



SH. L.N. HINDU COLLEGE, ROHTAK

(Affiliated to M.D. University, Rohtak)

Accredited by NAAC with B (2.74) Grade

Tel : 01262-265345

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Course Outcomes (COs), Programme Outcomes (POs) & Programme Specific Outcomes (PSOs) for UG, Hons., and Vocational Programmes

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B.A (English)

Course Outcomes (COs)

Semester-I

Paper: EN-01 English

CO 1: Through the book (English Literature and Language I) the course offered in BA 1 aims to improve the vocabulary, grammar, speaking and writing skills of students.

CO 2: This course provides an opportunity to the students to understand and practise the exact pronunciation of the English words through their phonetic transcription. Every chapter is supplemented with the phonetic transcription of words and glossary section at the end.

CO 3: It will help to test the learner's overall understanding of the essays as well as develop and sharpen their writing and critical thinking skills.

CO 4: A brief analysis of the prose pieces in the texts drawn from various social and cultural contexts would help the students in comprehending the socially relevant themes and topics.

CO 5: The essays included in the texts are accompanied by author's information and help to develop the emotional quotient of the students towards plants, animals and fellow human beings.

Semester-II

Paper: EN-02 English

CO 1: Students can learn from the life, achievements and innovations of various eminent authors prescribed in the book (Literature and Language part II).

CO 2: The students will be able to understand the various grammar topics including sentence structure, active and passive voices, Direct and Indirect Speech.

CO 3: Short Stories included in the text help to develop the emotional quotient and critical thinking among the students towards various aspects of life.

CO 4: At the end of this semester the students will be able to enhance their oral and written skills along with good vocabulary building and correct pronunciation of words.

Semester III

Paper: EN -03 English

CO1. The course enables students to enhance their creative and writing skills in a systematic and refined way as they are expected to write paragraphs on given specific topics.

CO2. They are capable of reading and doing paraphrasing systematically.

CO3. The grammar will help the students to enhance their competition skills with the practice of word knowledge, sentence formation, grammatical rules and writing skills.

CO4. The course enables students to enhance their understanding of vocabulary by practice of vocabulary via glossary, antonyms, synonyms etc.

CO5. The poetry amplifies the students understanding of various elements of poetry such as poetic diction, tone, genre, symbolism, personification, figure of speech etc.

Semester IV

Paper:EN -04

CO1. The students will demonstrate an increase in awareness of translation, sentence formation and structuring and various grammatical rules.

CO2. It will help the students to develop their technical writing skills i.e. e-mail, resume writing etc.

CO3. It will help the students to familiarize with the genre of dramatics.

CO4. Dramas will help students to develop practical wisdom.

CO5. The conclusion of the course will enable the students to enhance their understanding of vocabulary.

Semester V

Paper EN -05

CO1. Raja Rao's novel Kanthapura will provide better understanding of various age-old social evils that still is existing in the society.

CO2. It will help the students to understand the social, political, historical aspects of Indian freedom movement in 1930s.

CO3. It will familiarize the students with various literary forms.

CO4. It will help students in their critical thinking process and enhance their reading, writing and competition skills.

CO5. It will inculcate patriotic feelings and gratitude for the sacrifice and contribution of common man. Events depicted vividly raise better understanding of various historical and cultural aspects of India.

Semester-VI

Paper: EN-06 English

CO1: The Drama, *The Merchant of Venice* by William Shakespeare will help the students in learning language as it describes what to say and how to say in different situations.

CO2: It will help the students to develop the cognitive abilities, enhance their critical acumen and empower them to judge situations and take decisions accordingly.

CO3: It will enhance the reading and writing skills of students by helping them to understand the written words and interpreting them in their own words.

CO4: It will improve their comprehension and communication skills by learning effective summary, abstract and précis writing.

CO5: It will help the students to understand the proper way of correspondence in the form of formal/informal letter and RTI application.

