



**PROGRAMME OUTCOMES  
AND  
COURSE OUTCOMES**

**(B.A. || B.SC. || B.COM. || M.A.)**

**BIKALI COLLEGE**

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## PROGRAMME OUTCOMES AND COURSE OUTCOMES

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## **PROGRAMME OUTCOMES**

### **BACHELOR OF ARTS**

#### **PO1: Disciplinary Knowledge:**

Demonstrate a foundational knowledge of key concepts, principles and theories in concerned disciplines along with their applications.

#### **PO2: Critical Thinking:**

Develop critical thinking and analytical skills to evaluate socio-economic and political systems. Hone the capacity to evaluate claims, and beliefs independently, unhindered by schools of thought considered trendy or popular.

#### **PO3: Research-Related Skills:**

Acquire the basics of conducting qualitative and quantitative research in humanities and social sciences. Ability to use data, case studies, and theoretical frameworks to analyze all social phenomena.

#### **PO4: Ethical Understanding/ Awareness and Reasoning:**

Develop an understanding of ethical issues and ability to apply ethical reasoning to decision-making at individual and social level.

#### **PO5: Multicultural Competence:**

Develop an awareness pertaining to values of multiple cultures, a cosmopolitan perspective and capacity to understand and engage with diverse cultures and communities.

#### **PO6: Global Awareness:**

Gain a global perspective on socio-economic, cultural, literary, Geo-political issues, understanding the interconnectedness of the domestic and global.

#### **PO7: Personality Development:**

Develop multifaceted personality including communication skill, team work, leadership with integrity, community service, life-long and self-directed learning, self-regulation.

## **BACHELOR OF SCIENCE**

### **PO1: Disciplinary Knowledge:**

Acquire a thorough knowledge and understanding of subjects related to physical and life sciences and practical application of foundational concepts, principles and theories.

### **PO2: Scientific Outlook:**

Develop scientific outlook and temperament including questioning, observing, testing and drawing objective conclusion.

### **PO3: Research-related skills:**

Acquire the basics of conducting research in physical and life sciences enabling students to identify, analyse problems and reach solutions using interdisciplinary approach alongside principles of mathematics and sciences.

### **PO4: Usage of Scientific Instrument and Lab Experiment:**

Ability to conduct experiment with an understanding of the methods, processes and functions of lab instruments.

### **PO5: Critical thinking and Analysis:**

Develop critical thinking and analytical skills to evaluate existing knowledge and evolve solution and mechanisms to keep stride with changing trends in realm of science and technology.

### **PO6: Ethical Understanding/ Awareness and Reasoning:**

Develop an understanding of ethical issues and ability to apply scientific knowledge and skills to address societal, health and environmental issues.

### **PO7: Personality Development:**

Develop multifaceted personality including communication skill, team work, leadership with integrity, community service, life-long and self-directed learning, self-regulation.

## **BACHELOR OF COMMERCE**

### **PO1: Disciplinary Knowledge:**

Demonstrate understanding of theoretical and practical knowledge in Financial Accounting, Business Organization and Management, Business Law, Mathematics and Statistics, HRM and marketing.

### **PO2: Communication Skill:**

Develop communication and persuasion skill to thrive in dynamic and diverse corporate world.

### **PO3: Leadership and Managerial Skill**

Develop managerial skills, enabling the students of strategic thinking, decision making, conflict management, team work and delegation of work, and emotional management.

### **PO4: Entrepreneurial Skill**

Develop entrepreneurial skills and mindset striving for social change and alleviation of socio-economic problems.

### **PO5: Research-related skills:**

Acquire the basics of conducting qualitative and quantitative research in Commerce. Ability to use data, case studies, and theoretical frameworks to analyze market and emergent trends.

### **PO6: Ethical Understanding/ Awareness and Reasoning:**

Develop an understanding of ethical issues in business and commerce, and ability to apply ethical reasoning to business decision-making and economic transaction.

## COURSE OUTCOMES

### DEPARTMENT OF ASSAMESE (UG)

#### SEMESTER I

**Course: ASM-HC-1016 অসমীয়া সাহিত্যৰ বুৰঞ্জী (চৰ্যাপদ-শংকৰী যুগ)**

**Course Outcome:**

- এই পাঠ্যৰ জৰিয়তে ছাত্ৰ-ছাত্ৰী সকলে অসমীয়া সাহিত্যৰ যুগ বিভাজন সম্পৰ্কত পণ্ডিত সকলৰ মতামত, উমৈহতীয়া সাহিত্যৰ ধাৰণা আৰু ইয়াৰ গুৰুত্বপূৰ্ণ নিদৰ্শন, প্ৰাক্ শংকৰী আৰু শংকৰী যুগৰ প্ৰধান সাহিত্যিক সকলৰ ৰচনাৰ বৈশিষ্ট্য সম্পৰ্কে জানিব পাৰিব।

**Course: ASM-HC-1026 অসমীয়া সাহিত্যৰ বুৰঞ্জী (উত্তৰ-শংকৰী যুগ - অৰুণোদই যুগ)**

**Course Outcome:**

- পূৰ্ববৰ্তী পাঠ্যৰ ধাৰাবাহিক স্বৰূপে প্ৰস্তুত কৰা এই পাঠ্যৰ অধ্যয়নৰ যোগেদি ছাত্ৰ-ছাত্ৰী সকলক উত্তৰ শংকৰী যুগ, প্ৰাক্ অৰুণোদই, অৰুণোদই যুগৰ পটভূমিৰ জ্ঞান লভাৰ লগে লগে সেই সেই সময়ছোৱাৰ গুৰুত্বপূৰ্ণ সাহিত্যিকৰ ৰচনাৰ সৈতে পৰিচিত হ'ব।

**Course: ASM-HG/RC-1016 অসমীয়া ভাষাৰ ইতিহাস**

**Course Outcome:**

- এই পাঠ্যক্ৰমৰ জৰিয়তে ছাত্ৰ-ছাত্ৰীসকলে অসমীয়া ভাষাৰ ক্ৰমবিকাশৰ ধাৰণাৰ বিষয়ে পৰিচিত হ'ব।

## SEMESTER II

**Course: ASM-HC-2016 ভাষাবিজ্ঞান পৰিচয়**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে ছাত্ৰ-ছাত্ৰীয়ে ভাষা-বিজ্ঞানৰ আধাৰত ভাষা বিশ্লেষণৰ বিভিন্ন শাখা, স্তৰ আৰু ধৰণৰ লগতে ভাষা অধ্যয়নৰ ইতিহাসৰ সৈতে পৰিচিত হব।

**Course: ASM-HC-2026 সাহিত্য সমালোচনা**

**Course Outcome:**

এই পাঠ্যই প্ৰাচ্য আৰু পাশ্চাত্য সাহিত্যতত্ত্বৰ কেতবোৰ চৰ্চিত দিশ নতুনকৈ চোৱাত ছাত্ৰ-ছাত্ৰী সকলক সহায় কৰিব।

**Course: ASM-HG/RC-2016 অসমীয়া সাহিত্যৰ ইতিহাস (আৰম্ভণিৰ পৰা অষ্টাদশ শতিকা পৰ্যন্ত)**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে ছাত্ৰ-ছাত্ৰীয়ে প্ৰাক্শংকৰী যুগ, শংকৰী যুগ আৰু উত্তৰ শংকৰী যুগৰ সাহিত্যৰ পটভূমি আৰু বিশিষ্ট সাহিত্য-কৃতিৰ ধাৰণা লাভ কৰিব।

## SEMESTER III

**Course: ASM-HC-3016 অসমীয়া সাহিত্য- প্ৰৱেশ**

**Course Outcome:**

অসমীয়া সাহিত্যৰ এনে কিছু সংখ্যক সৃজনীমূলক আৰু সমালোচনামূলক লেখা ইয়াত সন্নিৱিষ্ট কৰা হৈছে, যিয়ে সাহিত্যৰ বসাস্বাদনৰ বাট ছাত্ৰ-ছাত্ৰী সকলৰ বাবে মুকলি কৰিব।

**Course: ASM-HC-3026 অসমীয়া কবিতাৰ চানেকি**

**Course Outcome:**

এই পাঠ্যই প্ৰাক্‌শংকৰী, শংকৰী, ৰমন্যাসিক আৰু আধুনিক কাব্য/কবিতাৰ সৈতে ছাত্ৰ-ছাত্ৰী সকলক পৰিচিত কৰাব।

**Course: ASM-HC-3036 অসমৰ সংস্কৃতি**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে অসমৰ সংস্কৃতিৰ লোকাচাৰ, ধৰ্মীয় পৰম্পৰা, উৎসৱ-পাৰ্বন, পৰিৱেশ্য কলা, স্থাপত্য-ভাস্কৰ্য-চিত্ৰকলাৰ জ্ঞান লভাৰ লগতে বৃহত্তৰ অসমীয়া জাতি গঠন প্ৰক্ৰিয়াৰ আভাস পাব।

**Course: ASM-HG/RC-3016 অসমীয়া নাটক আৰু মঞ্চকলা**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে লোকনাট্য, প্ৰচেনিয়াম, বিকল্প মঞ্চৰ স্বৰূপ সম্পৰ্কে অৱগত হোৱাৰ লগতে মঞ্চ আৰু অভিনয়ৰ আনুষংগিক দিশসমূহৰ জ্ঞানো লাভ কৰিব।

**Course: ASM-CC-3016 প্ৰাচীন অসমীয়া সাহিত্য**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে ছাত্ৰ-ছাত্ৰী সকল প্ৰাচীন অসমীয়া সাহিত্যৰ গীত -পদ, কাব্য, নাট আৰু কথা সাহিত্যৰ বিষয়ে অৱগত হ'ব পাৰিব।

**Course: ASM-SE-3014 ব্যৱহাৰিক অসমীয়া**

**Course Outcome:**

অসমীয়া বিষয়ৰ জ্ঞানেৰে একোগৰাকী ছাত্ৰ-ছাত্ৰীৰ পৰৱৰ্তী জীৱনৰ বৃত্তিকাপে গ্ৰহণ কৰিব পৰা বিশেষ বিষয়ৰ প্ৰাথমিক আৰু প্ৰায়োগিক জ্ঞান এই পাঠ্যৰ জৰিয়তে লাভ কৰিব।

#### SEMESTER IV

**Course: ASM-HC-4016 তুলনামূলক ভাৰতীয় সাহিত্য**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে শিক্ষাৰ্থীসকলক তুলনামূলক সাহিত্যৰ পটভূমি আৰু পৰিচয়ৰ লগতে আধুনিক যুগৰ ভাৰতীয় সাহিত্যৰ লগত পৰিচিত হ'ব।

**Course: ASM-HC-4026 অসমীয়া ভাষাৰ সমাহৰণ: আৰ্যভাষা আৰু আৰ্য-ভিন্ন ভাষা**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে সংস্কৃত, প্ৰাকৃত, বাংলা, ওড়িয়া আদি আৰ্যভাষাৰ সৈতে অসমীয়া ভাষাৰ সম্পৰ্ক নিৰূপণ কৰিব পৰা হ'ব। সেইদৰে অসমীয়া ভাষাত টাই-আহোম, বড়ো, ৰাভা, খাচী ইত্যাদি আৰ্য-ভিন্ন ভাষাৰ প্ৰভাৱ আৰু উপাদানৰ বিষয়ে জ্ঞান লাভ কৰিব।

**Course: ASM-HC-4036 অসমীয়া গদ্য সাহিত্য (আৰম্ভণিৰ পৰা অষ্টাদশ শতিকালৈ**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে ছাত্ৰ- ছাত্ৰীসকলে শংকৰদেৱৰ নাটৰ গদ্যৰ পৰা বুৰঞ্জীৰ গদ্যলৈকে এক স্পষ্ট জ্ঞান লাভ কৰিব।

**Course: ASM-HG/RC-4016 আধুনিক অসমীয়া গীতি সাহিত্য**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে ছাত্ৰ- ছাত্ৰীসকলে আধুনিক অসমীয়া গীতি সাহিত্যৰ বিভিন্ন পৰ্বৰ যুগমীয়া গীতৰ সৈতে ছাত্ৰ ছাত্ৰীসকলক পৰিচয় কৰোৱা হ'ব।

**Course: ASM-CC-4016 আধুনিক অসমীয়া সাহিত্য**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে আধুনিক অসমীয়া সাহিত্যৰ বহু- বহু কবিতা, চুটিগল্প, প্ৰবন্ধ আৰু নাটকৰ সৈতে ছাত্ৰ-ছাত্ৰীৰ অন্তৰংগতা স্থাপনৰ দিশত গুৰুত্ব দিয়া হৈছে।

**Course: ASM-SE-4014 সৃজনীমূলক সাহিত্য**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে কবিতা আৰু গল্প লিখাৰ প্ৰাথমিক আৰু ব্যৱহাৰিক জ্ঞান কৰিব।

## SEMESTER V

**Course: ASM-HC-5016 অসমীয়া নাটক আৰু পৰিৱেশন শৈলী (আৰম্ভণিৰ পৰা অষ্টাদশ শতিকালৈ)**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে ছাত্ৰ-ছাত্ৰীসকলে অসমীয়া নাটকৰ ইতিহাসৰ ৰূপৰেখাৰ বিষয়ে অৱগত হোৱাৰ লগতে প্ৰতিনিধিত্বমূলক নাটক বিশেষৰ পৰিৱেশন শৈলীৰ বিষয়েও জানিব পাৰিব।

**Course: ASM-HC-5026 অসমীয়া ব্যাকৰণ**

**Course Outcome:**

এই পাঠ্যত উচ্চ ব্যাকৰণৰ ৰীতি অনুযায়ী অসমীয়া ভাষাৰ বৈয়াকৰণিক বিশ্লেষণৰ বিষয়ে জ্ঞান লাভ কৰিব।

**Course: ASM-HE-5016 অসমীয়া লোক সাহিত্য অধ্যয়ন**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে ছাত্ৰ-ছাত্ৰীয়ে লোক সাহিত্যৰ স্বৰূপ আৰু অসমীয়া লোক সাহিত্যৰ বিভিন্ন সমলৰ সৈতে পৰিচিত হ'ব।

**Course: ASM-HE-5036 শংকৰদেৱ**

**Course Outcome:**

অসমীয়া সাহিত্যৰ যুগন্ধৰ প্ৰতিভা শংকৰদেৱৰ বৰগীত, কীৰ্তন ঘোষা, কাব্য আৰু নাট সম্পৰ্কে ছাত্ৰ-ছাত্ৰী সকলে জ্ঞান লাভ কৰিব।

**Course: ASM-RE-5016 শংকৰদেৱ**

**Course Outcome:**

অসমীয়া সাহিত্যৰ যুগন্ধৰ প্ৰতিভা শংকৰদেৱৰ বৰগীত, কীৰ্তন ঘোষা, কাব্য আৰু নাট সম্পৰ্কে ছাত্ৰ-ছাত্ৰী সকলে জ্ঞান লাভ কৰিব।

**Course: ASM-RG-5016 শংকৰদেৱ**

**Course Outcome:**

অসমীয়া সাহিত্যৰ যুগন্ধৰ প্ৰতিভা শংকৰদেৱৰ বৰগীত, কীৰ্তন ঘোষা, কাব্য আৰু নাট সম্পৰ্কে ছাত্ৰ-ছাত্ৰী সকলে জ্ঞান লাভ কৰিব।

**Course: ASM-SE-5014 আবৃত্তি কলা**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে কবিতা আবৃত্তিৰ তাত্ত্বিক আৰু প্ৰায়োগিক জ্ঞান লাভ কৰিব।

## SEMESTER VI

### Course: ASM-HC-6016 অসমীয়া চুটিগল্প আৰু উপন্যাস

#### Course Outcome:

ছাত্ৰ-ছাত্ৰী সকলে এই পাঠ্যৰ জৰিয়তে অসমীয়া চুটিগল্প আৰু উপন্যাসৰ ধাৰা সম্পৰ্কে অৱহিত হোৱাৰ লগে লগে অসমীয়া ভাষাৰ গুৰুত্বপূৰ্ণ গল্প আৰু উপন্যাসৰ বসাহাদনৰ লগতে ইয়াৰ বিদ্যায়তনিক গুৰুত্ব উপলব্ধি কৰিব।

### Course: ASM-HC-6026 অসমীয়া লিপিৰ ইতিহাস

#### Course Outcome:

এই পাঠ্যৰ জৰিয়তে ছাত্ৰ-ছাত্ৰী সকলে অসমীয়া লিপিৰ ইতিহাসৰ আভাস পোৱাৰ লগতে অসমৰ শিলালিপি, অসমৰ তাম্ৰলিপি সম্পৰ্কেও জ্ঞান লাভ কৰিব।

### Course: ASM-HE-6046 অসমীয়া ভাষাৰ উপভাষা

#### Course Outcome:

এই পাঠ্যৰ জৰিয়তে অসমীয়া ভাষাৰ বিভিন্ন আঞ্চলিক আৰু সামাজিক উপভাষাৰ বিষয়ে জ্ঞান লাভ কৰিব। তদুপৰি উপভাষা প্ৰয়োগ সম্বলিত পাঠ সংযোগৰ জৰিয়তে এনে উপভাষাৰ সাহিত্যিক প্ৰয়োগৰ ধাৰণা ছাত্ৰ-ছাত্ৰীয়ে লাভ কৰিব।

### Course: ASM-HE-6056 প্ৰকল্প

#### Course Outcome:

এই কাকতখনৰ বাবে ছাত্ৰ-ছাত্ৰীয়ে বিভাগীয় শিক্ষকৰ তত্ত্বাৱধানত কোনো গুৰুত্বপূৰ্ণ স্থান, উৎসৱ-পাৰ্বণ, লোকাচাৰ, লোকপৰিৱেশ্য কলা, লোক সাহিত্য, লোকভাষা আদি যিকোনো এটা বিষয়ত প্ৰকল্প প্ৰস্তুত কৰিব লাগিব।

**Course: ASM-RE-6016 ছন্দ আৰু অলংকাৰ**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে ছাত্ৰ-ছাত্ৰীয়ে অসমীয়াত ব্যৱহৃত ছন্দ আৰু অলংকাৰৰ তাত্ত্বিক জ্ঞান লাভ কৰিব।

**Course: ASM-RG-6016 ছন্দ আৰু অলংকাৰ**

**Course Outcome:**

এই পাঠ্যৰ জৰিয়তে ছাত্ৰ-ছাত্ৰীয়ে অসমীয়াত ব্যৱহৃত ছন্দ আৰু অলংকাৰৰ তাত্ত্বিক জ্ঞান লাভ কৰিব।

**Course: ASM-SE-6014 অসমীয়া আখৰ-জোঁটনি**

**Course Outcome:**

অসমীয়া ভাষা বৃত্তিগতভাৱে ব্যৱহাৰ কৰিবলৈ শুদ্ধ আখৰ-জোঁটনিৰ জ্ঞান অপৰিহাৰ্য। এই পাঠ্যৰ জৰিয়তে ছাত্ৰ-ছাত্ৰীয়ে অসমীয়া আখৰ-জোঁটনিৰ নিয়ম আৰু কৌশল সম্পৰ্কীয় জ্ঞান লাভ কৰিব।

**COURSE OUTCOMES**  
**DEPARTMENT OF BODO**

**SEMESTER-I**

**Course: BOD-HC-1016: History of Bodo Literature (Early Period)**

**Course Outcomes:** On completion of the course, the students will be able to

- Know about the contribution of the Missionaries in Bodo Literature
- Know about the contribution of the native speakers in Bodo Literature

**Course: BOD-HC-1026: Literary Criticism (Western)**

**Course Outcomes:** On completion of the course, the students will be able to

- Know about the concept of literary criticism
- Know about different genres of literature (Poetry, Drama, Novel, Short story)

**Course: BOD-AE-1014: Communicative Bodo**

**Course Outcomes:** On completion of the course, the students will be able to

- Know about the spelling system used in writing Bodo language
- Know about practical application of Bodo language in Print and Electronic Media, Administrative terminology.

