 12             |

|            |  |          |          |           |
|------------|--|----------|----------|-----------|
|            | <p>of circular motion (vehicle on a level circular road, vehicle on a banked road).</p> <p>Work done by a constant force and a variable force; kinetic energy, work-energy theorem, power.</p> <p>Concept of potential energy, potential energy of a spring, conservative forces: conservation of mechanical energy (kinetic and potential energies);</p>  |          |          |           |
| <b>II</b>  | <p><b>Gravity:</b></p> <p>Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth.</p> <p>Gravitational potential energy and gravitational potential, escape velocity, orbital velocity of a satellite, Geo-stationary satellites.</p>  | <b>6</b> | <b>2</b> | <b>10</b> |
| <b>III</b> | <p><b>Fluid Mechanics:</b></p> <p>Pressure due to a fluid; Pascal's law and its applications (hydraulic lift and hydraulic brakes).</p> <p>Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its applications.</p> <p>Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.</p>  | <b>6</b> | <b>3</b> | <b>10</b> |
| <b>IV</b>  | <p><b>Electricity and Magnetism:</b></p> <p>Electric charge and potential, Electric fields, Coulomb's law Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law,</p> <p>Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines.</p> <p>Magnetic properties of materials- Para-, dia- and ferro - magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties.</p> | <b>9</b> | <b>2</b> | <b>10</b> |
| <b>V</b>   | <p><b>Optics:</b></p> <p><b>Ray Optics:</b> Reflection of light, spherical mirrors, refraction of light, total internal reflection, refraction of light through a prism.</p> <p><b>Optical instruments:</b> Microscopes and astronomical</p>   | <b>8</b> | <b>3</b> | <b>10</b> |

|              |  |           |           |           |
|--------------|--|-----------|-----------|-----------|
|              | telescopes (reflecting and refracting) and their magnifying powers (Optional).<br><b>Wave optics:</b> Wave front and Huygen's principle, Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only)   |           |           |           |
| <b>VI</b>    | <b>Modern Physics:</b><br>Black body radiation, Failure of classical mechanics and the birth of quantum mechanics (qualitative explanation), Planck's hypothesis, Uncertainty principle, the wave-particle duality<br>Binding Energy, Nuclear fission and fusion, Radioactivity (qualitative explanation)<br>The special theory of relativity: Time dilation, Length contraction, Mass-energy equivalence<br>Atomic structure and the Bohr model (Qualitative) | <b>7</b>  | <b>2</b>  | <b>8</b>  |
| <b>Total</b> |  | <b>45</b> | <b>15</b> | <b>60</b> |

#### **MODES OF ASSESSMENT:**

##### **IN-SEMESTER ASSESSMENT: 40%**

- Two Sessional Examination - **20 %**
- Home Assignment 10%
- Others (Any one) – **10%**  
Group Discussion/Seminar presentation/Debate/Quiz etc.

##### **End Sem Examination: 60%**

*The Examination shall be conducted with MCQs to assess the basic understanding, critical and evaluative skills of the students*

#### **Learning Outcomes:**

- Upon completion of the course, students will be able to:
- Demonstrate a sound understanding of key physics' concepts, principles, and mathematical techniques.
- Apply physics' principles to elucidate and scrutinize the behaviour of objects under motion, forces, energy, and power.
- Articulate the fundamental aspects of electricity and magnetism, encompassing electric charge, electric fields, currents, resistance, and magnetic fields.
- Comprehend fluid mechanics principles, including pressure, Pascal's law, buoyancy, and surface tension.
- Describe the foundational principles of gravity, such as the law of gravitation, gravitational potential and field, escape velocity, and Kepler's laws.
- Explain the core tenets of modern physics, encompassing black body radiation, quantum mechanics, atomic structure, nuclear physics, and the special theory of relativity.
- Recognize and discuss the practical applications of Physics in technology and society.

- 8. Employ critical thinking skills by solving elementary physics' problems and analyze real-world scenarios utilizing physics' principles.

**Reference Books:**

- 1. Concept of Physics Vol - I
- Author: H. C. Verma
- Publisher: Bharati Bhawan
- 2. Concept of Physics Vol - II
- Author: H. C. Verma
- Publisher: Bharati Bhawan
- 3. Elements of Properties of Matter
- Author: D.S. Mathur
- Publisher: S. Chand and Company Ltd.