बी. ए. (हिंदी अनिवार्य)

पाठ्यक्रम परिणाम (Course Outcomes)

सेमेस्टर - I

Paper : HI-01 Hindi

CO-1: छात्रों ने भक्तिकालीन तथा रीतिकालीन कवियों व उनकी रचनाओं, प्रवृत्तियों एवं भाषा शैली के बारे में ज्ञान प्राप्त किया।

CO- 2: छात्रों ने हिंदी साहित्य इतिहास लेखन की परम्परा, परिस्थितियाँ, नामकरण का आदिकाल, प्रवृत्तियाँ एवं रासोकाव्य परम्परा का विस्तार से ज्ञान प्राप्त किया।

CO-3: छात्रों ने काव्य की परिभाषा, तत्त्व, काव्य गुण, शब्द शक्ति, अलंकार, छंद आदि को उदाहरण सहित भली भाँति समझा।

CO-4: छात्रों में साहित्य व काव्य के प्रति रुचि जागृत हुई।

सेमेस्टर II

Paper : HI-2 Hindi

CO-1: छात्रों ने नाटक एवं रंगमंच के तत्वों की जानकारी प्राप्त की।

CO-2: ध्रुवस्वामिनी नाटक के माध्यम से लेखक जयशंकर प्रसाद की नाट्यकला की विशेषताओं को समझा।

CO-3: हिंदी साहित्य के भक्तिकाल के अंतर्गत निर्गुण व सगुण काव्य की विशेषताओं और प्रमुख कवियों के विषय में जानकारी प्राप्त की।

CO-4: छात्रों ने बोली, भाषा, मानक भाषा, राजभाषा, राष्ट्रभाषा, माध्यम भाषा, मातृभाषा के अर्थ को समझा। छात्रों की भाषा के प्रति समझ विकसित हुई। नाट्यकला के प्रति रुचि जागृत हुई।

सेमेस्टर - III

Paper : HI-03 Hindi

CO-1:

हिंदी साहित्य के प्रमुख कहानी कारों और प्रसिद्ध कहानियों को पढ़कर उनके नैतिक व सामाजिक मूल्य की शिक्षा प्राप्त की।

CO-2: छात्रों में कथावाचन, कहानी लेखन के माध्यम से रचनात्मकता का विकास हुआ।

CO-3: हिंदी साहित्य में उपन्यास, कहानी नाटक, निबंध के उद्गम और विकास को भली-भाँति जाना। छात्र गद्य और पद्य के अंतर से भी परिचित हुए।

CO-4: छात्रों ने पारिभाषिक शब्दावली के स्वरूप और महत्व को जानकर उसके प्रयोग के बारे में सीखा। छात्रों में वाचन कौशल और लेखन कौशल का विकास हुआ।

सेमेस्टर - IV

Paper : HI-04 Hindi

CO-1: छात्रों ने आधुनिक हिंदी कवियों की रचनाओं, भावपक्ष, कलापक्ष, भाषाशैली एवं उनकी विशेषताओं के बारे में जानकारी प्राप्त की।

OC-2: छात्रों की काव्य पाठ में रुचि जागृत हुई।

OC-3: हिंदी साहित्य में रीतिकाल की पृष्ठभूमि, नामकरण, विशेषताओं व रीतिकालीन कवियों की जानकारी प्राप्त की।

OC-4: छात्रों ने कंप्यूटर के स्वरूप व महत्व, ईमेल, इंटरनेट की उपयोगिता के बारे में जानकारी प्राप्त की।

OC-5: छात्रों ने मशीनी अनुवाद, अनुवाद के प्रकार, प्रक्रिया के विषय में सीखा।

सेमेस्टर - V

Paper: HI-05 Hindi

CO-1: छात्रों ने समकालीन हिंदी कवियों और उनकी रचनाओं के बारे में ज्ञान प्राप्त किया।

CO-2: छात्रों ने आधुनिक काल के काव्य के विभिन्न कवियों और उनकी कविताओं तथा भाव-भाषा शैली विषयक आदि को भालिभाती समझा। काव्य के प्रति रुचि विकसित हुई।