**Course: BOD-HG/RC-1016: Textual Analysis on Bodo Drama (Early period)**

**Course Outcomes:** On completion of the course,

- The students will be able to know about the background of Bodo drama
- The students will be familiarised with Bodo Drama-Dwrswn Jwhwlaio, Obongni Phao Dukhashri.

## **SEMESTER-II**

### **Course: BOD-HC-2016: History of Bodo Literature (Modern Period, 1952 to 2015)**

**Course Outcomes:** On completion of the course, the students will be able to

- Know about the beginning of modern period of Bodo literature
- Familiarised with new trends and developments in Bodo literature

### **Course: BOD-HC-2026: Literary Criticism (Eastern)**

**Course Outcomes:** On completion of the course, the students will be able to

- Know about the theory and concept of eastern literary criticism
- Know about the uses of Rasa, Chanda and Alankara with special reference to Bodo literature

### **Course: BOD-HG/RC-2016: Non-fictional prose in Bodo**

**Course Outcomes:**

- The students will know the development of non-fictional prose in Bodo from early to modern period and critically review on prose.

## **SEMESTER-III**

### **Course: BOD-HC-3016: Introduction to Language and Linguistics**

**Course Outcomes:**

- Gain general idea about language and linguistics
- Learn about different levels of linguistic analysis

### **Course: BOD-HC-3026: Bodo Poetry (Early period)**

**Course Outcomes:** After completing the course, the students will

- Know about old Bodo poetry (from inception to 1952)
- Gain knowledge of mystic and romantic poems composed during the period
- Learn about the poems composed to bring social awareness among the mass

**Course: BOD-HC-3036: Introduction to Culture**

**Course Outcomes:** On completion of the course, the students will be able to know

- The general concept of culture
- The relation between folklore and society
- About diffusion, acculturation and assimilation of culture

**Course: BOD-SE-3014: Translation Studies**

**Course Outcomes:** After completing the course, the students will be able to

- Know about theory, concept and types of translation
- Learn about different types of translation into Bodo
- Review on Suitability and Acceptability of the translated Book “Wings of Fire” By Dr. A P J Abdul Kalam.

**Course: BOD-HG/RC-3016: Bodo Drama**

**Course Outcomes:** Students will

- Learn about development of drama in Bodo literature
- Gain knowledge about the influence of Assamese and Bangla drama in Bodo literature
- Know about Drama in Bodo-Horbadhi Khwmsi and Onlaynaya Zewaribadi Gwtharmwn

**Course: BOD-CC-3016: Kamal Kumar Brahma**

**Course Outcomes:**

- Know about life and works of litterateur Kamal Kumar Brahma
- Know about linguistic and literary contribution of Kamal Kumar Brahma

**SEMESTER-IV**

**Course: BOD-HC-4016: Modern Bodo Poetry (From 1952 to 2015)**

**Course Outcomes:**

- Know about the trend of modern Bodo poetry
- Learn about new symbols and techniques used by the poets.

**Course: BOD-HC-4026: Bodo Language**

**Course Outcomes:** On completion of this course, the students will know

- About the origin and development of the Bodo language
- Present status of Bodo language and language variation.

**Course: BOD-HC-4036: Bodo Culture**

**Course Outcomes:** The students will know

- About Bodo society and culture
- About cultural elements of the Bodo

**Course: BOD-SE-4014: Manuscript Preparation**

**Course Outcomes:**

- Students will learn manuscript preparation and use of punctuations and symbols

- Students will know the benefits of editing and learn taking manuscripts in MS word & PageMaker

**Course: BOD-HG/RC-4016: Bodo Fiction**

**Course Outcomes:** On completion of this course the students will be familiar with Bodo novels and Bodo short stories

**Course: BOD-CC-4016: Nilkamal Brahma**

**Course Outcomes:**

- Come to know about life and works of litterateur Nilkamal Brahma
- Come to know about literary contributions of Nilkamal Brahma in different genres of literature

**SEMESTER-V**

**Course: BOD-HC-5016: Manoranjan Lahary**

**Course Outcomes:** After completing this course, the students will know about life and literary works of Manoranjan Lahary.

**Course: BOD-HC-5026: Structure of Bodo Language**

**Course Outcomes:**

- The students will come to know about phonology of Bodo language.
- The students will come to know about the structure of morphology, syntax and vocabulary of Bodo language.

**Course: BOD-HE-5016: Bodo Folk-Literature**

**Course Outcomes:** After completing this course, the students will be able to

- Know about Bodo folk-literature and its sub-division
- Know about different genres of Bodo folk-literature.

**Course: BOD-HE-5026: BOD-HE-5026 Dialects of Bodo Language**

**Course Outcomes:**

- Students will be able to explain dialect and dialectology of Bodo language
- Students will be able to explain Bodo dialects and its uses in literature.

**Course: BOD-SE-5014: Costume and Textile Design of the Bodos**

**Course Outcomes:**

- Can come to know about costume and textile design of the Bodos
- Can come to know about changing trend of costume and textile design from tradition to modernity

**Course: BOD-RE-5016: Bodo Folk-Literature**

**Course Outcomes:**

- Come to know about Bodo folk-literature and its sub-division
- Come to know about different genres of Bodo folk-literature

**Course: BOD-RG-5016: Children Literature**

**Course Outcomes:**

- Come to know about development of children literature in Bodo
- Review of few children literature in Bodo

## SEMESTER-VI

### **Course: BOD-HC-6016: Contribution of women writers in Bodo literature**

**Course Outcomes:** After completion of this course, the students will be able

- Know about women writings in Bodo
- Contribution of women writers in different genres of Bodo literature.

### **Course: BOD-HC-6026: Cognate Languages of the Bodo**

**Course Outcomes:** After completion of this course, the students will be able to

- Know about Bodo group of languages and their common characteristics
- The students will be able to compare the phonology of Garo, Dimasa, Rabha, Kokborok and Tiwa with the phonology of Bodo language.
- The students will be able to compare the morphology of Garo, Dimasa, Rabha, Kokborok and Tiwa with the morphology of Bodo language.
- The students will be able to compare the vocabulary of Garo, Dimasa, Rabha, Kokborok and Tiwa with the vocabulary of Bodo language.

### **Course: BOD-HE-6016: Life Writing in Bodo**

**Course Outcomes:**

- Students will be able to explain about life writing and its types
- Students will be able to know biography and travel works in Bodo

### **Course: BOD-HE-6026: Dissertation Writing**

**Course Outcomes:** The students will be able to prepare a dissertation by using research methodology

**Course: BOD-SE-6014: Food processing system of the Bodos: Tradition to Modernity**

**Course Outcomes:** Come to know about the food processing system of the Bodos from past to present

**COURSE OUTCOMES**  
**DEPARTMENT OF ECONOMICS**

**SEMESTER I**

**Course: ECO-HC-1016 MICROECONOMICS**

**Course Outcome:**

- The students will learn the basic principles of microeconomic theory.
- The students will learn the application of microeconomic concepts to analyze real-life situations.

**Course: ECO-HC-1026 MATHEMATICAL METHODS IN ECONOMICS–I**

- To transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general.

**ECO-HG-1016 FUNDAMENTALS OF MICROECONOMICS**

- After the completion of this paper, the students will be able to explain the basic principles of the Microeconomics.

**SEMESTER II**

**ECO-HC-2016 INTRODUCTORY MACROECONOMICS**

- After the completion of this paper, the students will be able to explain the basic concepts of Macroeconomics.
- The students will develop an understanding of the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.

## **ECO-HC-2026 MATHEMATICAL METHODS IN ECONOMICS – II**

- After the completion of this course students will be able to explain the basic concepts of Mathematical Methods in Economics-II.
- They will be able to illustrating the method of applying mathematical techniques to economic theory in general.

## **ECO-HG-2016 MICROECONOMIC THEORY**

- After completion of this paper, the students will be able to explain the basic fundamentals of the Microeconomics.
- They will be able to describe all the basic concepts of the Microeconomic Theory confidently.

## **SEMESTER III**

### **ECO-HC-3016 INTERMEDIATE MICROECONOMICS-I**

- The students will develop the knowledge of microeconomic theory to formally analyze the behaviour of individual agents.
- The students will learn about the behaviour of the consumer and the producer and also the behaviour of a competitive firm.

### **ECO-HC-3026 INTERMEDIATE MACROECONOMICS-I**

- This course introduces the students to formal modelling of a macro-economy in terms of analytical tools.
- The students will be familiarised with various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context.
- The students will be acquainted with various theoretical issues related to an open economy.

### **ECO-HC-3036 STATISTICAL METHODS FOR ECONOMICS**

- The students will learn about the basic concepts and terminology that are fundamental to statistical analysis and inference. It then develops the notion of probability, followed by probability distributions of discrete and continuous random variables and of joint distributions. This is followed by a discussion on sampling techniques used to collect survey data.
- The course introduces the notion of sampling distributions that act as a bridge between probability theory and statistical inference.
- Students will be familiarised with the statistical inference that include point and interval estimation.

### **ECO-HG-3016 FUNDAMENTALS OF MICROECONOMICS**

- This course introduces students to the basic concepts in Macroeconomics.
- The students will be familiarised with the definition, measurement of the macroeconomic variables like GDP, consumption, savings, investment and balance of payments and the theories of determining GDP in the short run.

### **ECO-SE-3014 DATA COLLECTION AND PRESENTATION**

- This course helps students in understanding use of data, presentation of data using computer soft wares like MS-Excel.
- Students will be able to prepare questionnaires/interview schedules, collection of both primary and secondary data and its presentation.
- Students will also be able to prepare a report on collected data.

## **SEMESTER IV**

### **ECO-HC-4016 INTERMEDIATE MICROECONOMICS – II**

- The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It covers general equilibrium and welfare, imperfect markets and topics under information economics.

### **ECO-HC-4026 INTERMEDIATE MACROECONOMICS- II**

- The students will be familiarised with the long run dynamic issues like growth and technical progress. It also provides the micro-foundations to the various aggregative concepts used in the previous course.

### **ECO-HC-4036 INTRODUCTORY ECONOMETRICS**

- The students will know the basic econometric concepts and techniques.
- The students will be familiarised with the statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models, consequences of and tests for misspecification of regression models.

### **ECO-HG-4016 MACROECONOMIC THEORY**

- The students will be familiarised with various theories of determination of National Income in greater detail, concept of inflation, its relationship with unemployment and some basic concepts in an open economy.

### **ECO-SE-4014 DATA ANALYSIS**

- This course discusses how data can be summarized and analysed for drawing statistical inferences.
- The students will be acquainted with the use of statistical software's like SPSS/PSPP to analyse data.

## **SEMESTER V**

### **ECO-HC-5016 INDIAN ECONOMY-I**

- This course will familiarise the students with major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points.

### **ECO-HC-5026 DEVELOPMENT ECONOMICS-I**

- This course will provide knowledge on alternative conceptions of development and their justification, aggregate models of growth and cross-national comparisons of the growth experience that can help evaluate these models. The axiomatic basis for inequality measurement is used to develop measures of inequality and connections between growth and inequality are explored. The course ends by linking political institutions to growth and inequality by discussing the role of the state in economic development and the informational and incentive problems that affect state Governance.

### **ECO-HE-5026/ECO-RE-5026 (DSE) MONEY AND FINANCIAL MARKETS**

- The students will be familiarised with the theory and functioning of the monetary and financial Sectors of the economy and the organization, structure and role of financial Markets and institutions.
- The students will be able to discuss interest rates, monetary management and Instruments of monetary control, Financial and banking sector reforms and monetary Policy with special reference to India

### **ECO-HE-5036 PUBLIC FINANCE**

- The students will be familiarised with the efficiency and equity aspects of taxation of the centre, states and the local governments and the issues of fiscal federalism and decentralisation in India. The course will be useful for students aiming towards careers in the government sector, policy analysis, business and journalism.

### **ECO-RE- 5026 MONEY AND BANKING**

- The students will be familiarised with the theory and functioning of the monetary and financial sectors of the economy, organisation structure and role of financial markets and institutions.

- The students will also learn about the interest rates, monetary management and instruments of monetary control, financial and banking sector reforms and monetary policy with special reference to India.

#### **ECO-RE-5016 ECONOMIC DEVELOPMENT AND POLICY IN INDIA-I**

- This course will help the students understand the major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post- Independence period.

#### **ECO-RG-5016 ECONOMIC DEVELOPMENT AND POLICY IN INDIA-I**

- This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post- Independence period

### **SEMESTER VI**

#### **ECO-HC-6016 INDIAN ECONOMY-II**

- The students will be able to examine sector-specific policies and their impact in shaping trends in key economic indicators in India.
- The course will help the students in understanding the major policy debates and evaluate the Indian empirical evidence.

#### **ECO-HC-6026 DEVELOPMENT ECONOMICS-II**

- The students will be familiarised with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development.

### **ECO-HE-6016(DSE) ENVIRONMENTAL ECONOMICS**

- The students will be acquainted with the economic causes of environmental problems. The students will be familiarised with various topics like economic principles that are applied to environmental questions and their management through various Economic institutions, economic incentives and other instruments and policies, economic implications of environmental policy, valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental Projects such as cost-benefit analysis and environmental impact assessments.
- The students will also be familiarised with the international environmental problems.

### **ECO-HE-6026(DSE) INTERNATIONAL ECONOMICS**

- To explain the composition, direction and consequences of international trade, and the determinants and effects of trade Policy, models of open economy macroeconomics focusing on national policies as well as international monetary systems.
- analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years. Although the course is based on abstract theoretical models, students will also be exposed to real-world examples and case studies.

### **ECO-RE-6016 ECONOMIC DEVELOPMENT AND POLICY IN INDIA-II**

- This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post- Independence period

### **ECO-RG-6016 ECONOMIC DEVELOPMENT AND POLICY IN INDIA-II**

- This course will help the students examine sector specific trends in key indicators and their implications in the post- Independence period

## **COURSE OUTCOMES**

### **DEPARTMENT OF EDUCATION**

It aims to develop a holistic and multidimensional understanding of the topics of Education. It attempts to approach new areas of learning, develop competencies in the students thereby opening various avenues for self-discovery, academic understanding and employment.

### **SEMESTER I**

#### **Course: EDU-HC-1016 PRINCIPLES OF EDUCATION**

**Course Outcomes:** After completion of this course the learner will be able to:

- Explain the important concepts of education, curriculum, democracy, discipline and freedom.
- Develop knowledge about different aims of education, various types of curriculum, correlation of studies and forms of discipline.
- Familiarise with democratic idea of modern education.

#### **Course: EDU-HC-1026 PSYCHOLOGICAL FOUNDATIONS OF EDUCATION**

**Course Outcomes:** After completion of this course the learner will be able to:

- Understand the relationship between education and psychology.
- Explain the need of educational psychology in teaching learning process.
- Describe the nature and theories of learning and role of motivation in learning.
- Understand the concept of memory, forgetting, attention and interest.
- Understand intelligence, its theories and measurement.
- Acquainted with different types of personality and the adjustment mechanism.
- Develop expertise on different laboratory practical such as, Recall and Recognition, Trial and Error learning, Span of attention.

**Course: EDU-HG/RC-1016 FOUNDATIONS OF EDUCATION**

**Course Outcomes:** After completion of this course the learner will be able to

- Explain the principles of education
- Gain knowledge about different various forms and aims of education
- Understand the concept and importance of discipline and freedom.
- Familiarised with the concept of emotional and national integration and international understanding.

**SEMESTER II**

**Course: EDU-HC-2016 PHILOSOPHICAL AND SOCIOLOGICAL FOUNDATION OF EDUCATION**

**Course Outcomes:** After completion of this course the learner will be able to:

- Know the concept of philosophy and its relationship with education.
- Explain the educational implications of different Indian schools of philosophy.
- Explain the educational implications of different Western schools of philosophy.
- Know the concept of sociology and examine its relationship with education.
- Develop understanding about the concept of educational sociology, social groups and socialisation.

**Course: EDU-HC-2026 DEVELOPMENT OF EDUCATION IN INDIA-I**

**Course Outcomes:** After completion of this course the learner will be able to:

- Recount the concept of Ancient Indian education system
- Describe the education system in Ancient India, particularly Vedic Education
- Examine the education system in Medieval India.
- Analyse the education system during British Period

**Course: EDU-HG/RC-2016 PSYCHOLOGY OF ADOLESCENTS**

**Course Outcomes:** After completion of this course the learner will be able to:

- Understand the period of adolescence, its developmental aspects, and the significance of the adolescence period in human life
- Examine various problems associated with adolescence period.

**SEMESTER III**

**Course: EDU-HC-3016 DEVELOPMENT OF EDUCATION IN INDIA-II**

**Course Outcomes:** After completion of this course the learner will be able to:

- Understand the educational situation during the time of Independence
- Explain the recommendations and educational importance of different Education Commission and Committees in post Independent India
- Analyse various educational policies and programme such as the National Policy on Education, RMSA, RUSA, SSA etc.

**Course: EDU-HC-3026 EDUCATIONAL TECHNOLOGY AND TEACHING METHODS**

**Course Outcomes:** After completion of this course the learner will be able to:

- The students will be able to understand the meaning of Educational Technology and its implication in teaching learning process.
- Acquaint the students with innovations in the field of education through technology
- Understand about various methods and devices of teaching
- Acquaint students with levels of teaching, strategies of effective teaching and classroom management

**Course: EDU-HC-3036 VALUE AND PEACE EDUCATION**

**Course Outcomes:** After completion of this course the learner will be able to:

- Understand the concept and meaning of value.
- Become aware about the role of educational institutions in building a value-based society.
- Understand the meaning and concept of peace and its importance in human life.
- Understand the meaning and importance of peace education and its relevance at national and international level.
- Identify the different issues/ challenges in imparting peace education.
- Identify the strategies and skills in promoting peace education at institutional level.

**Course: EDU-HG/RC-3016 GUIDANCE AND COUNSELLING**

**Course Outcomes:** After completion of this course the learner will be able to:

- Understand the concept, need and importance of Guidance and Counselling
- Know different types and approaches to Guidance and Counselling
- Acquaint the students with the organization of guidance service and school guidance clinic
- Understand the challenges faced by the teacher as guidance worker.
- Discuss the role of head of the institutions, teacher and parents in guidance and counselling

**Course: EDU-SEC- 3014 PUBLIC SPEAKING SKILL**

**Course Outcome:**

- After completing this course, students will be able to acquire the capacities of public speaking skill.

## **SEMESTER IV**

### **Course: EDU-HC-4016 GREAT EDUCATIONAL THINKERS**

**Course Outcomes:** After completion of this course the learner will be able to:

- Learn the philosophy of life of different educational thinkers and their works.
- Learn about the views of thinkers in educational context.
- Learn about relevance of some of their thoughts at present day context.

### **Course: EDU-HC-4026 EDUCATIONAL STATISTICS AND PRACTICAL**

**Course Outcomes:** After completion of this course the learner will be able to:

- Develop an understanding of the basic concept of statistics and different statistical procedures used in Education.
- Represent educational data through graphs.
- Learn Normal Probability Curve and its applications in Education.
- Calculate mean, median and mode following the procedures.

### **Course: EDU-HC-4036 EMERGING ISSUES IN EDUCATION**

**Course Outcomes:** After completion of this unit, students will able to

- Acquaint the students with the various emerging issues in education in the higher education system.
- Address various problems and challenges of education in India at all levels.

### **Course: EDU-HG/RC-4016 HISTORY OF EDUCATION IN INDIA**

**Course Outcomes:** After completion of this course the learner will be able to:

- Analyse the education system during British Period
- Understand the Educational situation during the time of Independence

- Explain the recommendations and educational importance of different Education Commission and Committees in post Independent India
- Analyse the National Policy on Education in different tomes
- Accustom with the recent Educational Development in India.