**SEMESTER-III**

Subject: **NATURAL SCIENCE**

COURSE TITLE: **BIOSCIENCE AND BIORESOURCE**

NATURE OF COURSE: **MDEC**

COURSE CODE:---**MDE2031C**

COURSE CREDIT:**03**

TOTAL MARKS: **100**

Marks Distribution: **60 (END SEM) + 40 (In-SEM)**

**Course Objectives (C.O):**

**Part-I (Theory)**

| Unit | Course Content   | Lecture | Tutorial | Marks Assigned |
|------|--|---------|----------|----------------|
| I    | <b>Fundamentals of Life</b><br>Definitions and characteristics of life: nutrition, respiration, sensitivity, growth, reproduction, excretion, and movement; Origin of life on earth: Theory of spontaneous generation, abiogenesis, and biogenesis, Chemical origin of life                                    | 5       |          | 12             |
| II   | <b>Chemistry of Life and Living Beings</b><br>Building Blocks of Life; Biomolecules and their functions: carbohydrate, lipid, protein, and nucleic acids; Concept of Genome, Transcriptome, and Proteome; Central Dogma of Molecular Biology; Basics of enzymes and hormones,                                  | 10      |          | 12             |
| III  | <b>Cell and life processes</b><br>Cell as a basic unit of Life; Types of cells: Prokaryotic and Eukaryotic; Cell organelles and their functions: Cell membrane and cell wall, Nucleus, Mitochondria, Endoplasmic Reticulum, Golgi Bodies, Ribosomes, and its types and components, Cell Cycle, Tissue, Organs, | 12      |          | 12             |

|                            |   |           |  |           |
|----------------------------|---|-----------|--|-----------|
|                            | and Organ Systems; Basics of Respiration, Digestion, Reproduction   |           |  |           |
| IV                         | <b>Diversity of Life Forms</b><br>Introduction to different life forms; R.H. Whittaker's Five Kingdom Classification (1969): Monera, Protista, Fungi, Plantae, and Animalia; Nomenclature of living organisms: Binomial nomenclature, Basic rules of nomenclature, International Code of Nomenclature for Algae, Fungi and Plants (ICN), International Code of Zoological Nomenclature (ICZN)   | <b>10</b> |  | <b>12</b> |
| V                          | <b>Bioresources and their utilization</b><br>Food and oil crops; Fiber, resin, dye-yielding plants; Traditional Knowledge and phytomedicine;  | <b>6</b>  |  | <b>12</b> |
| <b>Part-II (Practical)</b> |   |           |  |           |
|                            | 1. Study of cells under a microscope<br>2. Study different parts of a plant<br>3. Study the parts of an angiosperm flower<br>4. Study different types of cells and organisms (From chart/model)<br>5. Collection and preservation of medicinal plants<br>6. Study different parts of common animals (From chart/model)<br>7. Study different life processes: Cell Division (From slides/charts), Reproduction (chart), Digestive systems (chart), respiratory systems (chart) |           |  |           |

### **MODES OF ASSESSMENT:**

#### **IN-SEMESTER ASSESSMENT: 40%**

- Two Sessional Examination - **20 %**
  - Home Assignment 10%
  - Others (Any one) – **10%**
- Group Discussion/Seminar presentation/Debate/Quiz etc.

#### **End Sem Examination: 60%**

*The Examination shall be conducted with MCQs to assess the basic understanding, critical and evaluative skills of the students*

#### **Learning Outcomes**

- Basic concept: To gain knowledge on the concept of life and living beings, when and how one can consider an object living or non-living. Learners will also gain knowledge on how non-living matters form a living organism.
- Science of Life: Learners will gain knowledge on different living processes, how cells divide, and how organisms reproduce and grow. This will help the learners to understand

why a living organism needs nutrition, and how it manufactures and utilizes energy for growth and reproduction.