CO-3: औपचारिक तथा अनौपचारिक पत्र लिखना सीखा।

CO-4: संक्षेपण और पल्लवन प्रक्रिया को जानकर रचनात्मक लेखन में रुचि जागृत हुई।

CO-5: छात्रों में काव्य-पाठ, लेखन कौशल, भाषण, वाद-विवाद की क्षमता का विकास हुआ।

सेमेस्टर - VI

Paper: HI-06 Hindi

CO-1: छात्रों ने हिंदी साहित्य की विभिन्न विधाओं, निबंध, हास्य-व्यंग्य, संस्मरण, यात्रा-वृत्तांत की जानकारी प्राप्त की।

CO-2: हरियाणवी लोक साहित्य के अंतर्गत हरियाणवी सांग, कविता, उपन्यास, कहानी, नाटक, प्रहसन का विस्तृत ज्ञान प्राप्त किया।

CO-3: हरियाणवी भाषा व विभिन्न बोलियों को समझकर हरियाणवी साहित्य के प्रति रुचि जागृत हुई।

CO-4: पत्रकारिता के अर्थ, स्वरूप, फीचर लेखन आदि की जानकारी प्राप्त की।

CO-5: हिंदी पत्रकारिता के प्रति रुझान जागृत हुआ।

बी.ए.(हिंदीऐच्छिक)

पाठ्यक्रम परिणाम (Course Outcomes)

सेमेस्टर-1

Paper: EH-01 Hindi

- CO-1 विद्यार्थियों ने हिंदी साहित्य इतिहास लेखन की परंपरा को समझते हुए आदिकालीन साहित्य की परिस्थितियां, नामकरण तथा प्रवृत्तियों के बारे में जानकारी प्राप्त की।
- CO-2 रासोकाव्य-परंपरा तथा विभिन्न रासोकारों के द्वारा रचित रासों-ग्रंथों की जानकारी विद्यार्थियों ने प्राप्त की।
- CO-3 'कुरुक्षेत्र' खंड काव्यके माध्यमसे 'दिनकर' जी की काव्य-कला से विद्यार्थियों को परिचित करवाया गया।
- CO-4 'हानूश' नाटक के माध्यम से विद्यार्थियों में नाट्य-कला के प्रति रुचि जागृत हुई।

सेमेस्टर-2

Paper: EH-02 Hindi

- CO-1 पाठ्यक्रम में निर्धारित 'भक्तिकाल' की संपूर्ण जानकारी (परिस्थितियां प्रवृत्तियां तथा भक्ति आंदोलन) विद्यार्थियों को प्रेषित की गई।
- CO-2 छात्रों ने प्रेमचंद जी द्वारा रचित 'निर्मला' उपन्यास के माध्यम से प्रेमचंद युगीन सामाजिक परिवेश तथा समस्याओं की जानकारी प्राप्त की।
- CO-3 विद्यार्थियों में प्राचीन एवं मध्यकालीन काव्य के प्रति विभिन्न कवियों द्वारा लिखित दोहों तथा चौपाइयों के माध्यम से रुचि जागृत की गई।

सेमेस्टर-3

Paper: EH-03 Hindi

- CO-1 विभिन्न लेखकों यथा जयशंकर प्रसाद, मुंशी प्रेमचंद, मन्नूभंडारी इत्यादि द्वारा लिखित कहानियों के माध्यम से विद्यार्थियों में सामाजिक समस्याओं के प्रतिजानकारी तथा समाधान संबंधी ज्ञान वितरित किया गया।
- CO-2 रीतिकालीन हिंदी काव्य का प्रेरणा स्रोत, रीति कवियों का आचार्यत्व तथा रीतिकालीन हिंदी काव्य की उपलब्धियां | विस्तृत जानकारी विद्यार्थियों को दी गई।
- CO-3 छात्रों ने आधुनिक 'काव्य-मंजूषा' पुस्तक के माध्यम से विभिन्न कवियों और उनकी रचनाओं के बारे में ज्ञान प्राप्त किया।