**Course: EDU-SEC-4014 WRITING BIODATA AND FACING AN INTERVIEW**

**Course Outcome:**

- After completing this course, students will be able to write a bio-data scientifically and will develop confidence to face different types of interviews.

**SEMESTER V**

**Course: EDU-HC-5016 MEASUREMENT AND EVALUATION IN EDUCATION & PRACTICAL**

**Course Outcomes:** After completion of this course the learner will be able to:

- Understand the concept of measurement and evaluation in education.
- Familiarised with the general procedure of test construction and characteristics of a good test.
- Develop an understanding of different types of educational tests and their uses.
- Acquaint the students with psychological test particularly, Ink Blot Test, Free Association Test t, Control Association Test, Personality Test.

**Course: EDU-HC-5026 GUIDANCE AND COUNSELLING**

**Course Outcomes:** After completion of this course the learner will be able to:

- Understand the concept, need and importance of Guidance and Counselling
- Know the different types and approaches to Guidance and Counselling

- Familiarised with the organization of guidance service and school guidance clinic
- Understand the challenges faced by the teacher as guidance worker

**Course: EDU-HE-5026 DEVELOPMENTAL PSYCHOLOGY**

**Course Outcomes:** After completion of this course the learner will be able to:

- Understand the basic concepts relating to Developmental Psychology
- Learn about heredity and environmental factors affecting pre-natal development
- Understand the development aspects during infancy, childhood and adolescence
- Understand the importance of adolescence period and problems associated with this stage.

**Course: EDU-HE/RE-5046 TEACHER EDUCATION IN INDIA**

**Course Outcomes:** After completion of this course the learner will be able to:

- Explain the Concept, Scope, Aims & Objectives and Significance of teacher education
- Familiarised with development of Teacher Education in India
- Describe different organising bodies of teacher education in India and their functions in preparation of teachers for different levels of education
- Learn innovative trends and recent issues in teacher education, and critically analyse the status of teacher education in India
- Understand and conceive the qualities, responsibilities and professional ethics of teachers

**Course: EDU-RG-5016 DISTANCE EDUCATION**

**Course Outcomes:** After completion of this course the learner will be able to:

- Understand the concept of distance education and its growth in India and Assam

- Explain the need and importance of distance education
- Familiarised with the different forms and methodologies applied in distance education
- Familiarised with different instructional strategies of distance education

**Course: EDU-SEC-5014 EXTENSION ACTIVITIES**

**Course Outcomes:** After completing this course, students will be able to do extension activities.

**SEMESTER VI**

**Course: EDU-HC-6016 EDUCATION AND DEVELOPMENT**

**Course Outcomes:** After completion of this course the learner will be able to:

- Understand the relation between education and development
- Analyse Educational development in the post globalization era
- Explain the role of education in community development, human resource development and
- Understand economic and political awareness through education.

**Course: EDU-HC-6026 PROJECT**

**Course Outcomes:** After completion of this course the learner will be able to

- Explain the process of conducting a Project.
- Prepare a Project Report.

**Course: EDU-HE/RE/RG-6016 MENTAL HEALTH AND HYGIENE**

**Course Outcomes:** After completion of this course the learner will be able to:

- Familiarised with the fundamentals and development of mental health

- Understand the characteristics of a mentally healthy person.
- Understand the concept and importance of mental hygiene and its relationship with mental health.
- Acquire knowledge about the principles, factors promoting mental health and the role of home, school, and society in maintaining proper mental health.
- Learn the meaning and problem of adjustment and also the different adjustment mechanisms.
- Familiarise with the concept and issues of positive psychology, mental health of women, role of WHO and stress management.

**Course: EDU-HE-6036 EDUCATIONAL MANAGEMENT**

**Course Outcomes:** After completion of this course the learner will be able to

- Develop an understanding of the basic concept of educational management.
- Know about the various resources in education
- Understand the concept and importance of educational planning
- Discuss the financial resources and financial management in education.

**Course: EDU-SEC-6014 DEVELOPING TEACHING SKILL**

**Course Outcome:**

- After completing this course, students will be able to develop understanding about different teaching skills which are used in classroom transaction.

**COURSE OUTCOMES**  
**DEPARTMENT OF ENGLISH**

**SEMESTER-I**

**Course: ENG-HC-1016 Indian Classical Literature**

Indian Classical Literature offers a rich and diverse canvas that spans across genres like drama, poetry, the epic narrative as well as short fictional fables, to name a few, it is essential that students studying English literature are familiar with at least a few of these.

**Course Outcomes:**

- The students will be able to think laterally about literatures of the world, and the possibility of cultural exchange.

**Course: ENG-HC-1026 European Classical Literature**

**Course Outcomes:**

- To familiarize the students with classical writing in Europe through the study of representative texts belonging to the Classical Period.
- To draw attention to the purposefulness of the creative exercise of writers such as Horace, Homer, Sophocles and Plautus.

**Course: ENG-HG/RC-1016 Individual and Society**

**Course Outcomes:**

- Understand the relationship between the individual writer and the society about/in which she writes
- Develop skill in analysing the author's representation of society and the individual in interaction and write critiques drawing out.
- Learn to distinguish between literary representation and actual character and milieu

**Course: ENG-CC-1016 English I**

**Course Outcomes:**

- The students will be able to read and respond to representation of issues in contemporary life and culture in the English Language.

**SEMSTER II**

**Course: ENG-HC-2016 Indian Writing in English**

**Course Outcomes:**

- Develop familiarity with the issues of politics of language and gender, nationalism and modernity pertaining to pre and post-Independence India that have been responsible for the emergence of Indian English literature
- Understand the place of English Writing in India in the larger field of English Literature
- Learn to discuss critically the use of literary forms of the novel, poetry and drama by Indian English writers in distinctive ways against Indian historical and cultural contexts

**Course: ENG-HC-2026 British Poetry and Drama: 14th to 17th Centuries**

**Course Outcomes:**

- To familiarise the students with Poetry and drama in British Literature from the 14th to the 17th centuries.
- The students will have the knowledge on the seminal issues and preoccupations of the writers and their ages.

**Course: ENG-HG/RC-2016 Modern Indian Literature**

**Course Outcomes:**

- To familiarize students with different translated works from Indian literature.

- The students also come to understand different historical and cultural backgrounds of the various Indian literature.

**Course: ENG-HG-2026 Contemporary India: Women and Empowerment**

**Course Outcomes:** The learner will be equipped with

- A historical understanding of the space accorded to women in India through history
- An understanding of the manner in which the social construction of gender comes about.
- The ability to critique the given and stereotypical notions of such constructions.

**Course: ENG-CC-2016 English II**

**Course Outcomes:**

- To enable students to appreciate poetry across a varied landscape.
- To make students develop their writing skill.

**SEMESTER III**

**Course: ENG-HC-3016 History of English Literature and Forms**

**Course Outcomes:**

- Acquire a sense of the historical development of English Literature and the major literary form.
- Gain understanding of the contexts in which literary forms and individual texts emerge.
- Learn to analyze texts as representative of broad generic explorations.

**Course: ENG-HC-3026 American Literature**

**Course Outcomes:**

- To acquaint the students with the main currents of American literature in its social and cultural contexts.

**Course: ENG-HC-3036 British Poetry and Drama: 17th and 18th Centuries**

**Course Outcomes:**

- To familiarize the students with British literature in the 17th and 18th centuries, a time-period
- To look at the economic, political and social changes in (primarily) Britain during this period, such as the shifts from the Puritan Age to the Restoration and Neoclassical periods.
- To familiarize the students with the larger contexts that generated such literatures as well as the possible impacts of the literature on society.

**Course: ENG-HG/RC-3016 British Literature**

**Course Outcomes:** The students will be equipped with

- The major literary traditions of British life and culture through a study of texts in different genres.

**Course: ENG-SE-3014 CREATIVE WRITING**

**Course Outcomes:**

- Students will develop the understanding of the creative genres focusing on fiction, non-fiction and poetry.

**Course: ALT-CC-3016 Alternative English I**

**Course Outcomes:**

- Students will be equipped with the major genres of English literature.

## **SEMESTER IV**

### **Course: ENG-HC-4016 British Literature: The 18th Century**

#### **Course Outcomes:**

- To familiarize the students with British literature in the 18<sup>th</sup> century
- To enables the students to appreciate the works of women writers of the age.

### **Course: ENG-HC-4026 British Romantic Literature**

#### **Course Outcomes:**

- To familiarise students with the poetry of Burns, Black, Wordsworth, Coleridge, Shelley and Keats.
- To offer an understanding of the relationship between human and nature through the select texts.

### **Course: ENG-HC-4036 British Literature: The 19th Century**

#### **Course Outcomes:**

- To familiarize the students with ground-breaking efforts of the poets as well to the works of fiction writers who manage to consolidate and refine upon the achievements of the novelists of the previous era.

### **Course: ENG-HG/RC-4016 Literary Cross Currents: Forms: Prose, Poetry, Fiction & Play**

#### **Course Outcomes:**

- To acquaint the students with different literary forms and their cultural contexts.

### **Course: ENG-HG-4026 Language, Literature and Culture**

#### **Course Outcomes:**

- The students will be able to explain the relationship between language, literature and culture.

**Course: ENG-SE-4014 Translation: Principles and Practice**

**Course Outcomes:**

- The students will learn the basic skills in translation.

**Course: ALT-CC-4016 Alternative English II**

**Course Outcomes:** On completion of this course, the students will be able to

- Understand literary representations and a writer's engagement with the social, cultural and political milieu.

**SEMESTER V**

**Course: ENG-HC-5016 British Literature: The 20th Century**

**Course Outcomes:**

- Students will get acquainted with the spirit of modernism with its experimentation with new forms and idioms and its cosmopolitan willingness to open itself up to influences coming from shores.
- Students will also get acquainted with the ethos of postmodernism through a reading of recent poetic and fictional works.

**Course: ENG-HC-5026 Women's Writing**

**Course Outcomes:** On completion of this course, the students will be able

- Know the 19th and 20th century women writers from different geographical and socio-cultural backgrounds.

- Analyse the women writers' handling of the different genres to articulate their women-centric experiences.

**Course: ENG-HE-5016 Popular Literature**

**Course Outcomes:**

- The students will be familiarised with the nature of 'popular' literature as a genre and the critical ideas underpinning the theorization of popular literature.

**Course: ENG-HE-5026 Modern Indian Writing in English Translation**

**Course Outcomes:**

- To make the students engage with the Indian literary works in different socio-cultural contexts.
- The students will be able to appreciate the richness and diversity of Indian literature written in the regional languages.

**Course: ENG-HE-5036 Literature of the Indian Diaspora**

**Course Outcomes:**

- To familiarize students with the diasporic experience with particular reference to Indian diasporic writers

**Course: ENG-HE-5046 Nineteenth Century European Realism**

**Course outcomes:**

- To make students understand European Realism in the nineteenth century.
- To develop the understanding of the gradual movement towards modernism in the twentieth century Europe.

**Course: ENG-HE-5056 Literary Criticism and Literary Theory**

**Course Outcomes:**

- The students will be familiarised with the shifts in literary interpretations and critical approaches so as to equip them while reading texts across genres.

**Course: ENG-HE-5066 Science Fiction and Detective Literature**

**Course Outcomes:**

- To make students understand the different narrative possibilities that emerged through the human fascination with crime, mystery and improbable occurrences.

**Course: ENG-RE-5016 Soft Skills**

**Course Outcomes:**

- The learners will understand and be aware about the importance, role and contents of soft skills.
- The students will improve the skills of communication, interaction, writing and documentation and thereby hone their confidence level.

**Course: ENG-RG-5016 Contemporary India: Women and Empowerment**

**Course Outcomes:** The learner will be equipped with

- A historical understanding of the space accorded to women in India through history.
- An understanding of the manner in which the social construction of gender comes about.
- The ability to critique the given and stereotypical notions of such constructions.

**Course: ENG-SE-5014 Technical Writing**

**Course Outcomes:**

- The student will be equipped with the skills of writing with a practical purpose, and also with specific forms of technical writing.

**SEMESTER VI**

**Course: ENG-HC-6016 Modern European Drama**

**Course Outcomes:**

- Students will know the innovative dramatic works of playwrights from different locations in Europe.
- Students will have an understanding of the emergence of avant garde movements and trends and dramatic devices and techniques during the period of modernism which eventually influenced theatrical practices in other nations of the world.

**Course: ENG-HC-6026 Postcolonial Literatures**

**Course Outcomes:**

- The students will be acquainted with the novels, short stories and poems from postcolonial literatures across the world.

**Course: ENG-HE-6016 Literature and Cinema**

**Course Outcomes:** The students will understand about the literature and e issues and practices of cinematic adaptations.

**Course: ENG-HE-6026 World Literatures**

**Course Outcomes:**

- To make the students familiar with the World Literatures.

**Course: ENG-HE-6036 Partition Literature**

**Course Outcomes:**

- To make the students familiar with the Partition Literature

**Course: ENG-HE-6046 Travel Writing**

**Course Outcomes:**

- To make the students familiar with the travel writing

**Course: ENG-HE-6056 Life Writing**

**Course Outcomes:**

- To make the students familiar with the life writing

**Course: ENG-HE-6066 Writings from North East India**

**Course Outcomes:**

- To make the students familiar with Writings from North East India

**Course: ENG-RE-6016 Academic Writing**

**Course Outcomes:**

- Students will develop the requisite proficiency in academic writing which involves the ability to write summaries, abstracts, reviews, reports, conference/seminar presentations etc.
- The students will be able to prepare bibliographies, citations and references for writing intended for publication in academic journals.

**Course: ENG-RG-6016 Cultural Diversity**

**Course Outcomes:**

- The students will develop understanding of cultural contexts, situations and the rich variety of practices.

**Course: ENG-SE-6014 Business Communication**

**Course Outcomes:**

- Students will gain a comprehensive idea of effective communication and its importance in the business and professional world.

**COURSE OUTCOMES**  
**DEPARTMENT OF GEOGRAPHY (UG)**

**SEMESTER I**

**Course: GGY-HC-1016 Geomorphology**

**Course Outcomes:**

- The students will learn that the earth is unstable and it is undergoing constant changes due to dynamic earth's processes.
- The students will come to know about the meaning and scope of geomorphology as a major branch of Physical Geography.
- The students will be able to realize the importance of geomorphological knowledge as applied in various developmental activities executed in different areas.

**Course: GGY-HC-1026 Cartographic Techniques**

**Course Outcomes:**

- Understanding the importance of various cartographic techniques in geographical study.
- General understanding of map type, map scale and map content.
- An acquaintance of different cartographic techniques for representation of various facts of physical and human geographic data of any area.

**Course: GGY-HG-1016/GGY-RC-1016 Physical Geography**

**Course Outcomes:**

- The students will learn that the earth is unstable and it is undergoing constant changes due to dynamic earth's processes.

- The students will come to know about the meaning and scope of geomorphology, which a major branch of Physical Geography.
- The students will be able to realize the importance of geomorphological knowledge as applied in various developmental activities executed on the land and over the earth's surface.

## **SEMESTER II**

### **Course: GGY-HC-2016 Human Geography**

#### **Course Outcomes:**

- The paper will be useful for students in developing ideas on human-environment issues that geographers usually address in the Anthropocene.
- The paper will be useful for students preparing for UGC NET/SLET exams and other competitive exams including the civil services.

### **Course: GGY-HC-2026 Climatology and Biogeography**

#### **Course Outcomes:**

- The paper will be useful for students in developing ideas on climate related aspects of geographical analyses.
- The paper will help provide theoretical insights and perspectives to students if they wish to pursue a research programme in future.
- Students will develop a basic understanding of the introductory concepts in biogeography.
- The paper be very useful for students preparing for UGC NET-JRF / SLET exam and other competitive exams including civil services.

### **Course: GGY-HG-2016/GGY-RC-2016 Human Geography**

#### **Course Outcomes:**

- The paper will be useful for students in developing ideas on human-environment issues that geographers usually address in the Anthropocene.
- The paper will be useful for students preparing for various competitive examinations including the civil services.

### **SEMESTER III**

#### **Course: GGY-HC-3016 Economic Geography**

##### **Course Outcomes:**

- The paper will be useful for students in developing ideas on how geographical aspects organise economic space and will offer perspectives to students if they wish to pursue a research programme.
- The paper will be useful for students preparing for UGC NET/SLET exams and other competitive exams including the civil services.

#### **Course: GGY-HC-3026 Geography of India with Special Reference to North-East India**

##### **Course Outcomes:**

- The paper will be useful for students in developing understanding on Indian geography and its various dimensions.
- It will also be useful for students preparing for various competitive examinations including civil services.

#### **Course: GGY-HC-3026 Quantitative Methods in Geography**

##### **Course Outcomes:**

- Thorough understanding of the statistical methods and techniques used in geographical studies;
- Understanding of tabulation, analysis and interpretation of geographical data.

**Course: GGY-HG-3016/GGY-RC-3016 Economic Geography**

**Course Outcomes:**

- This paper will be useful for the students in developing understanding on how geographical factors organize economic space, and to acquire knowledge about spatial patterns of various economic activities on the earth.

**Course: GGY-SE-3014 River Basin Studies**

**Course Outcomes:** At the end of the course, the students will be able to

- learn use of a few instruments like rotameter, planimeter, Dumpy Level, etc.
- learn the basics of morphometric analysis techniques.
- acquainted with the field methods of river studies in across-section.

**SEMESTER IV**

**Course: GGY-HC-4016 Environmental Geography and Disaster Management**

**Course Outcomes:**

- This paper will be useful for students in developing ideas on environmental issues including disasters that geographers usually address.
- This paper will be useful for students preparing for different competitive exams including the civil services.

**Course: GGY-HC-4026 Population and Settlement Geography**

**Course Outcomes:**

- The paper will be useful for students in developing ideas about spatio-temporal changes in the characteristics of population and settlement and the factors associated with them.

- The paper will be useful for students preparing for various competitive exams including the civil services.

**Course: GGY-HC-4036 Remote Sensing, GIS and GPS**

**Course Outcomes:**

- The paper remains useful for students in developing skills in spatial data analysis if they wish to pursue a research programme.
- The paper will be useful for students preparing for different competitive exams including the civil services.

**Course: GGY-SE-4024 Surveying Techniques**

**Course Outcomes:**

- Understanding the importance of various surveying techniques in geographical study.
- General understanding of preparation procedures of different types of plans and map.
- An acquaintance of different surveying techniques for representation of various spatial objects/Phenomena.

**Course: GGY-HG-4016/GGY-RC-4016 Geography of India with Reference N.E. India**

**Course Outcomes:**

- The paper will be useful for students in developing understanding on Indian geography and its various dimensions.
- The students will understand regional diversity of India with respect to its land, people and economy.
- The students will develop new insights among students on significant geographical dimensions of the country along with its north-eastern part.

## **SEMESTER V**

### **Course: GGY-HC-5016 Social and Political Geography**

#### **Course Outcomes:**

- The students will understand how geography influences political issues and their spatial dimensions.
- To appreciate the social and political dimensions of geographic phenomena.
- This course will help equip the students to comprehend various social and political aspects of phenomena and their interface within the realm of geography.

### **Course: GGY-HC-5026 Field Techniques in Geography**

#### **Course Outcomes:**

- This course will help students to proceed with a research problem and the steps she/he should adopt and the tools and craft to be employed for doing quality research.
- Students perceive fieldwork to be beneficial to their learning, because through it they experience ‘geographical reality’, and have deeper understanding of the subject.
- The students will have a chance to interact with respondents and collect data through questionnaire directly from the field.
- This course will develop understanding about designing and writing a field report.

### **Course: GGY-HE-5036 Urban Geography**

#### **Course Outcomes:**

- It seeks to develop new insights among students on the relevance of an urban geography and associated problems in a rapidly urbanizing world.
- The paper will be useful for students in developing ideas on how geographical factors organize urban spaces and how geographers seek to address various urban problems and issues.