- Economic importance of living organisms: Learners will gain knowledge on economically important plants, food crops, and other plant resources

**Suggested readings:**

- Campbell et al. (2020), Biology: A Global Approach, Global Edition, 12th Ed
- Mary Jones and Geoff Jones (2021), New Cambridge IGCSE™ Biology Coursebook
- Bruce Alberts et al. (2020), Essential Cell Biology
- Nelson and Cox (2021), Lehninger Principles of Biochemistry: International Edition
- Thatoi et al. (2021), Bioresource Utilization and Management: Applications in Therapeutics, Biofuels, Agriculture, and Environmental Science
- Verma and Agarwal (2022), Cell Biology (Cytology, Biomolecules and Molecular Biology)
- Crowe and Bradshaw (2021), Chemistry for The Biosciences, Fourth Edition: The Essential Concepts
- Hall et al. (2020), LIFE: The Science of Biology (Twelfth Edition)
- Lane (2017), The Vital Question: Energy, Evolution, and the Origins of Complex Life
- Broderick (2021), Cambridge IGCSE Biology Practical Workbook

\*\*\*\*\*





**SYLLABI OF STUDY OF MUSEUM AND ARCHEOLOGY  
for FIVE YEAR INTEGRATED MASTERS (FYUGP+1 YEAR MASTERS)  
PROGRAMME**

**SEMESTER – I**

**COURSE TITLE: MUSEOLOGY**

**COURSE CODE: HSTMDC1011D**

**NATURE OF THE COURSE: MULTI-DISCIPLINARY ELECTIVE COURSE**

**CREDIT: 03**

**TOTAL MARKS: 100 (40 IA+ 60 END SEM)**

**COURSE TEACHER: MS. AOYANA BURAGOHAIN**

**Course Objective (C.O):**

- The objective of this course is to introduce students the purpose and functioning of museums.
- The students will also able to learn the various perspective of museum.
- The students will be acquainted with the development of museum in India as well as Assam.

**Course Contents:**

|  | Topic   | Lecture | Tutorial |
|--|---|---------|----------|
| <b>Unit I: Introduction to Museology</b>                             |   |         |          |
| <b>Mark Distribution 20</b>  |   |         |          |
| 1  | 1.01: Definition of Museum, scope and function (aims and objectives)<br>1.02: Museology, Museography and other developments, Digital heritage<br>1.03: Types and Classification of Museums, changing concepts of Museums<br>1.04: Museology as a profession | 15      | 2        |
| <b>Unit II: History and Philosophy of Museums in India and Assam</b> |   |         |          |
| <b>Mark Distribution 20</b>  |   |         |          |
| 2  | 2.01: Museum movement in India<br>2.02: Growth and Expansion of Museums in the Colonial Context- National Museum, New Delhi<br>2.03: Assam State Museum   | 15      | 1        |
| <b>Unit III: Functions and Types of Museums</b>                      |   |         |          |

| Mark Distribution 20 |   |    |   |
|----------------------|---|----|---|
| 3                    | 3.01: Primary functions of the Museum (Collection, Conservation, Documentation, Exhibition, Education and Research).                              | 20 | 1 |
|                      | 3.02: Art and Archaeological Museums, Anthropological Museums, Ethnological Museums, Natural History Museums, Science Museums, Children’s Museums |    |   |
|                      | 3.03: A Visit to Museum (Field trip)  |    |   |
|                      | TOTAL   | 54 |   |

#### **MODES OF ASSESSMENT:**

##### **IN-SEMESTER ASSESSMENT: 40%**

- Two Sessional Examination - **20 %**
- Home Assignment 10%
- Others (Any one) – **10%**  
Group Discussion/Seminar presentation/Debate/Quiz etc.

##### **End Sem Examination: 60%**

##### **Learning Outcome (L.O):**

- After completion of the course, the students will also learn the basic functions of museum and their activities. Definition, philosophy, types of museums, collection, documentation and activities relating to museum are the major topics students learn about.
- The students will also learn the changing pattern of the Museum in India as well as Assam.
- The students will get an idea on the development of Museum studies in Indian subcontinent.