सेमेस्टर-4

Paper: EH-04 Hindi

- CO-1 कवि नरोत्तम दास द्वारा रचित 'सुदामाचरित' काव्य के माध्यम से आज के युगीन संदर्भ में 'सुदामा के चरित्र चित्रण का महत्व क्या है' इससे विद्यार्थियों को परिचित करवाया गया |
- CO-2 पाठ्यक्रम में निर्धारित विभिन्न सामाजिक भावात्मक तथा साहित्यिक निबंधों के माध्यम से विद्यार्थियों में आदर्श तथा यथार्थ के बीच सामंजस्य की भावना को जागृत किया गया।।
- CO-3 हिंदी साहित्य के आधुनिक काल में- हिंदी कविता का विभिन्न युगों में क्या स्वरूप रहा तथा हिंदी काव्य पर क्या प्रभाव हुआ इस की विस्तृत जानकारी विद्यार्थियों को प्रेषित की गई।

सेमेस्टर-5

Paper: EH-05 Hindi

- CO-1 डॉ. रोहिणी अग्रवाल द्वारा संपादित 'कथा-वातायन' में संकलित कहानियों का क्या उद्देश्य है इस की विस्तृत जानकारी छात्र तथा छात्राओं को प्रेषित की गई।
- CO-2 हिंदी साहित्य के आधुनिक काल में गद्की विभिन्न विद्याओं का उद्भव तथा विकास कैसे हुआ। विद्यार्थियों में इस के प्रति रुचि जागृत की गई।
- CO-3 समकालीन काव्य प्रभास पुस्तक के माध्यम से विभिन्न कवियों द्वारा रचित कविताओं के कथ्य पर विद्यार्थियों के समकक्ष प्रकाश डाला गया।

सेमेस्टर-6

Paper: EH-06 Hindi

- CO-1 पाठ्यक्रम में निर्धारित निबंधकारों के परिचय निबंधों के उद्देश्य तथा भाषा-शैली संबंधी जानकारी विद्यार्थियों को दी गई।
- CO-2 'मानसकाहंस' उपन्यास के माध्यम से पुरावत और कल्पना के आधार पर अमृत लाल नागर की भाषा-शैली संबंधी जानकारी विद्यार्थियों को प्रेषित की गई।
- CO-3 विद्यार्थियों को रस भेद, अलंकार भेद तथा छंदों की संपूर्ण जानकारी प्रेषित की गई।
- CO-4 उपन्यास के प्रति रुचि जागृत करना उद्देश्य रहा।

बी.ए. संस्कृत अनिवार्य

पाठ्यक्रम परिणाम (Course Outcomes)

संस्कृत (अनिवार्य)

बी(सामिसत्र प्रथम) .ए.

CO1. संस्कृत चयनिका पुस्तक के पद्य भाग के अध्यापन के माध्यम से विद्यार्थियों में काव्य के प्रति रुचि जागृत की गयी ।

CO2. संस्कृत चयनिका पुस्तक के गद्य भाग के अध्यापन के माध्यम से विद्यार्थियों में शब्दबोध के प्रति रुचि जागृत की गयी।

CO3. बालकपितृ ,मातृ ,जल ,साधु ,कवि , व सर्व (तीनों लिंगों में) इत्यादि शब्दरूपों के माध्यम से संस्कृत भाषा के गठन और कारक प्रकरण के स्वरूप से अवगत कराया गया ।

CO4. भू में मेलकारों लकारों विधिलिङ् ,लङ् लोट् लृट् ,लट् ,पठ् ,गम् ,वद् ,अस् ,अनुप्रयोग के माध्यम से विद्यार्थियों को लकार संबन्धी अवधारणा से अवगत कराया गया ।

संस्कृत (अनिवार्य)

बी(सामिसत्र द्वितीय) .ए.