- It will help build skills among students seeking advanced studies on urban development and planning.

**Course: GGY-HE-5046 Agricultural Geography**

**Course Outcomes:**

- It seeks to develop understanding among students about the significance of Agricultural Geography.
- To understand how different types of agriculture have developed in different areas and how they are similar to or different from one another.
- The students will develop ideas about agricultural practices and their distribution and characteristics.
- This paper will also be useful to the students in understanding the world agricultural systems.
- This paper will help develop understanding of location of agricultural activities and associated contemporary problems and challenges.

**Course: GGY-RE-5016 Environmental Geography and Disaster Management**

**Course Outcomes:**

- It seeks to develop new insights among students on the relevance of environmental studies from spatial perspective.
- The paper will be useful for students in developing ideas on environmental issues including disasters that geographers usually address.
- The paper will also be useful for students preparing for different competitive exams including the civil services.

## **SEMESTER VI**

### **Course: GGY-HC-6016 Geographical Thought**

#### **Course Outcomes:**

- This course introduces the students to the theoretical development of geography over time.
- This course helps the students to apply the historic and contemporary perspective to explain and approach the real-world geographic problems.

### **Course: GGY-HC-6026 Research Methods in Geography and Project Work**

#### **Course Outcomes:**

- To understand how to approach a research problem and to formulate research objectives and research questions in proper perspective. In addition, knowledge of formulation of hypothesis and testing, framing of questionnaires, techniques of collection of both qualitative and quantitative data and their analysis.
- To develop understanding of the basics and utility of review of literature and preparation of research report.
- This course will help the students to proceed with a research problem and the steps she/he should adopt and the tools and craft to be employed while doing quality research.

### **Course: GGY-HE-6036 Geography of Tourism**

#### **Course Outcomes:**

- The paper will be useful for students in developing ideas on how geographical factors tangent on tourism activities and how geographers seek to address issues of development and carrying capacities of varied environments.
- It will also build skills for students seeking to enrol in a research programme and/or provide openings for them to work with tourism/eco-tourism planning agencies.

**Course: GGY-HE-6046 Geography of Resources and Development**

**Course Outcomes:**

- This paper will be useful to students in developing ideas on different aspects of resources, and the linkages with development issues that geographers usually address.
- This paper will also be useful for students preparing for different competitive examinations including the civil services.
- To get acquainted with different concepts of development with special focus on economic development.

**Course: GGY-SE-6044 Field Techniques and Project work**

**Course Outcomes:**

- This course will help students to proceed with a research problem and the steps she/he should adopt and the tools and craft to be employed for doing quality research.
- Students perceive fieldwork to be beneficial to their learning, because through it they experience ‘geographical reality’, and have deeper understanding of the subject.
- The students will have a chance to interact with respondents and collect data through questionnaire directly from the field.
- This course will develop understanding about designing and writing a field report.

## **Course Outcomes**

### **DEPARTMENT OF HISTORY**

The course is framed in such a way that the students can get the updated as well as a holistic idea of the History of India and Assam. It also includes some papers based on the world History, so that the students can understand the current society, polity and economy of the world better. The specific course outcomes are stated below in detail.

### **SEMESTER I**

#### **Course HIS-HC-1016: HISTORY OF INDIA- I**

**Course Outcome:** On successful completion of this paper

- The students will be able to explore and effectively use historical tools in reconstructing the remote past of ancient Indian history.
- This course will also train the students to analyse the various stages of evolution of human cultures and the belief systems in the proto- history period.

#### **Course: HIS-HC-1026: SOCIAL FORMATIONS AND CULTURAL PATTERNS OF THE ANCIENT WORLD**

**Course Outcome:** On completion of this paper, the students will be able to

- Explain the processes and stages of evolution of the variety of cultural pattern throughout antiquarian periods in History.
- Relate the connections between the various Bronze Age civilizations in the ancient world as well as development of slave and polis societies in ancient Greece.

#### **Course: HIS-HG/RC-1016: History of India (from Earliest Times up to c. 1206)**

**Course Outcome:** On successful completion of this course, students will be able to

- Explain the emergence of state system in North India, development of imperial state structure and state formation in South India.
- Understand the changes and transformations in the polity, economy and society in early India and linkages developed through contacts with the foreign countries.

## **SEMESTER II**

### **Course: HIS-HC-2016: HISTORY OF INDIA- II**

**Course Outcome:** On successful completion of this course the students will be able to

- Explain the economic and socio-cultural connections, transitions and stratifications during the ruling houses, empires and the politico-administrative nuances of early Indian History from 300 BCE to 300 CE.

### **Course: HIS-HC- 2026: SOCIAL FORMATIONS AND CULTURAL PATTERNS OF THE MEDIEVAL WORLD**

**Course Outcome:** After the completion of this course, the students will be able to

- Analyze and explain the historical socio-political, administrative and economic patterns of the medieval world.
- Describe the emergence, growth and decline of various politico- administrative and economic patterns and the resultant changes therein

### **Course: HIS-HG/RC-2016: HISTORY OF INDIA (c.1206 to 1757)**

**Course Outcome:** The completion of this course will help the students to able to

- Analyze the political and social developments in India between 1206-1757.
- Explain the formation of different States along with their administrative apparatuses, the society, economy and culture of India in the 13<sup>th</sup> to mid-18<sup>th</sup> century period.

### **SEMESTER III**

#### **Course: HIS-HC- 3016: HISTORY OF INDIA III (c. 750 - 1206)**

**Course Outcome:** The completion of this paper will enable the students to

- Relate and explain the developments in India in its political and economic fields and its relation to the social and cultural patterns therein in the historical time period between c.700 to 1206.
- Analyse India's interaction with another wave of foreign influence and the changes brought in its wake in the period.

#### **Course: HIS-HC- 3026: RISE OF THE MODERN WEST – I**

**Course Outcome:** On completion of this course, the students will be able to

- Explain the major trends and developments in the Western world between the 14th to the 16th century CE.
- Explore and analyse the significant historical shifts and events and the resultant effects on the civilizations of Europe in the period.

#### **Course: HIS-HC- 3036: HISTORY OF INDIA IV (c.1206 - 1550)**

**Course Outcome:** On successful completion of this course students will be able to

- Explain the political and administrative history of medieval period of India from 1206 to 1550 AD.
- Analyse the sources of history, regional variation, social, cultural and economic set up of the history.

#### **Course: HIS-HG/RC-3016: HISTORY OF INDIA (c. 1757 to 1947)**

**Course Outcome:**

- The students will understand the major factors that led to the establishment and consolidation of British rule in India.
- They will also be able to identify the process of growth of resistance against British colonial rule and the eventual growth of Indian nationalist movement, which ultimately led to the end of the British rule in the country.

**Course: HIS-SE-3014: Historical Tourism in North East India**

**Course Outcome:** After completing this course, the students will be able to

- Explain Tourism in North East India with special reference to the historical monuments, cultural and ecological elements and places of the north east India as tourist and heritage sites of the nation.
- Relate to the growing vocation of tourism as an industry and the applicability of historical knowledge for its growth.

**SEMESTER IV**

**Course: HIS-HC- 4016: RISE OF THE MODERN WEST – II**

**Course Outcome:** After the successful completion of this course, the student will be able to

- Explain the political and intellectual currents in Europe in the Modern Age.
- Relate the circumstances and casual factors of the intellectual currents, revolutionary current of both Europe and America at the beginning of the Modern Age.

**Course: HIS-HC- 4026: HISTORY OF INDIA V (c. 1550 - 1605)**

**Course Outcome:** On the completion of this course, the students will be able to

- Analyze the circumstances, historical shifts and foundations of a variety of administrative and political setup in India between c. 1550-1605.
- Describe the inter relationships between the economy, culture and religious practices of this period.

**Course: HIS-HC- 4036: HISTORY OF INDIA VI (c. 1605 - 1750)**

**Course outcome:** At the completion of this course, the students will be able to

- Explain and reconstruct the linkages of the history of India under the Mughal Rule
- Relate to the socio-economic and religious orientation of the people of Medieval period in India.

**Course: HIS-HG/RC-4016: SOCIAL AND ECONOMIC HISTORY OF ASSAM**

**Course Outcome:**

- The students will be able to explain the socio-economic history of Assam including among others the development of caste system, religious beliefs, agriculture and land system, the social organization, trade and commerce, various agricultural regulations, plantation economy, development of modern industries, transport system, education and the emergence of middle class with the development of literature and press, and growth of public associations.

**Course: HIS-SE-4014: Oral Culture and Oral History**

**Course Outcome:**

- This course will be able to explain complex interrelationships of structures or events in the context of broader social and cultural framework of societies through ‘public memory’ and the use of oral history to preserve oral culture and local history.
- The students will be able to use ‘Public memory’ as a tool and a source not only to write public history but also to explore new knowledge in the humanities, social sciences and even in disciplines like architecture, communication studies, gender studies, English, history, philosophy, political science, religion, and sociology

## **SEMESTER V**

### **Course: HIS-HC- 5016: History of Modern Europe- I (c. 1780-1939)**

**Course Outcome:** After the completion of this course the students will be able to

- Evaluate the historical evolution and political developments that occurred in Europe in the period between 1780 to 1939.
- Critically analyze the evolution of social classes, nation states, capitalism and national sentiment in Europe.
- Relate to the variety of causes that dragged the world into devastating wars in the intervening period.

### **Course: HIS-HC- 5026: HISTORY OF INDIA VII (c. 1780 - 1857)**

**Course Outcome:** On successful completion of this course, the students will be able to

- Relate the circumstances leading to the consolidation of colonial rule over India and their consequences.
- Explain the orientation of the indigenous population and the masses towards resistance to the colonial exploitation.
- Analyse popular uprisings among the tribal, peasant and common people against the British policies.

### **Course: HIS-HE-5016: HISTORY OF ASSAM (UPTO c. 1228)**

**Course Outcome:**

- Upon completion of this paper the students will be acquainted with major stages of developments in the political, social and cultural history of Assam from the earliest times to the advent of the Ahoms in the 13th century.

**Course: HIS-HE-5026: HISTORY OF ASSAM (c. 1228 –1826)**

**Course Outcome:** After the completion of this paper,

- The students will be able to identify and explain the major stages of developments in the political, social and cultural history of Assam during the medieval times, from the 13th century to the occupation of Assam by the English East India Company in the first quarter of the 19th century.

**SEMESTER VI**

**Course Outcome: HIS-HC- 6016: HISTORY OF INDIA VIII (c. 1857 - 1950)**

**Course Outcome:** After the completion of this course, the learners will be able to

- Analyse the course of British colonial exploitation, the social mobilizations during the period between c.1857 to 1950 and also the techniques of Indian resistance to British policies.
- Explain the circumstances leading to de-colonization and also the initial period of nation building in India.

**Course: HIS-HC- 6026: HISTORY OF MODERN EUROPE II (c. 1780 - 1939)**

**Course Outcome:** On the completion of this course, the students will be able to

- Analyse the historical developments in Europe between c.1780 to 1939.
- As the course structure of this paper focuses on the democratic and socialist foundations modern Europe, the students will be able to situate the historical development of working-class movements, socialist upsurge and the economic forces of the two wars and the other ideological shifts of Europe in the period.

**Course: HIS-HE/RE-6016: HISTORY OF ASSAM (c. 1826 – 1947)**

**Course Outcome:** Upon completion of this course, students will be able to

- Describe the period of British rule in Assam after its annexation by the imperialist forces.
- Situate the development of nationalism and its role in India's freedom struggle.
- Analyze the main currents of the political and socio-economic developments in Assam during the colonial period.

**Course: HIS-HE-6026: ASSAM SINCE INDEPENDENCE**

**Course Outcome:** After the completion of this course students will be able to

- Assess the aftermath of Partition and other socio- economic developments in post-independence Assam.
- Identify the main currents of political and socio-economic development in Assam after India's independence and the causes and impact of various struggles and movements in contemporary Assam.

## **COURSE OUTCOMES**

### **DEPARTMENT OF POLITICAL SCIENCE**

#### **SEMESTER I**

##### **Course: POL HC 1016: Understanding Political Theory**

###### **Course Outcomes:**

- To introduce the idea of political theory and various approaches
- To enable the students to assess the contemporary trends of political theory
- To reconcile theory and practice in relation to democracy

##### **Course: POL HC 1026 Constitutional Government and Democracy in India**

###### **Course Outcomes:**

- To acquaint students with constitutional design of state structures and institutions
- To understand the conflicts in constitutional provisions
- To make them comprehend the state institutions in relation to extra constitutional environment

##### **Course: POL HG/RC 1016 Introduction to Political Theory**

###### **Course Outcomes:**

- To introduce the key concepts in political theory
- To make students understand the aspects of conceptual analysis
- To engage the students in application of concepts and their limitations

**Course: POL HG 1026 Politics in North-East India**

**Course Outcomes:**

- To introduce the students with the region and nature of its politics
- To engage them with historical development of the region
- To understand the contemporary developments of the region

**Course: POL HG 1036 Governance: Issues and Challenges**

**Course Outcomes:**

- To introduce major concepts and debates of Governance
- To enable the students to relate governance with globalization, environment and development
- To make students explore good governance initiatives in India

**SEMESTER II**

**Course: POL HC 2016 Political Theory-Concepts and Debates**

**Course outcomes:** After reading the course, the students will

- Understand the various concepts in political theory and appreciate how they can be helpful to analyse crucial political issues
- Understand the significance of debates in political theory in exploring multiple perspectives to concepts, ideas and issues.
- Appreciate how these concepts and debates enrich political life and issues surrounding it.

**Course: POL HC 2026 Political Process in India**

**Course outcomes:**

- Understand the working of major political institutions in India
- Understand the major debates in Indian politics along the axes of caste, gender, region and religion
- Understand the changing nature of the Indian state and the contradictory dynamics of modern state power

**Course: POL HG/RC 2016 Indian Government and Politics**

**Course outcomes:**

- To appreciate the approaches to the study of Indian politics and the changing nature of the state
- To understand the basic features of the Indian constitution and its institutional functioning
- To examine the changing role of caste, class and patriarchy and their impact on politics
- To understand the dynamics of social movements in India.

**Course: POL HG 2026 Feminism: Theory and Practice**

**Course outcomes:**

- This course on gender studies will open up the structural and institutional basis of patriarchy as well as establish that gender identity and gender injustice cannot be understood in isolation, but only with reference to caste, class and religious community identities.
- Understand the history of feminism and its origins in different parts of the world
- Appreciate the Indian Women's Movement and its role in foregrounding important issues relating to women's position in the society, economy and polity

**Course: POL HG 2036 Local Rural and Urban Governance**

**Course Outcomes:**

- Understand the historical evolution of local governance in India
- Understand the working of rural and urban governance in India
- Understand the workings of committees and commissions associated with local governance

**SEMESTER III**

**Course: POL HC 3016 Introduction to Comparative Government and Politics**

**Course Outcomes:**

- To make students understand the basic concepts in comparative politics,
- To make students classify the different political systems and historical context of modern governments,
- To enable students to have a comparative analysis of countries related to their political institutions and behaviour.

**Course: POL HC 3026 Perspectives on Public Administration**

**Course Outcomes:**

- To enable students to learn the basic concepts related to public administration and its importance,
- To make students learn the major theories of public administration,
- To enable students to have an understanding of public policy and its formulation,
- To familiarize students with the major approaches and recent debates related to field of public administration.

**Course: POL HC 3036 Perspectives on International Relations and World History**

**Course outcomes:**

- To make students understand the key theoretical approaches in international relations
- To familiarize students with the evolution of international state systems and its importance.
- To make students aware of the key theoretical debates in international relations
- To enable students to have an overall understanding of international relations in relation to twentieth century IR history.

**Course: POL HG/RC 3016 Comparative Government and Politics**

**Course Outcomes:**

- To make students have a basic understanding of comparative political analysis,
- To make students learn the classification of political systems from a comparative politics framework.
- To make students learn the classification of governments and the political behavior of institutions and the changes in the nature of the nation-state

**Course: POL HG 3026 Gandhi and the Contemporary World**

**Course Outcomes:**

- To make students understand relevance of Gandhi and his philosophy in modern times
- To familiarize students with Gandhian ideology and leadership
- To make students learn Gandhi's critique on modern civilization and development
- To make students understand Gandhi's political strategy and philosophy

**Course: POL HG 3036 United Nations and Global Conflicts**

**Course Outcomes:**

- To make students learn the importance of United Nations as an organization
- To enable students to have a basic understanding of the political processes of the United Nations
- To make students to learn the relevance of United Nations and its intervention in global conflicts critically

**Course: POL SE 3014 Parliamentary Procedures and Practices**

**Course outcomes:**

- To help students in understanding the practical approaches to legislatives practices and procedures,
- To make students understand the procedures and processes related to drafting a Bill and the passage of the Bill,
- To enable students to have an understanding of the importance of Parliamentary Committees,
- To make students learn about the basic functioning of Parliament.

**Course: POL SE 3024 Youth and Nation-Building**

**Course Outcomes:**

- To enable students to learn the importance of youth in NSS and NCC,
- To make students understand the activities related to NSS and NCC and its importance,
- To make students learn the basics of National Disaster Management and its importance.

## **SEMESTER IV**

### **Course: POL HC 4016 Political Processes and Institutions in Comparative Perspective**

#### **Course Outcomes:**

- To understand, comprehend and analyse the complex nature and functioning of the political systems, political institutions and corresponding issues to these both in a country specific case of India and cross-country perspectives.
- To demonstrate critical thinking about key issues of political system of different forms, political process and public policy.
- To use the contents and sub-units of the course as yardsticks for comparing these political systems and processes.

### **Course: POL HC 4026 Public Policy and Administration in India**

#### **Course Outcomes:**

- Be familiarised with and gain knowledge about the processes of public policy making in India and their significance in administering the state.
- Develop the ability to assess the functioning of the government and the administration in ensuring a citizen centric welfare administration in India.

### **Course: POL HC 4036 Global Politics**

#### **Course Outcomes:**

- To enable students to understand how to approach a wide range of important global political and economic policy problems and participate in public policy debates on the crucial issues facing the world today.
- To have knowledge of the essential theoretical assumptions underlying globalisation's conceptual frameworks and their relationships to policy interventions.

- To demonstrate elementary knowledge of major issues and subject-matters surrounding globalisation that decides the international relations- political, economic and security relations- among the nations.

**Course: POL HG/RC 4016 Introduction to International Relations**

**Course Outcomes:**

- To demonstrate basic understanding of scientific methods of inquiry in international relations.
- To understand how international relations influence societies.
- To demonstrate a basic understanding of the foundational theories and concepts in international relations.
- To analyse the current world events and their implications on the Indian Foreign policy decision making process by applying prominent theories of international relations and generate substantial research question on the topics.

**Course: POL HG 4026 Understanding Ambedkar**

**Course Outcomes:**

- To analyse Ambedkar's views on caste, class, religion, nationalism, gender and constitutional democracy.
- To understand contribution of Ambedkar to political thought in modern India.
- To evaluate political ideas of Ambedkar and assess its relevance in context of contemporary politics.

**Course: POL HG 4036 Politics of Globalization**

**Course Outcomes:**

- To analyse the historical evolution of globalisation.
- To understand social, economic, cultural and political impact of globalisation.

- To evaluate the idea of globalisation and assess its relevance in context of contemporary politics.

**Course: POL SE 4014: Panchayati Raj in Practice**

**Course outcomes:**

- This paper will help students understand the importance of grassroot political institutions in empowering people.
- This paper will highlight the complex challenges faced by PRIs in India and mechanisms involved to make it more participatory and inclusive in nature.

**Course: POL SE 4024 Citizens and Rights**

**Course outcomes:**

- To analyse the linkages between citizenship, law, rights and equality
- To understand the measures of discrimination, justice and empowerment and the ways to protect the same.
- To evaluate the idea of justice and assess its relevance in context of contemporary India.