##### **Essential Reading**

- Agarwal Usha, 2000. Directory of Museums in India. New Delhi: Sundeep Prakashan
- Alexander Edward P. 1995: Museum Masters: Their Museum and Their Influence. USA: Altamira Press
- Barringer, T.J., Flynn, T. (eds.). (1998). Colonialism and the object: Empire, material culture, and the Museum. Routledge.
- Bennett, Tony (1995). The birth of the Museum: history, theory, politics. Routledge.
- Edson, G., and D. Dean 1994. Handbook of Museum. New York: Routledge.
- Jenkins, P.1993. Museum Features, Museums Journal 19(7): 22-23
- Guha, Tapti: Monuments, Objects, Histories, Institutions of Art in Colonial and Post-Colonial India

## **SEMESTER – II**

**COURSE TITLE: ART AND ICONOGRAPHY**

**COURSE CODE: HSTMDC1021D**

**NATURE OF THE COURSE: MULTI-DISCIPLINARY ELECTIVE COURSE**

**CREDIT: 03**

**TOTAL MARKS: 100 (40 IA+ 60 END SEM)**

**COURSE TEACHER: DR. NISHA RANI DAS**

### **Course Objective (C.O):**

- To explore the historical roots and developmental trajectory of image worship and iconographic traditions, with a focus on their cultural and artistic significance in Indian art.
- To examine the artistic and cultural developments from the Pre-Vedic, Mauryan, and Post-Mauryan periods, highlighting the contributions of different schools and the influence of Greek and regional art traditions.
- To study the distinctive features of Brahmanical iconography, major deities, and the unique contributions of Assamese and East Indian art traditions, including the Pala and Deopani Schools.

### **Course Contents:**

|   | <b>Topic</b>   | <b>Lecture</b> | <b>Tutorial</b> |
|---|--|----------------|-----------------|
| <b>Unit I: Origin and Development</b><br><b>Mark Distribution 15</b>    |  |                |                 |
| 1   | 1.01: Origin and development of Image Worship<br>1.02: Fundamentals of Art; Features of Iconography; Different Mudras<br>1.03: Pre-Vedic Iconography   | 13             | 2               |
| <b>Unit II: Post-Mauryan</b><br><b>Mark Distribution 15</b>             |  |                |                 |
| 2   | 2.01: Mauryan art and iconography, Buddha, and Bodhisattvas; Tirthankaras<br>2.02: Sunga, Kushana, and Satavahana Iconography (different Schools and Features)<br>2.03: Influences from Greek Iconography in Indian regional art | 12             | 3               |
| <b>Unit III: Brahmanical Iconography</b><br><b>Mark Distribution 15</b> |  |                |                 |

|  |  |    |   |
|--|--|----|---|
| 3  | 3.01: Key Concepts and terminologies of Iconography<br>3.02: Gupta School of Art and Iconographic developments<br>3.03: Major Brahmanical deities and their iconography- Vishnu, Siva, Devi, Surya, and Ganapati                               | 10 | 3 |
| <p align="center"><b>Unit IV: Regional Images of Assam</b></p> <p align="center"><b>Mark Distribution 15</b></p> |  |    |   |
| 4  | 4.01: The Classical art of Assam and its influences in the later periods<br>4.02: Deopani School of art and iconography: regional elements<br>4.03: East Indian School of Medieval Art: Pala School<br>4.04: The iconography of Medieval Assam | 10 | 1 |
|  | <b>TOTAL</b>   | 54 |   |

#### **MODES OF ASSESSMENT:**

##### **IN-SEMESTER ASSESSMENT: 40%**

- Two Sessional Examination - **20 %**
- Home Assignment 10%
- Others (Any one) – **10%**  
Group Discussion/Seminar presentation/Debate/Quiz etc.

##### **End Sem Examination: 60%**

##### **Learning Outcome (L.O):**

- Students will gain a clear understanding of the origins, fundamentals, and development of iconography, including the features of different artistic traditions and Mudras.
- Students will develop the ability to analyse the artistic and cultural influences on Indian iconography across time, with a focus on the regional and classical art traditions of Assam.
- Students will acquire an appreciation for the diversity of Indian iconographic traditions, including Brahmanical and Buddhist iconography, and their relevance to Indian cultural heritage.