CO1. संस्कृत चयनिका पुस्तक के पद्य भाग के अध्यापन के माध्यम से विद्यार्थियों में काव्य के प्रति रुचि जागृत की गयी।

CO2. संस्कृत चयनिका पुस्तक के गद्य भाग के अध्यापन के माध्यम से विद्यार्थियों में शब्दबोध के प्रति रुचि जागृत की गयी।

CO3. राजन् इदम् और तद्,युष्मद् ,अस्मद् ,विद्वस् ,(तीनों लिंगों में) इत्यादि शब्दरूपों के माध्यम से संस्कृत भाषा के गठन और कारक प्रकरण के स्वरूप से अवगत कराया गया ।

CO4. लभ्(यच्छ) दा ,, कृच् ,भृ , इत्यादि धातुओं के लट् में लकारों विधिलिङ् ,लङ् लोट् लृट् ,अनुप्रयोग के माध्यम से विद्यार्थियों को लकार संबन्धी अवधारणा से अवगत कराया गया ।

व्यं CO5. जन सन्धि व विसर्ग सन्धि के परिभाषा रहित प्रयोगमात्र ,अध्यापन के माध्यम से विद्यार्थियों व्यञ्जन प्रणाली के विषय में जानकारी दी गयी |

CO 6. हिन्दी से संस्कृत में अनुवाद के माध्यम से विद्यार्थियों में द्विभाषायी कौशल का विकास किया गया |

संस्कृत (अनिवार्य)

बी .ए.(तृतीय सामिसत्र)

CO 1. महाकविभास के द्वारा रचित चारुदत्तम् नाटक के प्रथम अंक वद्वितीय अंक के माध्यम से भास के काव्य सौन्दर्य से विद्यार्थियों को अवगत कराया गया

CO2. क्त, क्तवत्, शतृ,शानच् तुमुन्इत्यादि कृदन्त प्रत्ययों के माध्यम से विद्यार्थियों को संस्कृत व्याकरण की प्रमुख प्रवृत्ति प्रकृतिप्रत्ययविभाग के स्वरूप से अवगत कराया गया |

CO3. भूहस्,स्था,दा,भृ,श्रु,लिखु,पा,गम्,पठ्,धातुओं के सन् प्रत्यय के रूपों के माध्यम से विद्यार्थियों को संस्कृत भाषा अधिक्रिय रूपों से अवगत कराया गया |

CO4. अवययीभाव व द्वन्द्व समास के माध्यम से विद्यार्थियों को संस्कृत समास प्रक्रिया से अवगत कराया गया |

CO 5. हिन्दी से संस्कृत में अनुवाद के माध्यम से विद्यार्थियों में द्विभाषायी कौशल का विकास किया गया |

संस्कृत (अनिवार्य)

बी.ए.(चतुर्थ सामिसत्र)

CO 1. महाकविभास के द्वारा रचित चारुदत्तम् नाटक के तृतीय अंक व चतुर्थ अंक के माध्यम से भास के काव्य सौन्दर्य से विद्यार्थियों को अवगत कराया गया।

CO 2. कृदन्त तव्यत्, अनीयर, यत्, क्त्वा, ल्यप् ण्वुल् इत्यादि कृदन्त प्रत्ययों के माध्यम से विद्यार्थियों को संस्कृत व्याकरण की प्रमुख प्रवृत्ति प्रकृतिप्रत्ययविभाग के स्वरूप से अवगत कराया गया।

CO 3. भूहस्, स्था, दा, भृ, श्रु, लिखु, पा, गम्, पठ्, धातुओं के सन् प्रत्यय के रूपों के माध्यम से विद्यार्थियों को संस्कृत भाषा अधिक्रिय रूपों से अवगत कराया गया।

CO 4. बहुव्रीहि, तत्पुरुष (द्विगु तथा कर्मधारय सहित) समास के माध्यम से विद्यार्थियों को संस्कृत समास प्रक्रिया से अवगत कराया गया।

CO 5. हिन्दी से संस्कृत में अनुवाद के माध्यम से विद्यार्थियों में द्विभाषायी कौशल का विकास किया गया।

संस्कृत (अनिवार्य)-

बी(सामिसत्र पञ्चम) .ए .