**SEMESTER V**

**Course: POL HC 5016 Classical Political Philosophy**

**Course Outcomes:**

- To interpret ideas underlying traditions in classical political philosophy
- To analyze the debates and arguments of leading political philosophers belonging to different traditions of the period
- To appraise the relevance of classical political philosophy in understanding contemporary politics

**Course: POL HC 5026 Indian Political Thought-I**

**Course Outcomes:**

- To underline themes and issues in political traditions of pre-colonial India.
- To compare and contrast positions of different political traditions those were present in pre-colonial India.
- To evaluate the relevance of political thought of pre-colonial India for contemporary politics.

**Course: POL HE 5016 Human Rights**

**Course Outcomes:**

- To describe the basic concepts of human rights
- To comprehend different approaches regarding human rights
- To familiarise the role of UNO in the growth and development of human rights
- To describe different measures taken for the protection of human rights

**Course: POL HE 5026 Public Policy in India**

**Course Outcomes:**

- To be familiarised with and gain knowledge about the processes of public policy making in India
- To assess the functioning of the government and the administration in ensuring a citizen centric welfare administration in India.

**Course: POL HE 5036 Understanding Global Politics**

**Course Outcomes:**

- To describe the key concepts underlying the idea of world order and their historical evolution.
- To comprehend diverse approaches to understand global political and economic problems.
- To demonstrate relevance of international actors in understanding world politics.

**Course: POL HE 5046 Select Constitutions - I**

**Course outcomes:**

- Students will be able to understand the importance of constitutions
- This paper is an integral part of public services examinations
- Students will be introduced to the various types of constitutions and the forms of governments from different parts of the world

**Course: POL RE 5016 Public Administration-I**

**Course outcomes:**

- Students will be able to understand the basics of public administration;
- This paper is an integral part of public services examinations. Students will be well versed with ideas of administration.

**Course: POL RE 5026 Select Constitutions-I**

**Course outcomes:**

- Students will be able to understand the importance of constitutions;
- This paper is an integral part of public services examinations.

- Students will be introduced to the various types of constitutions and the forms of governments from different parts of the world.

**Course: POL RG 5016 Public Administration-I**

**Course outcomes:**

- Students will be able to understand the basics of public administration;
- This paper is an integral part of public services examinations. Students will be well versed with ideas of administration.

**Course: POL RG 5026 Democracy in India**

**Course outcomes:**

- Students will be able to understand the importance of freedom movement in India;
- Students will be introduced to the various types of constitutions and the forms of governments from different parts of the world.
- The debates on the nature of Indian democracy will provide an important insight to the complex nature of challenges faced by the state and different public institutions.

**Course: POL SE 5014 Public Opinion and Survey Research**

**Course outcome:**

This course will familiarize the students with how to conceptualize and measure public opinion using quantitative methods, with particular attention being paid to developing basic skills pertaining to the collection, analysis and utilization of quantitative data.

## **SEMESTER VI**

### **Course: POL HC 6016 Modern Political Philosophy**

#### **Course Outcome:**

- To interpret ideas underlying traditions in modern political philosophy
- To analyze the debates and arguments of leading political philosophers of different philosophical traditions
- To appraise the relevance of modern political philosophy in understanding contemporary politics

### **Course: POL HC 6026 Indian Political Thought-II**

#### **Course Outcomes:**

- To underline themes and issues in political thought of modern India.
- To compare and contrast positions of leading political thinkers in India on issues those are constitutive of modern India.
- To assess the relevance of political thought of modern India in understanding contemporary politics.

### **Course: POL HE 6016 Human Rights in India**

#### **Course Outcomes:**

- To describe origin and development of human rights in India
- To comprehend different measures adopted by India for the protection and development of human rights
- To familiarise the emerging issues related to human rights

**Course: POL HE 6026 Understanding South Asia**

**Course Outcomes:**

- To identify geo-political and historical construction of South Asia as a region.
- To analyse the politics and socio-economic issues of the South Asian Region.
- To assess the relevance of regionalism in South Asia and India's position in the region.

**Course: POL HE 6036 Women, Power and Politics**

**Course Outcomes:**

- To explain key concepts that offers an understanding of gender inequality.
- To appraise the historical evolution of the Women's movement in India and issues addressed by it.
- To underline the contemporary issues that affect women's participation in politics

**Course: POL HE 6046 Select Constitutions – II**

**Course outcomes:**

- Students will be able to understand the importance of constitutions
- This paper is an integral part of public services examinations.
- Students will be introduced to the various types of constitutions and the forms of governments from different parts of the world

**Course: POL RE 6016 Public Administration –II**

**Course outcomes:** After reading this course the students will be in a position

- acquaint with the different layers and structures of public administration and also to know how public administration contributes towards development.
- Know about the principles and processes of budgeting etc.

**Course: POL RE 6026 Select Constitutions -II**

**Course outcomes:**

- Students will be able to understand the importance of constitutions;
- This paper is an integral part of public services examinations.
- Students will be introduced to the various types of constitutions and the forms of governments from different parts of the world.

**Course: POL RG 6016 Public Administration –II**

**Course outcomes:** After reading this course the students will be

- Acquaint with the different layers and structures of public administration and also to know how public administration contributes towards development.
- Know about the principles and processes of budgeting etc.

**Course: POL RG 6026 Indian Administration**

**Course Outcomes:**

- After completing this course the student will be acquainted himself/herself with the process of evolution of Indian administration and also different layers and structures of the administration.

**Course: POL SE 6014 Conflict and Peace Building**

**Course Objectives:**

- The students will be able to relate to variety of conflict situations through their lived experiences. The students will develop skills of managing and resolving conflicts and building peace through techniques such as role-play, simulations, street theatre, cinema and music on the one hand and by undertaking field visits, interacting with different segments of the civil society including those affected by conflicts as well as diplomats, journalists and experts, on the other.

**DEPARTMENT OF ASSAMESE (PG)**

**SEMESTER I**

**Course: ASM 1016: Rise and Development of the Assamese Language**

**Course Outcomes:**

- Reconstruct the social history of Assam in the light of the rise of Assamese language.
- Justify the relationship between tradition of religion and formation of Assamese language.
- Compare and contrast the social history of early Assamese form of language with that of the Modern Assamese language.

**Course: ASM 1026: History of Assamese Literature: 1889-2015**

**Course Outcome:**

- Trace the phases of Romantic and Modern Assamese literature.

**Course: ASM 1036: Study of Culture of Assam**

**Course Outcome:**

- Reconstruct religious belief of the people of Ancient Assam and compare it with that of the rest of ancient India.

**Course: ASM 1046: History of Sanskrit Literature: History, Features and Genres**

**Course Outcome:**

- Trace the history and heritage of Indian literary tradition.
- Describe the features of Sanskrit Literature which is considered as the mother of all regional Literature including Assamese.
- Grasp the Indianness in Indian Literature.

**Course: ASM 1054: Creative Writing**

**Course Outcome:**

- Compare and contrast the genres of creative writing on the basis of imitation and imagination.
- Create a piece of literature and justify its quality.
- Describe the experience of reading a piece of literature.

**SEMESTER II**

**Course: ASM 2016: Assamese Poetry: 1889-2015**

**Course Outcome:**

- Categorise Assamese poetry (1889-2015) in groups of Romantic and Modern Phases.
- Describe experience of reading Romantic and Modern Assamese Poetry.
- Tell the difference between Romantic and Modern Poetry. Plan to develop intellectual history of Assam with the help of knowledge of stone inscriptions and copperplates.
- Enumerate the institutions and describe their role in preserving Assamese culture.

**Course: ASM 2026: Assamese Prose: 1846-2015**

**Course Outcome:**

- Trace the development of Assamese prose from 1846 to 2015.
- Interpret the changes occurring in Assamese prose.
- State the present features of Assamese prose.

**Course: ASM 2036: Assamese Drama and Performance: 1857-2015**

**Course Outcome:**

- Reconstruct the history of Assamese drama and performance since 1857.

- Describe the experience of viewing a play
- Enumerate the trends of Assamese Drama since 1857.

**Course: ASM 2046: Indian Criticism**

**Course Outcome:**

- Describe the Indian systems of evaluating Literature.
- Trace the thought systems of ancient Indian Literary critics.
- Interpret Literature from Indian point of view.

**Course: ASM 2054 Editing**

**Course Outcome:**

- Trace the phases of book history in India.
- Critique a manuscript.
- Tell the philosophy behind the book-editing

**SEMESTER III**

**Course: ASM 3016: Assamese Novel: 1890-2015**

**Course Outcome:**

- Categorise the Assamese novels into different trends.
- Explain the effects of the socio-political development on Assamese novels.
- Design a spectrum of different themes used in Assamese novels.

**Course: ASM 3026: Translation: Theory and Practice**

**Course Outcome:**

- Illustrate the linguistic and cultural aspects of translation.
- State the problems of different kinds of translation.
- Justify the quality of different texts of translation.

### **Course: ASM 3036: World Literature**

#### **Course Outcome:**

- Trace the development of different trends of World Literature.
- Interpret Romanticism, Modernism and postmodernism with the help of related texts.
- Critique a piece of Romantic / Modern/ Postmodern and Sanskrit Literature.

### **ASM 3046 Ethnic Literature of North-East India**

#### **Course Outcome:**

- Trace the development of various ethnic literatures of NE India.
- Critique the documentation and presentation of ethnic literatures of NE India.
- Explain the linkage between ethnic literature and modern literature.

### **ASM 3056 Sanskrit Texts**

#### **Course Outcome:**

- Critique the Classical Sanskrit Texts.

### **ASM 3066 Varieties of the Assamese Language**

#### **Course Outcome:**

- Describe different varieties of the Assamese Language in the context of contemporary Linguistics.

- Organize geographical and social varieties of Assamese Language.

### **ASM 3076 Contact Languages of North-East India**

#### **Course Outcome:**

- Understanding the history of language contact and its impacts
- Illustrate the contact language scenario of North-East India.

### **ASM 3086: Modern Indian Literature**

#### **Course Outcome:**

- Illustrate the concept of Modern Indian literature and trace its history.
- Describe the national and regional aspects of Modern Indian literature.
- Interpret a few major Modern Indian texts in original or translation.

### **ASM 3096 Assamese Vaisnavite, Saiva and Sakta Literature**

#### **Course Outcome:**

- Categorise religious literature of Assam and compare Assamese Vaisnavite literature with Assamese Saiva –Sakta literature.
- Elaborate the concept of Vaishnavism, Saivism and Saktism and Organize literary products under titles like Vaishnava, Sakta, and Saiva literature.
- Interpret religious beliefs i.e. Vaishnava, Saiva and Sakta with keeping in mind their humanitarian outlook.
- Generate human values out of the religious outlook prevalent in Assam.

### **ASM 3106 Structure of the Assamese Language**

#### **Course Outcome:**

- Describe the intricate structure of the Assamese Language.
- Analyse language in sync with contemporary linguistics.
- Design a synchronic study of the structure of Assamese Language.

### **ASM 3116 Phonetics**

#### **Course Outcome:**

- State practical knowledge of phonetics in the light of computational Linguistics.
- Describe the phonological aspect of Assamese Language.

### **ASM 3126: Sankaradeva Studies**

#### **Course Outcome:**

- Justify the philosophy of Eksarana Nama Dharma by Sankaradeva in relation to All India Medieval Bhakti Movement.
- Produce a one act play as the structure laid by Sankaradeva's Ankia Bhaona.
- Trace the outcome of social reformation done by Sankaradeva.

## **SEMESTER IV**

### **ASM 4016: Textual Criticism and Manuscript Reading**

#### **Course Outcome:**

- Explain the Manuscript tradition in different part of the world.
- Explain mutilated text is restored.
- Generate interest in preservation and restoration of intellectual heritage of a nation

### **ASM 4026: Applied Linguistics**

#### **Course Outcome:**

- Explain computational linguistics.
- Plan to review literature applying discourse analysis.
- State the tools for analyzing the Assamese language.

### **ASM 4036: Peripheral Genres of Assamese Literature**

#### **Course Outcome:**

- Trace the development of a few peripheral genres in Assamese literature.
- Explain the emotional effects of reading a piece of travelogue/biography/autobiography/literature for children/scientific fiction.
- Critique a piece a travelogue/biography/autobiography/literature for children book.

### **ASM 4046: Assamese Short Story:1889-2015**

#### **Course Outcome:**

- Trace the development of the major trends of Assamese short stories.
- Describe the emotional effect of reading a few significant Assamese short stories.
- Interpret a short story.

### **ASM 4056: Comparative Studies of Indo-Aryan Languages**

#### **Course Outcome:**

- Rearrange the evolution of the Assamese language and compare it with other language.
- Enumerate the common heritage of the Indian-Aryan languages.
- Contrast the linguistic variation of Assamese with other Pan Magadhan languages.

### **ASM 4066: Language Acquisition**

#### **Course Outcome:**

- Explain the process of first language acquisition
- Explain the role of different factors making impact in second language acquisition.
- Compare between the first and the second language acquisition.

### **ASM 4076: Aspects of Multilingualism**

#### **Course Outcome:**

- Justify the significance of study of language use in a multilingual context.
- Draw a linguistic map of Assam showing bilingual and multilingual area.

### **ASM 4086: Western Literary Criticism**

#### **Course Outcome:**

- Interpret classicism, Romanticism Modernism, Structuralism, Post-Structuralism and Feminism with the help of a few selected texts.
- Compare and contrast different movements in criticism.
- State the effects of western literary criticism on critiques of Assamese literature.

### **ASM 4096: Assamese Criticism**

#### **Course Outcome:**

- Grasp the history and trends of Assamese criticism.
- Trace the influence of western and Indian criticism on Assamese criticism.
- Produce a criticism of a text.

### **ASM 4106: Trends in Linguistics**

#### **Course Outcome:**

- Elaborate semiotics and pragmatics by grasping contemporary theories.
- Enumerate stylistic elements in a literary text.
- Reconstruct Assamese Grammar drawing insights from the TG Grammar.

### **ASM 4116: Tibeto Burman Languages**

#### **Course Outcome:**

- Illustrate the Linguistics features of Tibeto Burman Language of Assam.
- Trace the differences among Rabha, Boro, Mising, Karbi communities and compare the Tibeto Burman Languages with Assamese and other Indio-Aryan Language.
- Describe the influence of Tibeto Burman Language on the Assamese Language and vice-versa.

### **ASM 4126: Language Study in Assam**

#### **Course Outcome:**

- Mapping the history of language study in Assam
- Compare the view-points of different Assamese linguists and their impacts.

### **ASM 4136: Culture Studies of North-East India**

#### **Course Outcome:**

Enumerate the changes in material culture and performing Art with special reference to Moran, Hajong, Sonowal-Kachari, Garo and Manipuri.

- Justify the role of women in the context of greater Assamese society and culture.
- Justify the culture of North-East India as synthesized one.

## **DEPARTMENT OF GEOGRAPHY (PG)**

### **SEMESTER I**

#### **Course: GGY 1016 Nature of Geography**

##### **Course Outcomes:**

- Through understanding of the basics of the subject;
- understanding of sophisticated models and techniques;
- Interdisciplinary field – a field that crosses traditional boundaries between academic disciplines or schools of thought.

#### **Course: GGY 1026 Geomorphology**

##### **Course outcome:**

- Understanding of Principles and Concepts in Geomorphology;
- Application of geomorphic concepts and techniques in the field;
- Knowledge enrichment of glacial, fluvial and Aeolian processes.

#### **Course: GGY1036 Climatology and Biogeography**

##### **Course outcome:**

- Knowledge about different phenomena of weather and climate specially vagaries of Indian monsoon and techniques of weather forecasting;
- Deeper understanding of plant-animal association in varying habitats and environments;
- Practical utility in the field while carrying out research on issues of climate and biogeography.

**Course: GGY1046 Economic Geography**

**Course outcome:**

- Understanding of location, distribution and spatial organization of economic activities across the world;
- Knowledge of geographical and other factors which influence man's productivity;
- Knowledge of different farming techniques and modernization of agriculture;
- Practical utility in the field while carrying out research on agriculture and economic geography.

**Course: GGY 1054 Practical on Geomorphology, Climatology and Economic Geography**

**Course outcome:**

- Practical utility in the field while carrying out research on geomorphology, climatology and economic geography.

**SEMESTER II**

**Course: GGY 2066 Geographic Thought**

**Course outcome:**

This course helps students to

- Develop a comprehensive understanding of the discipline.
- Apply the historic and contemporary perspective to explain and approach the real world geographic problems.

**Course: GGY 2076 Geography of Environment and Development**

**Course outcome:**

- It provides the scope to develop a better understanding of environment from local to global perspectives.

- Increasing awareness towards environment and to equip with the methodologies of need based sustainable developmental plan.

**Course: GGY 2086 Population and Settlement Geography**

**Course outcome:** The course enables the students to understand population issue in spatial dimension to diagnose the problem issue arise out of population growth. Understanding the settlement, both in urban and rural context equip students to prepare need based sustainable settlement plans and policies.

**Course: GGY 2096 Geography of Regional Development of India with Special Reference to North-East India**

**Course outcome:** Development of a better spatial perspective of a country like India with greater physical and social disparity. Such issues have both utilitarian and applied aspects in a broader context.

**Course: GGY 2104 Practical on Population and Settlement Geography and Regional Development of India and N.E. India**

**Course outcome:** Practical on these issues help the students to portray problems as well as resource based in spatial perspectives and encourage the students to accommodate the significance of dimension in planning and policy making.

**SEMESTER III**

**Course: GGY 3116 Quantitative and Cartographic Methods in Geography**

**Course outcome:** At the end of the course students should be able to:

- Understand what methods to use for geographical data analysis.
- Understand the principles of surveying and mapping.

**Course: GGY 3123 Fundamentals of Remote Sensing, GIS and GPS**

**Course outcome:** At the end of the course students should be able to:

- Understand the rationale behind use of remotely sensed data its advantages and disadvantages.
- Understand how GIS/GPS methodologies can be used to address spatial analysis from the theoretical perspective.

**Course: GGY 3133 Research Methodology in Geography**

**Course outcome:** This course will help students how to proceed with tackling a research problem and the steps one should adopt and the tools and craft a geographer usually employs.

**Course: GGY3146 Social, Cultural and Political Geography**

**Course outcome:**

- To appreciate socio-cultural and political dimensions of geographic phenomena.
- To understand how language, religion, ethnicity tangent with lebensruam, frontiers and boundaries and influence the geography of a region.

**Course: GGY3156 (1) Agricultural Geography**

**Course outcome:** After attending this course student should be able to understand

- Concepts such as crop combination, crop rotation, agricultural efficiency, classification scheme and models.
- Understand the inter-disciplinary nature of this branch of geography

**Course: GGY3156 (2) Cartography**

**Course outcome:**

- The students will be in a position to understand the pros and cons of various map projections
- The principles behind various surveying methods including the use of instruments such as theodolite, dumpy level and total station

**Course: GGY3156 (3) Fluvial Geomorphology**

**Course outcome:** After attending this course students would be able to:

- Understand concepts of fluvial geomorphology such as run-off estimation, hydrograph analysis channel equilibrium and channel dynamics.

**Course: GGY3156 (4) Geography of Rural Development**

**Course outcome:** After attending this course students would be able to:

- Understand rural-urban disparities
- Understand the diffusion of development and the spatial dimensions of rural settlements

**Course: GGY3156 (5) Geoinformatics**

**Course outcome:** After this course students should be able to Derive a comprehensive understanding of the use of RS/GIS/GPS techniques and their integration

**Course: GGY3156 (6) Population Geography**

**Course outcome:** Students should be able to: → Develop an understanding of the theories and “laws” in population geography → Interpret the problems and prospects of population growth, distribution, composition and rural-urban differences in diverse areal contexts

**Course: GGY3156 (7) Regional Development Planning**

**Course outcome:** Students would be able to – Derive and understanding of regional development, its approaches, regionalization techniques and the need for conservation and management of resources for development.