##### **Essential Reading**

- Gupta, R.S., *Iconography of the Hindus, Buddhists and Jainas*, Bombay, 1972
- Bhattacharya, B., *Indian Buddhist Iconography*, Oxford, 1924
- Rao, T. A. Gopinath, *Elements of Hindu Iconography* 3 vols, 1914
- Banerjee, J.N., *Development of Hindu Iconography*, Calcutta 1958
- Bhattasali, N.K. *Iconography of Buddhist and Brahmanical Sculptures in the Dacca Museum*, Dacca, 1929
- Gupta, R.S., *Iconography of Hindus, Buddhists and Jains*, Bombay 1964

*Shangmai*

### **SEMESTER – III**

**COURSE TITLE: EPIGRAPHY**

**COURSE CODE: HSTMDC2031D**

**NATURE OF THE COURSE: MULTI-DISCIPLINARY ELECTIVE COURSE**

**CREDIT: 03**

**TOTAL MARKS: 100 (40 IA+ 60 END SEM)**

**COURSE TEACHER: DR. NISHA RANI DAS**

#### **Course Objective (C.O):**

- To introduce students to the history and significance of epigraphic studies as a vital source for reconstructing historical narratives.
- To familiarize students with the origins, development, and decipherment of ancient Indian scripts and inscriptions, including their geographic and cultural contexts.
- To enable students to critically analyse inscriptions, highlighting their historical, cultural, and linguistic contributions across regions and time periods.

#### **Course Contents:**

|  | <b>Topic</b>  | <b>Lecture</b> | <b>Tutorial</b> |
|--|---|----------------|-----------------|
| <b>Unit I: History of Epigraphy</b>                  |   |                |                 |
| <b>Mark Distribution 15</b>                          |   |                |                 |
| 1  | 1.01: The History of Epigraphic Studies<br>1.02: Inscriptions as a source of History<br>1.03: Origin and Writing of Script in Indian context: Harappan Scripts; Problems and Issues   | 13             | 2               |
| <b>Unit II: The earliest deciphered inscriptions</b> |   |                |                 |
| <b>Mark Distribution 15</b>                          |   |                |                 |
| 2  | 2.01: The earliest script in Indian subcontinent: Brahmi (Early, Middle and Late Brahmi)<br>2.02: Asokan Edicts: Nature, Geographic distributions, Language, and script<br>2.03: Decipherment of major rock edicts of Asoka (Reading and understanding) | 12             | 3               |
| <b>Unit III: Historical and Cultural Importance</b>  |   |                |                 |
| <b>Mark Distribution 15</b>                          |   |                |                 |
| 3  | 3.01: Besnagar Pillar Inscription of Heliodorus   | 12             | 3               |

|   |   |    |   |
|---|---|----|---|
|   | 3.02: Junagadh Rock Inscription of Rudradaman<br>3.03: Hathigumpha Rock Inscription of Kharavela<br>3.04: Sarnath Image Inscription of the time of Kanishka |    |   |
| <b>Unit IV: Regional Variations</b><br><b>Mark Distribution: 15</b> |   |    |   |
| 4   | 4.01: Gupta and Satavahana Brahmi<br>4.02: Siddhamatrika<br>4.03: Proto-Bengali and DevaNagari  | 8  | 1 |
|   | <b>TOTAL</b>  | 54 |   |

#### **MODES OF ASSESSMENT:**

##### **IN-SEMESTER ASSESSMENT: 40%**

- Two Sessional Examination - **20 %**
- Home Assignment 10%
- Others (Any one) – **10%**  
Group Discussion/Seminar presentation/Debate/Quiz etc.

##### **End Sem Examination: 60%**

##### **Learning Outcome (L.O):**

- Students will gain a comprehensive understanding of the evolution of Indian scripts and their role in documenting historical events.
- Students will develop the ability to interpret significant inscriptions, such as the Asokan edicts and regional epigraphic records, within their historical and cultural frameworks.
- Students will acquire skills to assess the merits and limitations of inscriptions as primary sources for historical research.

##### **Essential Reading:**

- Dani. A. H, Indian Palaeography, Delhi, (2nd.ed.)1986.
- Sircar, D.C. Introduction to Indian Epigraphy and Palaeography, Journal of Ancient Indian History, 4, 1970-71, 72-136.
- Verma T.P. The Palaeography of Brahmi Script, Varanasi, 1971.
- Barua, B.M. Inscriptions of Asoka, pt. II, Calcutta, 1943. -----, Asoka and His Inscriptions, Calcutta, 1946.
- Basak, R.G. (ed. by), Asokan Inscriptions, Calcutta, 1959.
- Hultzsch, E. Corpus Inscriptionum Indicarum, Vol. I, Inscriptions of Asoka, Oxford, 1925.
- Epigraphia Indica, Vol. VIII (iv, v, vi, vii); Vol. XX (iii).

\*\*\*\*\*

*Dangmai*