CO 1. पण्डित अम्बिका दत्त व्यास के द्वारा रचित शिवराज विजय नामक उपन्यास के प्रथम निश्वास के माध्यम से संस्कृत भाषा की उपन्यास विधा के उद्भव और विकास के क्रम व प्रवृत्तियों से विद्यार्थियों को परिचित कराया गया।

CO 2. भर्तृहरि प्रणीत नीतिशतकम् के माध्यम से विद्यार्थियों को तात्कालिक नीति मूल्यों से अवगत कराया गया।

CO 3. अश्वघोषभर्तृहरि, भारवि, कालिदास, आदि कवियों को आधार मान कर संस्कृत साहित्य के इतिहास की प्रमुख प्रवृत्तियों से विद्यार्थियों को अवगत कराया गया।

CO 4. विद्यार्थियों को कर्ता कर्म करण व संप्रदान आदि कारकों का सामान्य परिचय देते हुये कारक प्रकरण से अवगत कराया गया।

संस्कृत(अनिवार्य)-

बी(सामिसत्र षष्ठ) .ए.

CO 1. पण्डित अम्बिका दत्त व्यास के द्वारा रचित शिवराज विजय नामक उपन्यास के प्रथम निश्वास के माध्यम से संस्कृत भाषा की उपन्यास विधा के उद्भव और विकास के क्रम व प्रवृत्तियों से विद्यार्थियों को परिचित कराया गया |

CO 2. भर्तृहरिप्रणीत नीतिशतकम् के माध्यम से विद्यार्थियों को तात्कालिक नीति मूल्यों से अवगत कराया गया |

CO 3. भवभूतिजयदेव ,बाणभट्ट ,शूद्रक , आदि कवियों को आधार मान कर संस्कृत साहित्य के इतिहास की प्रमुख प्रवृत्तियों से विद्यार्थियों को अवगत कराया गया |

CO 4. विद्यार्थियों को अपादान, सम्बन्ध, अधिकरण आदि कारकों का सामान्य परिचय देते हुये कारक प्रकरण से अवगत कराया गया |

बी.ए.संस्कृत ऐच्छिक

पाठ्यक्रम परिणाम (Course Outcomes)

संस्कृत(ऐच्छिक)

बी.ए.(प्रथमसामिसत्र)

CO 1. संस्कृत व्यवहारसाहस्री पाठ्यपुस्तक के माध्यम से शिष्टाचार प्रवासतः ,यात्रा ,मेलनम् , छात्राः प्रतिनिर्वतनम् आदि के विषय में संस्कृत में सरल प्रश्नोत्तर रूप में विद्यार्थियों को अवगत कराया गया ।

CO 2. पण्डित विष्णु शर्मा के द्वारा रचित “हितोपदेशः” के मित्र लाभ नामक संभाग के कथामुख मृग काक , कथा विडाल गृद्ध,कथा मूषिक-कूर्मइत्यादि के माध्यम से प्राचीन भाषा संस्कृत में निहित नीति व राजनीति से संबद्ध मूल्यों से विद्यार्थियों को परिचित कराया गया ।

CO 3. विद्यार्थियों को राम, कवि, भानु, पितृ, लता, मति, नदी, धेनु, वधू, मातृ, फल, वारि, मधु इत्यादि शब्दरूपों के माध्यम से संस्कृत भाषा के गठन और कारक प्रकरण के स्वरूप से अवगत कराया गया ।

CO 4. भू, पठ्, हस्, नम्, गम्, अस्, हन्, क्रुध, नश्, नृतचिन्त् ,पृच्छ ,इष् ,अद् , इत्यादिधातुरूपों के माध्यम से विद्यार्थियों को संस्कृत भाषा के क्रियारूपों के स्वरूप और क्रियाविधि से परिचित कराया गया ।

CO 5. अनुष्टुप् आर्या मालिनी ,उपजाति ,उपेन्द्रवज्रा ,इन्द्रवज्रा ,इत्यादि छन्दों के माध्यम से विद्यार्थियों को संस्कृत भाषा में निष्ठ संगीत कला से अवगत कराया गया ।

CO 6. अच् सन्धिः के माध्यम से विद्यार्थियों को संस्कृत भाषा के स्वरों की उत्पत्ति और विकास के क्रम से अवगत कराया गया ।

संस्कृत (ऐच्छिक)

बी(सामिसत्र द्वितीय) .ए.