**Course: GGY3156 (8) Social Geography**

**Course outcome:** Students would be able to: – Derive and understanding of social geography and social pluasity and spatial dimensions of social and cultural issues. – Understand spatial differences to caste, tribe, race and language and methodologies in understanding these.

**Course: GGY 3164 Practical on Quantitative and Cartographic Methods**

**Course outcome:** Students will be able to learn the different quantitative, cartographic and surveying techniques and its applications in geographical studies.

**SEMESTER IV**

**Course: GGY 4176 Environment and Climate Change**

**Course outcome:** The course will sensitize the student about the mechanism of climate and its drivers. Learners will explore the impacts on various sectors viz. hydrosphere, cryosphere, and biosphere. Students further learn different organizational setup and policies related to climate change.

**Course: GGY 4186 Geography of Bhutan, Bangladesh and Myanmar**

**Course outcome:** Students will learn the scope of south-east Asian countries in regional collaboration, cooperation, in sustainable environmental and resource management.

**Course: GGY 4193 Practical on Remote Sensing and GIS**

**Course outcome:** The students will learn and acquire the skills in applying the advanced techniques of Remote Sensing, GIS and GPS in their study and research, which will lead them to quality research.

**Course: GGY 4206 (1) Agricultural Geography**

**Course outcome:** The students will be able to know the issues and challenges associated with different agricultural systems prevalent over the globe. The students will also show the problems and prospects of agricultural development in a region.

**Course: GGY4214 Agricultural Geography (Practical)**

**Course outcome:** The students will be able to know the methods associated with the analysis of different agricultural systems. The students will also learn the problems and prospects of agricultural development in a region with some practical exposure trips.

**Course: GGY 4223 Agricultural Geography (Dissertation)**

**Course outcome:** Students will write a dissertation on suitable topic related to special paper applying all required methodology and dissertation writing procedure.

**Course: GGY4206 (2) Cartography**

**Course outcome:** The students will acquire the cartographic skills which are very vital as well as prerequisite for any geographical analysis and interpretation.

**Course: GGY4214 (2) Cartography (practical)**

**Course outcome:** The students will be able to know the methods associated with the analysis of different cartographic techniques. The students will also learn the techniques and methods.

**Course: GGY 4223 (2) Cartography (Dissertation)**

**Course outcome:** Students will write a dissertation on suitable topic related to special paper applying all required methodology and dissertation writing procedure.

**Course: GGY4206 (3) Fluvial Geomorphology**

**Course outcome:** The students will know how and why the fluvial system should be made sustainable for the both physical and social environments. Also acquire the techniques to study the forms and processes of fluvial landforms.

**Course: GGY4214 (3) Fluvial Geomorphology (Practical)**

**Course outcome:** The students will be able to know the methods associated with the analysis of different geomorphological systems. The students will also learn the problems and prospects of fluvial characteristics in a region with some practical exposure trips.

**Course: GGY 4223 (3) Fluvial Geomorphology (Dissertation)**

**Course outcome:** Students will write a dissertation on suitable topic related to special paper applying all required methodology and dissertation writing procedure.

**Course: GGY4206 (4) Geography of Rural Development**

**Course outcome:** The students will have the knowledge how a region can attain development through proper and rational utilization of its resources.

**Course: GGY4214 (4) Geography of Rural Development (Practical)**

**Course outcome:** The students will be able to know the methods associated with the analysis of different geography of rural development. The students will also learn the problems and prospects of geography of rural development in a region with some practical exposure trips.

**Course: GGY 4223(4) Geography of Rural Development (Dissertation**

**Course outcome:** Students will write a dissertation on suitable topic related to special paper applying all required methodology and dissertation writing procedure.

**Course: GGY4206 (5) Geoinformatics**

**Course outcome:** The students will enrich themselves with the techniques and skills of Remote Sensing, GIS and GPS and be able to apply these in quality study and research in geography.

**Course: GGY4214 (5) Geoinformatics (Practical)**

**Course outcome:** The students will be able to know the methods associated with the analysis of different geoinformatics techniques and its applications.

**Course: GGY 4223(5) Geoinformatics (Dissertation)**

**Course outcome:** Students will write a dissertation on suitable topic related to special paper applying all required methodology and dissertation writing procedure.

**Course: GGY4206 (6) Population Geography**

**Course outcome:** The students will show the problems and prospects associated with population and also know how population problem can be managed using the applied knowledge of geography.

**Course: GGY4214 (6) Population Geography (Practical)**

**Course outcome:** The students will be able to know the methods associated with the analysis of different demographic characteristics. The students will also learn the problems and prospects of demographic characteristics in a region with some practical exposure trips.

**Course: GGY 4223 (6) Population Geography (Dissertation)**

**Course outcome:** Students will write a dissertation on suitable topic related to special paper applying all required methodology and dissertation writing procedure.

**Course: GGY4206 (7) Regional Development Planning**

**Course outcome:** The students will acquire applied knowledge how any region can be development through proper planning of the resources and other potentials.

**Course: GGY4214 (7) Regional Development Planning (Practical)**

**Course outcome:** The students will be able to know the methods associated with the analysis of different regional development planning. The students will also learn the problems and prospects of regional development planning in a region with some practical exposure trips.

**Course: GGY 4223 (7) Regional Development Planning (Dissertation)**

**Course outcome:** Students will write a dissertation on suitable topic related to special paper applying all required methodology and dissertation writing procedure.

**Course: GGY4206 (8) Social Geography**

**Course outcome:** The students will be able to analyze the social problems and their causative factors by which they will also be able in a position to handle the ethnic issues emerging here and there.

**Course: GGY4214 (8) Social Geography (Practical)**

**Course outcome:**

The students will be able to know the methods associated with the analysis of different social issues. The students will also learn the problems and prospects of social development in a region with some practical exposure trips.

**Course: GGY 4223 (8) Social Geography (Dissertation)**

**Course outcome:** Students will write a dissertation on suitable topic related to special paper applying all required methodology and dissertation writing procedure.

## DEPARTMENT OF BOTANY

### Programme Specific Outcome:

- On successful completion of the programme, the students will be well aware of different plant groups and different branches of plant sciences.
- They will learn the techniques of studying plants-basic techniques as well as advance techniques.
- The students will also become aware of physiology and metabolism of different plant groups and their uses for human welfare.
- They become skilled in modern advance branches of biochemistry, cytogenetics, molecular biology etc. and at the same time they develop the skilled of traditional branches of botany like taxonomy, ecology, genetics, physiology, palynology, anatomy etc.
- The basic techniques of plant research like biostatics, spectrometry, chromatography, microscopy, bioinformatics is also learned in the course.
- Students also learn to write project reports on field visits.
- The course also helps in making a student responsible citizen aware of environment conservation and ways to do so. As throughout the course, they are thought the importance of plants in human life and importance of plant resources and their conservation in situ conservation ecology) as well as in vivo (tissue culture and gardens).

## COURSE OUTCOMES

### SEMESTER I

**Course: BOT-HC-1016 Phycology and Microbiology**

**BOT-HC-1016 Practical**

### Course Outcome:

- The students will get to know about the different groups of Algae. Details idea of algae as a whole is given in the first paper.

**Course: BOT-HC-1026 Biomolecules and Cell Biology**

**BOT-HC-1026 Practical**

**Course Outcome:**

- The students will get detail idea of and its organelles and the different major biomolecules involve in cell activities.
- Students get fundamental knowledge about the cell structure and functions.

**SEMESTER II**

**Course: BOT-HC-2016 Mycology and phytopathology**

**BOT-HC-2016 Practical**

**Course outcome:**

Details idea of Fungi, including the structure, reproduction, special characters and utility to Human and environment is given in the paper. This paper also includes role of fungi in disease development and methods of their control.

**Course: BOT-HC-2026 Archegoniate**

**BOT-HC-2026 Practical**

**Course Outcome:**

In this paper Archegoniate details of Bryophytes, Pteridophytes and Gymnosperms are given.

## **SEMESTER III**

### **Course: BOT-HC-3016 Morphology and Anatomy of Angiosperm**

#### **BOT-HC-3016 Practical**

##### **Course Outcome:**

In this paper students will learn about morphology and anatomy of all flowering plants. They will be introduced with some new forms of external and internal structure of different kinds of flowering plants in microscopic levels.

### **Course: BOT-HC-3026 Economic Botany**

#### **BOT-HC-3026 Practical**

##### **Course Outcome:**

In this paper, details of various plants, plant cultivation and their uses will be taught thoroughly. It also will further relate students with the interaction of people with plants.

### **Course: BOT-HC-3036 Genetics**

#### **BOT-HC-3036 Practical**

##### **Course Outcome:**

In this theory and practical paper, students will be enlightened with the knowledge about various genome interaction, chromosome's structure and various mutations.

### **Course: BOT-SE-3016 Biofertilizers**

##### **Course Outcome:**

This skill enhancement course will provide the practical knowledge of organic farming, different types of bio-fertilizers and their uses and also trained the making and field application of vermicompost.

## **SEMESTER IV**

### **Course: BOT-HC-4016 Molecular Biology**

#### **BOT-HC-4016 Practical**

##### **Course Outcome:**

Molecular biology will inform about molecular aspects of cell, Internal physiology, Bio chemical aspects of different physiological and metabolic functions taking place inside a plant cell.

### **Course: BOT-HC-4026 Plant Ecology and Phytogeography**

#### **BOT-HC-4026 Practical**

##### **Course Outcome:**

The course content will give idea about ecological types and influence of environment on plants and plant types ecology.

### **Course: BOT-HC-4036 Plant Systematics**

#### **BOT-HC-4036 Practical**

##### **Course Outcome:**

The outcome of the course gives the details about the taxonomic and morphological development of plants, understand principles of general taxonomy and nomenclature system of plants, understand historical development of taxonomy, explanation of concept of species, order sub and super categories of species according to Linn hierarchy and discuss the importance of nomenclature rules in botany.

### **Course: BOT-SE-4014 Nursery and Gardening**

##### **Course Outcome:**

This paper will give the knowledge of gardening, different designs of a garden and also the methods like cutting, budding and grafting.

## **SEMESTER V**

### **Course: BOT-HC-5016 Reproductive biology of Angiosperms**

#### **BOT-HC-5016 Practical**

##### **Course Outcome:**

Each topic has been provided with utmost care to incorporating data from recent literatures and publications. It gives the knowledge regarding history and scope of reproductive biology, structure and development of fruits and seeds, polyembryony and apomixis.

### **Course: BOT-HC-5026 Plant Physiology**

#### **BOT-HC-5026 Practical**

##### **Course Outcome:**

In this paper theories relating mineral nutrition, nutrient uptake and plant water relations are described thoroughly. Physiology of flowering, different plant growth regulators and translocation in plants will be described.

### **Course: BOT-HE-5016 Natural Resource Management**

#### **BOT-HE-5016 Practical**

##### **Course Outcome:**

In this paper students will be familiarized with various natural resources and management. It will also help them in utilization of various conservatory methods like Waste management, Carbon footprint, GIS etc.

**Course: BOT-HE-5026 Horticulture Practices and Post-harvest Technology**

**BOT-HE-5026 Practical**

**Course Outcome:**

In this paper, students will be initiated with different kinds of fruits and flowers cultivation. Application of fertilizers, hydroponics, indoor gardening, floriculture will be explained.

**SEMESTER VI**

**Course: BOT-HC-6016 Plant Metabolism**

**BOT-HC-6016 Practical**

**Course Outcome:**

In this theory and practical paper, details about various enzymes and pathways are given. This paper includes synthesis and catabolism of various biomolecules. Students will get fundamental knowledge about glycolysis, lipid metabolism, nitrogen metabolism etc.

**Course: BOT-HC-6026 Plant Biotechnology**

**BOT-HC-6026 Practical**

**Course Outcome:**

This course content gives idea about plant tissue culture and recombinant DNA technology. The practical paper gives details about gene cloning, PCR, methods of gene transfer and overall application of biotechnology.

**Course: BOT-HE-6016 Industrial and Environment Ecology**

**BOT-HE-6016 Practical**

**Course Outcome:**

Details about bio reactor, fermentation and its processes are described. This paper includes alcohol and antibiotics production and its large-scale production.

**Course: BOT-HE-6026 Analytical Techniques in plant Sciences**

**BOT-HE-6026 Practical**

**Course Outcome:**

The course outcome is of detailed techniques related to microscopy, cytometry, chromosome painting, spectrophotometry etc. which are involved in advance study of plants. This semester makes student skilled in latest plant studies and advance techniques involve therewith. On completion of the course 6<sup>th</sup> semester, the students will become well informed about all aspects of different plant variety. Students will also be engaged in systematic discovery and critical review of appropriate and relevant information of different plant species.

## **COURSE OUTCOMES**

### **DEPARTMENT OF CHEMISTRY**

#### **SEMESTER I**

**Course: CHE-RC/HG-1016: CHEMISTRY1 ATOMIC STRUCTURE, BONDING, GENERAL ORGANIC CHEMISTRY & ALIPHATIC HYDROCARBONS**

**Course Outcome:** After completion of this course the students will learn the atomic structure through the basic concepts of quantum mechanics. They will understand the chemical bonding through VB and MO approaches. In organic part, the students are expected to learn basic ideas used in organic chemistry, stereochemistry, functional groups, alkanes, alkenes, alkynes etc.

#### **SEMESTER II**

**Course: CHE-RC/HG-2016: CHEMISTRY2 s- AND p-BLOCK ELEMENTS, TRANSITION ELEMENTS, COORDINATION CHEMISTRY STATES OF MATTER & CHEMICAL KINETICS**

**Course Outcome:** After completion of this course the students will learn periodic properties in main group elements, transition metals (3d series). They will also learn the crystal field theory in coordination chemistry unit. In physical chemistry part, the students are expected to learn kinetic theory of gases, ideal gas and real gases, surface tension, viscosity, basic solid state chemistry and chemical kinetics.

#### **SEMESTER III**

**Course: CHE-RC/HG-3016: CHEMISTRY 3 CHEMICAL ENERGETICS, EQUILIBRIA & FUNCTIONAL ORGANIC CHEMISTRY-I**

**Course Outcome:** After completion of this course the students will be able to understand the chemical system from thermodynamic points of view. They will also learn two very important topics in chemistry- chemical equilibrium and ionic equilibrium. In organic chemistry part, the students are expected to learn various classes of organic molecules-alkyl halides, aryl halides, alcohols, phenols, ethers, aldehydes and ketones.

**Course: CHE-SE-3034: BASIC ANALYTICAL CHEMISTRY**

**Course Outcome:** Upon completion of this course, students shall be able to explain the basic principles of chemical analysis, design/implement microscale and semimicro experiments, record, interpret and analyze data following scientific methodology.

**SEMESTER IV**

**Course: CHE- RC/HG-4016: CHEMISTRY4 SOLUTIONS, PHASE EQUILIBRIUM, CONDUCTANCE, ELECTROCHEMISTRY & FUNCTIONAL GROUP ORGANIC CHEMISTRY**

**Course Outcome:** After completion of this course the students learn solutions, phase rule and its application in specific cases, basics of conductance and electrochemistry. Students will also learn some important topics of organic and biochemistry- carboxylic acids, amines, amino acids, peptides, proteins and carbohydrates.

**Course: CHE-SE-4024: GREEN METHODS IN CHEMISTRY**

**Course Outcome:** Students shall be able to describe and evaluate chemical products and processes from environmental perspective, define and propose sustainable solutions and critically assess the methods for waste reduction and recycling.

**SEMESTER V**

**Course: CHE-RE-5016: APPLICATIONS OF COMPUTERS IN CHEMISTR**

**Course Outcome:** After the completion of this course, it will help the student to interpret laboratory data, curve fitting of experimental work, also perform quantum mechanical calculations for various molecular models.

**Course: CHE-RE-5026: ANALYTICAL METHODS IN CHEMISTRY**

**Course Outcome:** On successful completion students will have theoretical understanding about choice of various analytical techniques used for qualitative and quantitative characterization of samples. At the same time through the experiments students will gain hands on experience of the discussed techniques. This will enable students to take judicious decisions while analyzing different samples.

**Course: CHE-RE-5036: MOLECULAR MODELLING & DRUG DESIGN**

**Course Outcome:** Students will be able to identify basic components of computer and programming as applied to computer assisted design and modelling of molecules.

**Course: CHE-RE-5046: NOVEL INORGANIC SOLIDS**

**Course Outcome:** After the completion of this course it will also be possible for the students to opt for studying an interdisciplinary master's programme with an emphasis on the synthesis and applications of various materials or take up a job in the materials production and/or processing industry.

**Course: CHE-RE-5056: POLYMER CHEMISTRY**

**Course Outcome:** After completion of this course the students will learn the definition and classifications of polymers, kinetics of polymerization, molecular weight of polymers, glass transition temperature, and polymer solutions etc. They also learn the brief introduction of preparation, structure and properties of some industrially important and technologically promising polymers.

**Course: CHE-RE-5066: INSTRUMENTAL METHODS OF CHEMICAL ANALYSIS**

**Course Outcome:** Students shall be able to explain the theoretical basis of different analytical techniques, identify the experimental requirements and compare/analyze the data/results thereof.

**Course: CHE-SE-5014: CHEMICAL TECHNOLOGY & SOCIETY**

**Course Outcome:** Students shall be familiarized with processes and terminologies in chemical industry, like mass balance, energy balance etc... Learners will be able to use chemical and scientific literacy as a means to better understand the topics related to the society.

**Course: CHE-SE-5024: CHEMOINFORMATICS**

**Course Outcome:** On the successful completion of the course, the students should be able to explain, interpret and critically examine the utility of computers and software tools to solving chemistry related problems. Recognize, apply, compare and predict chemical structures, properties, and reactivity and; solve chemistry related problems. Employ critical thinking and scientific reasoning to design and safely implement laboratory experiments and keep the records of the same. Compile, interpret and analyze the qualitative/quantitative data and communicate the same in a scientific literature

**Course: CHE-SE-5034: BUSINESS SKILLS FOR CHEMISTS**

**Course Outcome:** students shall be able to explain and/or analyze the important steps of business operations, finance and intellectual property as applied to chemical industry.

**Course: CHE-SE-5044: INTELLECTUAL PROPERTY RIGHTS**

**Course Outcome:** After completing this course, students will have in-depth understanding about the importance and types of IPR. This course will also provide the clarity on the legal and economic aspects of the IP system.

**SEMESTER VI**

**Course: CHE-RE-6026: INDUSTRIAL CHEMICALS AND ENVIRONMENT**

**Course Outcome:** After successful completion of the course, students would have learnt about the manufacture, applications and safe ways of storage and handling gaseous and inorganic industrial chemicals. Students will get to know about industrial metallurgy and the energy

generation industry. Students will also learn about environmental pollution by various gaseous, liquid wastes and nuclear wastes and their effects on living beings. Finally, the students will learn about industrial waste management, their safe disposal and the importance of environment friendly “green chemistry” in chemical industry.

**Course: CHE-SE-6014: CHEMISTRY OF COSMETICS & PERFUMES**

**Course Outcome:** Students will learn about the preparation and chemistry involved with the production different cosmetic. This may encourage students to take up entry level jobs at cosmetics industry or venture into commercial production of cosmetics as an entrepreneur.

**Course: CHE-SE-6024: PESTICIDE CHEMISTRY**

**Course Outcome:** Students will be able to explain or describe and critically examine different types of pesticides, their activity/toxicity and their applications and the need for the search of an alternative based on natural products.

## **COURSE OUTCOMES**

### **DEPARTMENT OF MATHEMATICS (REGULAR COURSE)**

#### **SEMESTER I**

##### **MAT-RC-1016: Calculus**

**Course Outcomes:** This course will enable the students to:

- i) Learn differentiability, limit and continuity tests for functions.
- ii) Learn different theorems along with their geometric properties.
- iii) Learn partial differentiation of functions

#### **SEMESTER II**

##### **MAT-RC-2016: Algebra**

**Course Outcomes:** This course will enable the students to:

- i) Employ De Moivre's theorem to solve problems.
- ii) Learn about matrices, determinant and application in solving system of equations
- iii) Learn about vector space algebra and their application

#### **SEMESTER III**

##### **MAT-RC-3016: Differential Equations**

**Course Outcomes:** The course will enable the students to:

- i) Learn basics of differential equations and methods for solving.

##### **MAT-SE-3014: Computer Algebra Systems and Related Software**

**Course Outcomes:** This course will enable the students to:

- i) Use of softwares; Mathematica/MATLAB/Maxima/Maple etc. as a calculator, for plotting functions and animations
- ii) Use of CAS for various applications of matrices such as solving system of equations and finding eigenvalues and eigenvectors.
- iii) Understand the use of the statistical software R as calculator and learn to read and get data into R.
- iv) Learn the use of R in summary calculation, pictorial representation of data and exploring relationship between data.
- v) Analyze, test, and interpret technical arguments on the basis of geometry

## **SEMESTER IV**

### **MAT-RC-4016: Real Analysis**

**Course Outcomes:** This course will enable the students to:

- i) Recognize bounded, convergent, divergent, Cauchy and monotonic sequences and to calculate their limit, algebra of limit and uniform continuity of functions.
- ii) Apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers.

### **MAT-SE-4014: R Programming**

**Course Outcomes:** This course will enable the students to:

- i) Become familiar with R syntax and to use R as a calculator.
- ii) Understand the concepts of objects, vectors and data types.
- iii) Know about summary commands and summary table in R.
- iv) Visualize distribution of data in R and learn about normality test.
- v) Plot various graphs and charts using R.

## SEMESTER V

### **MAT-SE-5014: Combinatorics and Graph Theory**

**Course Outcomes:** This course will enable the students to:

- i) Learn about the counting principles, permutations and combinations, Pigeonhole principle
- ii) Understand the basics of graph theory and learn about social networks, Eulerian and Hamiltonian graphs, diagram tracing puzzles and Knight's tour problem.

### **MAT-RE-5016: Number Theory**

**Course Outcomes:** This course will enable the students to

- i) Learn about some fascinating discoveries related to the properties of prime numbers, and some of the open problems in number theory, viz., Goldbach conjecture etc.
- ii) Know about number theoretic functions and modular arithmetic.
- iii) Solve linear, quadratic and system of linear congruence equations

### **MAT-RE-5026: Discrete Mathematics**

**Course outcomes:** After the course, the student will be able to:

- i) Understand the notion of ordered sets and maps between ordered sets.
- ii) Learn about lattices, modular and distributive lattices, sublattices and homomorphisms between lattices.
- iii) Become familiar with Boolean algebra, Boolean homomorphism, Karnaugh diagrams, switching circuits and their applications.

### **MAT-RG-5016: General Mathematics-I**

**Course Outcomes:** This course will enable the students to:

- i) Learn about some fascinating discoveries related to the properties of prime numbers, and some of the open problems in number theory, viz., Goldbach conjecture etc.

- ii) Know about number theoretic functions and modular arithmetic.
- iii) Solve linear, quadratic and system of linear congruence equations.
- iv) Know solve simultaneous algebraic equations with matrix theory

## **SEMESTER VI**

### **MAT-SE-6014: LaTeX and HTML(P)**

**Course Outcomes:** After studying this course, the student will be able to:

- i) Create and typeset a LaTeX document.
- ii) Typeset a mathematical document using LaTeX.
- iii) Learn about pictures and graphics in LaTeX.
- iv) Create beamer presentations.
- v) Create web page using HTML.

### **MAT-RE-6016: Numerical Analysis**

**Course Outcomes:** The course will enable the students to:

- i) Learn some numerical methods to find the zeroes of nonlinear functions of a single variable and solution of a system of linear equations, up to a certain given level of precision.
- ii) Know about iterative and non-iterative methods to solve system of linear equations
- iii) Know interpolation techniques to compute the values for a tabulated function at points not in the table.
- iv) Integrate a definite integral that cannot be done analytically
- v) Find numerical differentiation of functional values
- vi) Solve differential equations that cannot be solved by analytical methods

### **MAT-RE-6026: Programming in C**

**Course Outcomes:** After completion of this paper, student will be able to:

- i) Understand and apply the programming concepts of C which is important to mathematical investigation and problem solving
- ii) Learn about structured data-types in C and learn about applications in factorization of an integer and understanding Cartesian geometry and Pythagorean triples.
- iii) Use of containers and templates in various applications in algebra.
- iv) Use mathematical libraries for computational objectives.
- v) Represent the outputs of programs visually in terms of well formatted text and plots

### **MAT-RG-6016: General Mathematics – II**

**Course Outcomes:** This course will enable the students to:

- i) Learn about some fascinating problems concerning numbers
- ii) Learn about life and works of ancient Indian and Foreign scientists in mathematical science.
- iii) Learn the symmetrical behaviour of numbers.
- iv) Know solve simultaneous algebraic equations with matrix theory

## **COURSE OUTCOMES**

### **DEPARTMENT OF PHYSICS**

Developing personal, intellectual and professional skills of students in physics and making them ready for advance studies in Physical Science. Students will demonstrate an understanding knowledge in physics, including the major premises of Classical mechanics, EM theory and modern physics. Students will demonstrate proficiency in mathematics and mathematical concepts needed for a proper understanding of physics.

### **SEMESTER I**

#### **Course: PHY-HC-1016 Mathematical Physics I**

##### **Course Outcome:**

- Successful students should be able to understand vector and its applications in various fields, differential equations and its applications, different coordinate systems, concept of probability and error.

#### **Course: PHY-HC-1026 Mechanics**

##### **Course Outcome:**

- On successful completion of the course students should be able understand Inertial and non-inertial reference frames, Newtonian motion, Galilean transformations, projectile motion, work and energy, Elastic and inelastic collisions, motion under central force, simple harmonic oscillations, special theory of relativity.

#### **Course: PHY-HG-1016 (PHY-RC-1016) Mechanics**

**Course outcome:** Upon completion of this course, students are expected to

- Understand the role of vectors and coordinate systems in Physics, solve Ordinary Differential Equations, laws of motion and their application to various dynamical

situations, Inertial reference frames their transformations, concept of conservation of energy, momentum, angular momentum and apply them to basic problems, phenomenon of simple harmonic motion, motion under central force, concept of time dilation, Length contraction using special theory of relativity.

- In the laboratory course, after acquiring knowledge of how to handle measuring instruments (like screw gauge, Vernier calipers, travelling microscope) student shall embark on verifying various principles and associated measurable parameters.

## SEMESTER II

### **Course: PHY-HC-2016 Electricity & Magnetism**

**Course Outcome:** After successful completion of this course,

- Students will be able to Understand electric and magnetic fields in matter, Dielectric properties of matter magnetic properties of matter, electromagnetic induction, applications of Kirchhoff's law in different circuits, applications of network theorem in circuits.

### **Course: PHY-HC-2026 Waves & Optics**

**Course Outcome:**

- After successful completion of this course, students will be able to Understand superposition of harmonic oscillations, different types of wave motions, superposition of harmonic waves, interference and interferometer, diffraction, holography.

### **Course: PHY-HG-2016 (PHY-RC-2016) Electricity & Magnetism**

**Course outcome:** Upon completion of this course, students are expected to

- Apply Gauss's law of electrostatics to solve a variety of problems, calculate the magnetic forces that act on moving charges and the magnetic fields due to currents, have brief idea of magnetic materials, understand the concepts of induction, and apply them to solve variety of problems.

- In the Lab course, students will be able to measure resistance (high and low), Voltage, Current, self and mutual inductance, capacitor, strength of magnetic field and its variation, study different circuits RC, LCR etc.

### **SEMESTER III**

#### **Course: PHY-HC-3016 Mathematical Physics II**

##### **Course Outcome:**

- After successful completion of the course, students will be able to solve differential equation using power series solution method, solve differential equation using separation of variables method, special integrals, different properties of matrix, Fourier series.

#### **Course: PHY-HC-3026 Thermal Physics**

##### **Course Outcome:**

- Upon successful completion, students will have the knowledge and skills to identify and describe the statistical nature of concepts and laws in thermodynamics, in particular: entropy, temperature, Thermodynamics potentials, Free energies, Maxwell's relations in thermodynamics, behaviour of real gases.

#### **Course: PHY-HC-3036 Digital Systems & Applications**

**Course Outcome:** After successful completion of the course student will be able to

- Understand the working principle of CRO, develop a digital logic and apply it to solve real life problems
- Analyze, design and implement combinational logic circuits
- Classify different semiconductor memories
- Analyze, design and implement sequential logic circuits
- Analyze digital system design using PLD

- Simulate and implement combinational and sequential circuits.

**Course: PHY-HG-3016 (PHY-RC-3016) Thermal Physics & Statistical Mechanics**

**Course outcome:** Upon completion of this course, students are expected

- Learn the basic concepts of thermodynamics, the first and the second law of thermodynamics, the concept of entropy and the associated theorems, the thermodynamic potentials and their physical interpretations, Maxwell's thermodynamic relations, fundamentals of the kinetic theory of gases, Maxwell-Boltzman distribution law, equipartition of energies, mean free path of molecular collisions, viscosity, thermal conductivity, diffusion and Brownian motion, black body radiations, Stefan- Boltzmann's law, Rayleigh-Jean's law and Planck's law and their significances, quantum statistical distributions, viz., the Bose-Einstein statistics and the Fermi-Dirac statistics.
- In the laboratory course, the students will be able to Measure of Planck's constant using black body radiation, determine Stefan's Constant, coefficient of thermal conductivity of a bad conductor and a good conductor, determine the temperature coefficient of resistance, study variation of thermos emf across two junctions of a thermocouple with temperature etc.

**Course: PHY-SE-3014 Physics Workshop Skills**

**Course Outcome:**

- The aim of this course is to enable the students to familiar and experience with various mechanical and electrical tools through hands-on mode

**Course: PHY-SE-3024 COMPUTATIONAL PHYSICS SKILLS**

**Course Outcome:**

The aim of this course is not just to teach computer programming and numerical analysis but to emphasize its role in solving problems in Physics.

- Highlights the use of computational methods to solve physical problems
- Use of computer language as a tool in solving physics problems (applications)
- Course will consist of hands on training on the Problem solving on Computers.

**Course: PHY-SE-3034 Computer Assembling and Networking**

**Course Outcome:** After successfully completing the course students will be able to

- Identify Computer Hardware Components, Network Components and Peripherals, assemble and disassemble a computer,
- Identify the different types of network topologies and protocols.
- Enumerate the layers of the OSI model and TCP/IP.
- Explain the function(s) of each layer, Identify the different types of network devices and their functions within a network
- Understand and building the skills of subnetting and routing mechanisms.
- Familiarity with the basic protocols of computer networks, and how they can be used to assist in network design and implementation.

**Course: PHY-SE-3044 Digital Photography & Editing**

**Course Outcome:** On successful completion of the course students will be able to

- Identify cameras according to formats and view finder systems,
- Identify types of lenses and state what type of lenses to be used for different purposes,
- Apply settings of shutter speed, control depth of field via aperture settings,
- Apply suitable focal length and use the light metering mechanism of the camera to take photographs.

**Course: PHY-SE-3054 VIDEO EDITING FOR SOCIAL MEDIA**

**Course Outcome:** On successful completion of the course students will be able to

- Learn to edit impactful video content which appeals to target audience,
- Add or edit music, soundtrack or audio to your videos,
- Learn to customize your videos by using Text (fonts),
- Learn to use transitions and effects to create impactful videos.

**Course: PHY-SE-3064 WEATHER FORECASTING**

**Course Outcome:** To enable the students to develop an awareness and understanding regarding the causes and effects of different weather phenomenon and basic forecasting techniques

**Course: PHY-SE-3084 TECHNICAL DRAWING**

**Course Outcome:** After successfully completing the course students will be able to draw free hand sketches of various kinds of objects, apply different dimensioning methods on drawing of objects, different types of scales and their utilization in reading and reproducing drawings of objects and maps, draw 2-dimensional view of different objects viewed from different angles, generate isometric (3D) drawing from different 2D (orthographic) views/sketches, use basic commands of Auto CAD.

**Course: PHY-SE-3094 PAGEMAKER**

**Course Outcome:** On successful completion of the course students will be able to Create Documents and Templates, add text into documents using various methods, and apply different formatting styles to characters and paragraphs, Import graphics, create objects using various tools, add effects to objects, Create a book and export it into PDF, Multipage Layout Design.

## SEMESTER IV

### **Course: PHY-HC-4016 Mathematical Physics III**

**Course Outcome:** On successful completion of the course students will be able to solve complex integrals using residue theorem, apply Fourier and Laplace transforms in solving differential equations, understand properties of Tensor like Transformation of coordinates, contravariant and co-variant tensors, indices rules for combining tensors.

### **Course: PHY-HC-4026 Elements of Modern Physics**

**Course Outcome:** On completion of the course students will be able to understand modern development in Physics, Starting from Planck's law, its development of the idea of probability interpretation and the formulation of Schrodinger equation. Students will also get preliminary idea of structure of nucleus, radioactivity Fission and Fusion and Laser

### **PHY-HC-4036 Analog Systems & Applications**

**Course Outcome:** On successful completion of the course students will be able to understand about the physics of semiconductor p-n junction and devices such as rectifier diodes, Zener diode, photodiode etc. and bipolar junction transistors, transistor biasing and stabilization circuits, the concept of feedback in amplifiers and the oscillator circuits, students will also have an understanding of operational amplifiers and their applications.

### **PHY-HG-4016 (PHY-RC-4016) Waves & Optics**

**Course outcome:** Upon completion of this course, students are expected to understand Simple harmonic oscillation and superposition principle, importance of classical wave equation in transverse and longitudinal waves and solving a range of physical systems on its basis, concept of normal modes in transverse and longitudinal waves: their frequencies and configurations, interference as superposition of waves from coherent sources derived from same parent source, Demonstrate understanding of Interference and diffraction experiments, Polarization. In the laboratory course, student will gain hands-on experience of using various optical instruments and making finer measurements of wavelength of light using Newton Rings experiment,

Fresnel Biprism etc. Resolving power of optical equipment, the motion of coupled oscillators, study of Lissajous figures and behaviour of transverse, longitudinal waves.

### **PHY-SE-4014 BASIC INSTRUMENTATION SKILLS**

This course helps the students to get exposure with various aspects of instruments and their usage through hands-on mode.

### **PHY-SE-4024 Research & Technical Writing**

**Course Outcome:** On successful completion of the course students will be able to identify and write different parts of technical reports, write article, thesis, and presentation in latex, create chart in Microsoft excel, use different format of chart based on need, plot data from different sources using Origin plot.

### **PHY-SE-4034 Domestic and Industrial Electrical Wiring**

**Course Outcome:** After successfully completion of the course students will be able to recognize various electrical devices and their symbols, Recognize various electrical devices placed on the panels/distribution boards and to design the panels, Read schematic and wiring diagrams of electrical devices, Read and interpret electrical installation plan, Practice and execute any type of wiring, Estimate and determine the cost of wiring installation.

### **PHY-SE-4044 Photoshop**

**Course Outcome:** On successful completion of the course students will be able to work with the tools in Adobe Photoshop CC, crop image in Adobe Photoshop CC, to resize an image for print and digital media in Adobe Photoshop CC, apply Photoshop filters in print and digital media, apply filters to sharpen the images, different types of brushes used for digital painting.

### **PHY-SE-4054 MOTION GRAPHICS FOR ADVERTISING & FILMS**

**Course Outcome:** On successful completion of the course students will be able to create Motion Graphic Design for Ads, Commercials, Promos & Film / Show Titles, use After Effects templates to create your own customized 2D or 3D Motion Graphics, Understand Working with Layers, create Shape morphing animation and build transitions, utilize After Effects' Motion Graphics Techniques.

### **PHY-SE-4064 Radiation Safety**

**Course Outcomes:** The course is designed in such a way to acquaint the students with the sources of various natural and man-made radiation sources, risks involved in working in relatively high radiation zone, and safety measures to be taken to protect individual's health. The students will acquire a basic knowledge of types and sources of radiations, interactions of radiations with matter, risks involved and safety measures to be taken.

### **PHY-SE-4074 RENEWABLE ENERGY AND ENERGY HARVESTING**

**Course Outcomes:** The aim of this course is not just to impart theoretical knowledge to the students but to provide them with exposure and hands-on learning wherever possible

### **PHY-SE-4084 Introduction to CorelDraw**

**Course Outcome:** On successful completion of the course students will be able to work with layers and symbols in CorelDRAW, Apply fills and outlines to illustrations in CorelDRAW, Use, edit, and create artistic and paragraph text in CorelDRAW, Create boundaries to objects and copy and clone the effect of one object to another in CorelDRAW, Import and export projects, Print objects/documents created on CorelDRAW.

### **PHY-SE-4094 GRAPHIC DESIGN FOR DIGITAL ADVERTISING**

**Course Outcome:** On successful completion of the course students will be able to Understand aesthetics & visual appeal in design, Using impactful visual content which appeals to target

audience, Conceptualize, Visualize and Create Graphic Designs for: Digital Ads, Posters, Banners and Flyers, Social Media Ads & Banners, Websites and Blogs.

## **SEMESTER V**

### **PHY-HC-5016 Quantum Mechanics & Applications**

**Course Outcome:** On successful completion of the course students will be able to understand the principles in quantum mechanics, such as the Schrödinger equation, the wave function, the uncertainty principle, stationary and non-stationary states, time evolution of solutions, as well as the relation between quantum mechanics and linear algebra. Students will be able to solve the Schrödinger equation for hydrogen atom. Students will have the concepts of angular momentum and spin, as well as the rules for quantization and addition of these, spin-orbit coupling and Zeeman Effect.

### **PHY-HC-5026 Solid State Physics**

**Course Outcome:** On successful completion of the course students should be able to explain the main features of crystal lattices and phonons, understand the elementary lattice dynamics and its influence on the properties of materials, describe the main features of the physics of electrons in solids; explain the dielectric ferroelectric and magnetic properties of solids and understand the basic concept in superconductivity.

### **PHY-HE-5016 Experimental Techniques**

**Course Outcome:** Upon completion of this course, students will be able to describe the errors in measurement and statistical analysis of data required while performing an experiment. Also, students will learn the working principle, efficiency and applications of transducers & industrial instruments like digital multimeter, RTD, Thermistor, Thermocouples and Semiconductor type temperature sensors.

### **PHY-HE-5026 Embedded System: Introduction to microcontroller**

**Course Outcome:** Upon completion of this course, students will be able to understand microprocessor and microcontroller 8051. Students will also learn about the 8051 I/O port programming, various addressing modes, Timer and counter programming, Serial port programming with and without interrupt and interfacing 8051 microcontroller to peripherals.

### **PHY-HE-5036 Advanced Mathematical Physics I**

**Course Outcome:** The emphasis of the course is on applications in solving problems of interest to physicists. Students are to be examined on the basis of problems, seen and unseen. Course Outcome: Upon completion of this course, students will be able to solve problems in Physics related to Linear Vector space, Matrix algebra, Tensor.

### **PHY-HE-5046 Physics of Devices and Instruments**

**Course Outcome:** Upon completion of this course, students will be able to gain knowledge on advanced electronics devices such as UJT, JFET, MOSFET, CMOS etc., detailed process of IC fabrication, Digital Data serial and parallel Communication Standards along with the understanding of communication systems.

### **PHY-HE-5056 Nuclear and Particle Physics**

**Course Outcome:** Upon completion of this course, students will have the understanding of the sub atomic particles and their properties. They will gain knowledge about the different nuclear techniques and their applications in different branches of Physics and societal application. The course will develop problem based skills and the acquire knowledge can be applied in the areas of nuclear, medical, archeology, geology and other interdisciplinary fields of Physics and Chemistry.

### **PHY-SE-5014 WEATHER FORECASTING**

**Course Outcome:** The aim of this course is not just to impart theoretical knowledge to the students but to enable them to develop an awareness and understanding regarding the causes and effects of different weather phenomenon and basic forecasting techniques

### **PHY-SE-5034 TECHNICAL DRAWING**

**Course Outcome:** After successfully completing the course students will be able to draw free hand sketches of various kinds of objects, apply different dimensioning methods on drawing of objects, different types of scales and their utilization in reading and reproducing drawings of objects and maps, Draw 2 - dimensional view of different objects viewed from different angles, Generate isometric (3D) drawing from different 2D (orthographic) views/sketches, use basic commands of Auto CAD.

### **PHY-SE-5044 PAGEMAKER**

**Course Outcome:** On successful completion of the course students will be able to Create Documents and Templates, add text into documents using various methods, and apply different formatting styles to characters and paragraphs, Import graphics, create objects using various tools, add effects to objects, Create a book and export it into PDF, Multipage Layout Design.

## **SEMESTER VI**

### **PHY-HC-6016 Electromagnetic Theory**

**Course Outcome:** On successful completion of the course students will acquire the concepts of Maxwell's equations, propagation of electromagnetic (EM) waves in different homogeneous-isotropic as well as anisotropic unbounded and bounded media, production and detection of different types of polarized EM waves, general information as waveguides and fibre optics.

### **PHY-HC-6026 Statistical Mechanics**

**Course Outcome:** On successful completion of the course students will be learn the techniques of Statistical Mechanics to apply in various fields including Astrophysics, Semiconductors, Plasma Physics, Bio-Physics, Chemistry and in many other directions.

### **PHY-HE-6016 Communication Electronics**

**Course Outcome:** Upon completion of this course, students will have the concepts of electronics in communication, details of communication techniques based on Analog Modulation, Analog and digital Pulse Modulation including PAM, PWM, PPM, ASK, PSK, FSK, overview of communication and Navigation systems such as GPS and mobile telephony system.

### **PHY-HE-6026 Digital Signal Processing**

**Course Outcome:** Upon completion of this course, students will be able This paper describes the discrete-time signals and systems, Fourier Transform Representation of Aperiodic Discrete-Time Signals. This paper also highlights the concept of filters and realization of Digital Filters. At the end of the syllabus, students will develop the understanding of Discrete and fast Fourier Transform.

### **PHY-HE-6036 Advanced Mathematical Physics II**

**Course Outcome:** Upon completion of this course, students will be able to apply the concepts of Calculus of Variations, Group Theory and Probability Theory to solve numerical problems in Physics.

### **PHY-HE-6046 Astronomy and Astrophysics**

**Course Outcome:** Upon completion of this course, students will be able to understanding the origin and evolution of the Universe. The course will give a comprehensive introduction on the measurement of basic astronomical parameters such as astronomical scales, luminosity and astronomical quantities. It will give an overview on key developments in observational

astrophysics. Students will have the idea of the instruments implemented for astronomical observation, the formation of planetary system and its evolution with time, the physical properties of Sun and the components of the solar system; and stellar and interstellar components of our Milky Way galaxy. Students will have the understanding of the origin and evolution of galaxies, presence of dark matter and large scale structures of the Universe.

### **PHY-HE-6056 PHYSICS-DSE: CLASSICAL DYNAMICS**

**Course Outcome:** Upon completion of this course, students will have the overview of Newton's Laws of Motion, Special Theory of Relativity by 4-vector approach and fluids. Students will also have the understanding of the Lagrangian and Hamiltonian of a system.. By the end of this course, students will be able to solve the seen or unseen problems/numericals in classical mechanics.

### **PHY-SE-6014 Radiation Safety**

**Course Outcome:** The course is designed in such a way to acquaint the students with the sources of various natural and man-made radiation sources, risks involved in working in relatively high radiation zone, and safety measures to be taken to protect individual's health. The students will acquire a basic knowledge of types and sources of radiations, interactions of radiations with matter, risks involved and safety measures to be taken.

### **PHY-SE-6024 RENEWABLE ENERGY AND ENERGY HARVESTING**

**Course Outcome:** The aim of this course is not just to impart theoretical knowledge to the students but to provide them with exposure and hands-on learning wherever possible

### **PHY-SE-6034 Introduction to CorelDraw**

**Course Outcome:** On successful completion of the course students will be able to work with layers and symbols in CorelDRAW, Apply fills and outlines to illustrations in CorelDRAW, Use, edit, and create artistic and paragraph text in CorelDRAW, Create boundaries to objects

and copy and clone the effect of one object to another in CorelDRAW, Import and export projects, Print objects/documents created on CorelDRAW.

### **PHY-SE-6044 GRAPHIC DESIGN FOR DIGITAL ADVERTISING**

**Course Outcome:** On successful completion of the course students will be able to Understand aesthetics & visual appeal in design, Using impactful visual content which appeals to target audience, Conceptualize, Visualize and Create Graphic Designs for: Digital Ads, Posters, Banners and Flyers, Social Media Ads & Banners, Websites and Blogs.

## DEPARTMENT OF ZOOLOGY

To inculcate interest in nature and its living creatures and in future they can diversify their interest in career as Animal Behaviourist, Conservationist, Wildlife Biologist, Wildlife Educator, Forensic experts, Lab technicians, Zoology faculty etc.

### Programme Specific Outcome:

1. The curriculum helps to enhance the ability and thinking power of students.
2. It helps to acquire communication skill through debates, seminars and presentations
3. During field visits social interaction develops.
4. Students learn ethical approach, to conserve diversity of animal kingdom.
5. Students understand the issues of environmental contexts and sustainable development.
6. They can work in multi-disciplinary environments and be responsive to the changing needs of the society.
7. Engage in lifelong learning, apply the knowledge judiciously and remain continuously employable.
8. To acquire basic skills in the observation and study of nature, biological techniques, experimental skills and scientific investigation.
9. To obtain knowledge in wildlife and choose wildlife tourism as a career.
10. To impart awareness for the conservation of the biosphere.

## COURSE OUTCOMES

### SEMESTER 1

**Course: ZOO-HC-1016: NON-CHORDATES I: PROTISTS TO PSEUDOCOELOMATES**

### Course Outcomes:

- Students will learn about the basic taxonomy and systematics
- and classification of Protozoa, Porifera, Cnidaria and Helminth groups.

- They also will acquire knowledge about the biology of these taxonomic categories as well as about some acoelomate plus pseudocoelomate parasites for their life cycles, epidemiology, pathology, diagnosis, symptoms and treatments.

**Course: ZOO-HC-1026: PRINCIPLES IN ECOLOGY**

**Course Outcomes:**

- Students will be understanding the various features and aspects of population ecology, community ecology and ecosystem ecology.

**SEMESTER 2**

**Course: ZOO-HC-2016: NON-CHORDATES II: COELOMATES**

**Course Outcomes:**

- Students will be learning about classification of coelomate invertebrates and the structure, function plus biology of these taxonomic categories as well.
- They will understand about different vector born diseases and the related life cycles, epidemiology, pathology, diagnosis, symptoms and treatments.

**Course: ZOO-HC-2026: CELL BIOLOGY**

**Course Outcomes:**

- Students will understand the structures, positions and functions of plasma membrane and all cellular organelles in details.
- They will acquire knowledge about chromosomes and cell divisions, both mitosis and meiosis.

### **SEMESTER 3**

#### **Course: ZOO-HC-3016: DIVERSITY OF CHORDATES**

##### **Course Outcomes:**

- Students will understand the classification, structure, function and biology of chordates of different taxonomic classes.

#### **Course: ZOO-HC-3026: PHYSIOLOGY: CONTROLLING AND COORDINATING SYSTEMS**

##### **Course Outcomes:**

- Students will learn about the basics of histology and tissue staining.
- They will also understand the physiology of muscles, nerves, reproductive systems and bone.

#### **Course: ZOO-HC-3036: FUNDAMENTALS OF BIOCHEMISTRY**

##### **Course Outcomes:**

- Students will understand the basic and fundamental biochemistry of carbohydrates, proteins, lipids and nucleic acids.
- They will also understand the nature, mechanism, and kinetics of enzyme action.

#### **Course: ZOO-SE-3014: ORNAMENTAL FISH AND FISHERIES**

##### **Course Outcome:**

- Enables opportunities to the students for income source. They can be cultured in small aquariums.

**Course: ZOO-SE-3024: APICULTURE**

**Course Outcome:**

- It provides products such as honey and wax that are used commercially.

**SEMESTER 4**

**Course: ZOO-HC-4016: COMPARATIVE ANATOMY OF VERTEBRATES**

**Course Outcomes:**

- Students will understand the structures of different systems such as, integumentary, skeletal, digestive, respiratory, circulatory, urinogenital, nervous and sensory organs in comparative way among the vertebrate groups.

**Course: ZOO-HC-4026: PHYSIOLOGY: LIFE SUSTAINING SYSTEMS**

**Course Outcomes:**

- Students will know the physiology of digestion, respiration, circulation, excretion and adaptation.

**Course: ZOO-HC-4036: BIOCHEMISTRY OF METABOLIC PROCESSES**

**Course Outcomes:**

- Students will understand the metabolism of carbohydrates, lipids and proteins in details.
- They will also learn about oxidative phosphorylation and redox reactions.

**Course: ZOO-SE-4014: NON-MULBERRY SERICULTURE**

**Course Outcome:**

- Sericulture offers career opportunities in Govt. research centres, silk boards, academic fields, sericulture units etc.

**Course: ZOO-SE-4024: WILDLIFE PHOTOGRAPHY AND ECO-TOURISM**

**Course Outcome:**

- The majority of wildlife photographers can work as freelancers.

**SEMESTER 5**

**Course: ZOO-HC-5016: MOLECULAR BIOLOGY**

**Course Outcomes:**

- Students will acquire knowledge about replication, transcription, translation, post transcriptional and post translational modifications, gene regulation, DNA repair mechanisms and various molecular tools and techniques like PCR, southern, northern and western blotting, recombinant DNA technology etc.

**Course: ZOO-HC-5026: PRINCIPLES OF GENETICS**

**Course Outcomes:** Students will learn the fundamental genetics like Mendelian and Non-Mendelian inheritances, linkages, mutations, sex determination of various animals, extrachromosomal inheritances, transposable genetic elements etc.

**Course: ZOO-HE-5016: COMPUTATIONAL BIOLOGY AND BIostatISTICS**

**Course Outcomes:**

- Biological techniques deal with different types of biostatistical tools and studying biology for analysing biological data.

**Course: ZOO-HE-5036: ENDOCRINOLOGY**

**Course Outcome:**

- Endocrinology teaches about the hormones and the processes they control.

**Course: ZOO-HE-5046: PARASITOLOGY**

**Course Outcome:**

- The students will learn about disease related parasites, their life cycle is studied.

**SEMESTER 6**

**Course: ZOO-HC-6016: DEVELOPMENTAL BIOLOGY**

**Course Outcomes:**

- Students will learn the different aspects of early, late and post embryonic developments.
- They will have the knowledge about implications of developmental biology in various fields, such as in teratogenesis, stem cell biology, in vitro fertilization, cryopreservation, cord blood transfusion etc.

**Course: ZOO-HC-6026: EVOLUTIONARY BIOLOGY**

**Course Outcomes:**

- Students will know about population genetics, human evolution, various concepts about origin of species, extinctions, phylogenetic tree making.
- They will also understand few basic of bioinformatics.

**Course: ZOO-HE-6014: BIOLOGY OF INSECTA ZOO-HE-6026: FISH AND FISHERIES**

**Course Outcomes:**

- Insecta includes a huge group of insects that can be used as biopesticides, for food and medicines etc.
- Students will learn details about taxonomy and biology of fishes as well as various aquaculture techniques in details.

**Course: ZOO-HE-6036: REPRODUCTIVE BIOLOGY**

**Course Outcomes:**

- Concepts of reproductive biology can help students to understand the reproductive process and formation of a life.

**Course: ZOO-HE-6046: WILDLIFE CONSERVATION AND MANAGEMENT**

**Course Outcomes:**

- Knowledge of wildlife management will help in controlling the man and animal conflicts and poachers and other activities that disrupt the ecology.

**Course: ZOO-HE-6056: DISSERTATION**

- Considerably more in-depth knowledge of the subject/field of study, including deeper into current research and development work.

**COURSE OUTCOMES**  
**DEPARTMENT OF COMMERCE**  
**SEMESTER I**

**BCM-AE-1014 Business Communication**

**Course outcome:** The students will acquire skills in reading, writing, comprehension and communication, and also uses of electronic media for business communication.

**COM-HC-1016 Financial Accounting**

**Course outcome:** The students will acquire conceptual knowledge of the Financial Accounting and skills for recording various kinds of business transactions.

**COM-HC-1026: Business Laws**

**Course Outcomes:** The students will be familiarised with the basic knowledge of the important business legislation along with relevant case law.

**COM-GE-1016(A) Micro Economics**

**Course outcome:**

- Students will be familiarised with the concepts of microeconomics dealing with consumer behaviour.
- Student will understand the supply side of the market through the production and cost behaviour of firms.

**COM-GE-1026(B) Investing in Stock Markets**

**Course outcomes:**

- The students will develop the basic skills to operate in stock markets and the ways of investing in it.

- Students will develop the ability to take up investment in stock markets independently.

## **SEMESTER II**

### **COM-HC-2016: Corporate Accounting**

#### **Course Outcomes:**

- The students will acquire the conceptual knowledge of the corporate accounting
- Learn the techniques of preparing the financial statements

### **COM-HC-2026 Corporate Laws**

#### **Course outcome:**

- The students will gain basic knowledge of the provisions of the Companies Act 2013 and the Depositories Act, 1996.

### **COM-GE-2016 (A) Macro Economics**

#### **Course outcome:**

- The student will gain the knowledge of basic concepts of the macro-economics.
- The students will learn the modern tools of macro-economic analysis and the policy framework, including the open economy.

### **COM-GE-2026 (B) Insurance & Risk Management**

#### **Course outcome:**

- The students will develop an understanding about identifying analysing and managing various types of risk.
- The students will be in a position to understand principles of insurance and its usefulness in business along with its regulatory framework.

## **SEMESTER III**

### **COM-HC-3016 Computer Applications in Business**

**Course outcome:**

- The students will acquire computer skills and knowledge and understand the usefulness of information technology tools for business operations.

### **COM-HC-3026 Income-tax Law and Practice**

**Course outcome:** The students will be equipped with the application of principles and provisions of Income-tax Act, 1961 and the relevant Rules.

### **COM-HC-3036 Management Principles and Applications**

**Course outcome:** The students will develop an understanding of basic management concepts, principles and practices.

### **COM-GE-3046 (A) Business Statistics**

**Course outcome:** Students will be familiarised with the basic statistical tools used for managerial decision-making.

### **COM-GE-3046 (B) Operation Research in Business**

**Course outcome:** Students will develop the basic knowledge of application of Operation Research in business activities.

### **COM-SEC-HC-3054 (A) Entrepreneurship**

**Course outcome:** To orient the learner toward entrepreneurship as a career option and creative thinking and behaviour.

### **COM-SEC-HC-3054 (B) New Venture Planning**

**Course outcome:** After completing the course student should be able to

- Develop an understanding of the process of identifying various sources of new business ideas of products and services.
- Examine, evaluate and approach different sources of finance, the nature of marketing effort required and to develop a comprehensive business plan.

## **SEMESTER IV**

### **COM-HC-4016 Cost Accounting**

**Course outcome:**

- The students will be familiarised with basic concepts used in cost accounting, various methods involved in cost ascertainment and cost accounting book keeping systems.

### **COM-HC-4026 Business Mathematics**

**Course outcome:** The students will be familiarised with the basic financial mathematics tools, with an emphasis on applications to business and economic situations.

### **COM-HC-4036 Human Resource Management**

**Course outcome:** The students will be acquainted with the techniques and principles to manage human resource of an organisation.

### **COM-GE-4046 (A) Indian Economy**

**Course outcome:** The student will be able to grasp the major economic problems in India and their solution.

### **COM-GE-4046 (B) Micro Finance**

**Course outcome:** The students will understand the basic concepts of micro- finance and its importance, institution structure, management of micro-finance institutions and microfinance in Indian context.

### **COM-SEC-HC-4054 (A) E-Commerce**

**Course outcome:** Students will be familiarised with the mechanism for conducting business transactions through electronic means.

### **COM-SEC-HC- 4054 (B) E-Filing of Returns**

**Course outcome:** The students will learn the concepts and practical knowledge about electronic filling of returns.

## **SEMESTER V**

### **COM-HC-5016 Principles of Marketing**

**Course outcome:** The students will learn basic knowledge of concepts, principles, tools and techniques of marketing.

### **COM-HC-5026 Fundamentals of Financial Management**

**Course outcome:** The students will be familiarised with the principles and practices of financial management.

### **COM-DSE-HC-5036 (A) Management Accounting**

**Course outcome:** The students will gain knowledge about the use of financial, cost and other data for the purpose of managerial planning, control and decision making.

### **COM-DSE-HC-5036 (B) Advanced Financial Accounting**

**Course outcome:** The students will gain advanced knowledge on financial accounting applicable in business of special nature and on Government accounting system.

### **COM-DSE- HC- 5036 (C) Advertising**

**Course outcome:** The students will be familiarised with the basic concepts, tools and techniques of advertising used in marketing.

### **COM-DSE- HC- 5036 (D) Banking**

**Course outcome:** The students will learn about the banking, rule and regulations of banking operation.

### **COM-DSE- HC- 5036 (F) Indian Financial System**

**Course outcome:** The students will be acquainted with the basic knowledge of Indian Financial System and its components, institutions and their functions.

## **SEMESTER VI**

### **COM-HC-6016 Auditing and Corporate Governance**

**Course outcome:** The students will gain knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards and to give an overview of the principles of Corporate Governance and Corporate Social Responsibility.

### **COM-HC-6026 Indirect Tax Laws**

**Course outcome:** The students will be familiarised with application of principles and provisions of Service Tax, VAT, Central Excise, and Customs Laws.

### **COM-DSE-HC-6036 (A) Fundamentals of Investment**

**Course outcome:** The students will be familiarised with the different investment alternatives, framework of their analysis and valuation and highlight the role of investor protection.

### **COM-DSE-HC-6036 (B) Consumer Affairs and Customer Care**

**Course outcome:**

- The students will be familiarised with of their rights as a consumer, the social framework of consumer rights and legal framework of protecting consumer rights.
- The students will develop an understanding of the procedure of redress of consumer complaints, and the role of different agencies in establishing product and service standards.
- The student will be able to comprehend the business firms' interface with consumers and the consumer related regulatory and business environment.

### **COM-DSE-HC-6036 (C) Advanced Corporate Accounting**

**Course outcome:** The learners will acquire advanced knowledge of corporate accounting and learn the techniques of preparing accounts and statements under various corporate situations.

### **COM-DSE-HC-6036 (D) International Business**

**Course outcome:**

- The students will be familiarised with the concepts, importance and dynamics of international business and India's involvement with global business.
- The students will also learn the theoretical foundations of international business to the extent these are relevant to the global business operations and developments.

### **COM-DSE- HC-6036 (E) Industrial Relations and Labour Laws**

**Course outcome:** The students will learn the concepts of industrial relations including trade unions, collective bargaining, discipline and various labour enactments.

## **COM-DSE-HC-6036 (F) Business Research Methods and Project Work**

### **Course outcome:**

- The students will develop a general understanding of business research and the methods of business research.
- The students will learn about how to collect, analyse, present and interpret data.