CO 1. हिन्दी से संस्कृत में अनुवाद के माध्यम से विद्यार्थियों में द्विभाषायी कौशल का विकास किया गया ।

CO2. श्लोक कण्ठस्थीकरण के माध्यम से विद्यार्थियों के वाचन व गायन कौशल का विकास किया गया ।

CO 3. भासविरचितदूतवाक्यम् के माध्यम से विद्यार्थियों को भास के रचना कौशल से अवगत कराया गया |

CO4. बाणभट्ट के द्वारा रचित कादम्बरीशुकनासोपदेश के माध्यम से विद्यार्थियों को गद्य साहित्य के विकास व उसकी प्रमुख प्रवृत्तियों से अवगत कराया गया |

CO 5. आत्मन्, दण्डिन्, वाच्, सरित्, सर्व, तद्, एतद्, यद्, किम्, इदम् (तीनों लिंगों में) अस्मद्, युष्मद्, एक, द्वि, त्रि, चतुर्, पंचन् इत्यादि शब्दरूपों के माध्यम से संस्कृत भाषा के गठन और कारक प्रकरण के स्वरूप से अवगत कराया गया |

CO 6. सेव्, लभ्, रुच्, मुद्, याच् कृ, नी, ह, भज्, पच् इत्यादि के माध्यम से विद्यार्थियों को संस्कृत भाषा के क्रिया रूपों से अवगत कराया गया |

संस्कृत (ऐच्छिक)

बी तृतीय .ए.(सामिसत्र)

CO1. संस्कृत व्यवहारसाहस्री पाठ्यपुस्तक के माध्यम से परीक्षा और छात्राः आदि के विषय में संस्कृत में सरल प्रश्नोत्तर रूप में विद्यार्थियों को अवगत कराया गया |

CO2. रामायण के बालकाण्ड के प्रथम अध्याय के माध्यम से वाल्मीकि द्वारा रचित आदिकाव्य रामायण के स्वरूप व महत्त्व से अवगत कराया गया |

CO3. मतुपठ ,इनि ,क् तल,त्वा ,इत्यादि तद्धित प्रत्ययों के माध्यम से संस्कृत व्याकरण के द्वितीयक प्रत्ययों के स्वरूप से विद्यार्थियों को अवगत कराया गया |

CO4. भूरू सन्नन्त व णिजन्त के धातुओं हन् ,स्था ,दा ,धृ ,शृ ,लिखू ,पा ,गम् ,पठ् .पों के माध्यम से विद्यार्थियों को संस्कृत भाषा अधिक्रिय रूपों से अवगत कराया गया |

CO5. अव्ययीभाव व तत्पुरुषसमास के माध्यम से विद्यार्थियों को संस्कृत समास प्रक्रिया से अवगत कराया गया |

CO6. हिन्दी से संस्कृत में अनुवाद के माध्यम से विद्यार्थियों में द्विभाषायी कौशल का विकास किया गया |

CO7. हल सन्धि व विसर्ग सन्धिके माध्यम से संस्कृत भाषा के व्यञ्जन व अयोगवाह की उत्पत्ति और कार्य प्रणाली से अवगत कराया गया ।

CO8. छन्दांसि स्स्रग्धरा शार्दूलविक्रीडितम्, वसन्ततिलका ,मन्दाक्रान्ता ,शिखरिणी ,वंशस्थ ,इत्यादि छन्दों के माध्यम से विद्यार्थियों को संस्कृत भाषा में निष्ठ संगीत कला से अवगत कराया गया ।

संस्कृत (ऐच्छिक)

बीए(चतुर्थसामिसत्र)

CO1. श्रीमद्भगवद्गीता के द्वितीय अध्याय के माध्यम से संस्कृत भाषा में निहित आध्यात्मिक ज्ञान से विद्यार्थियों को परिचित कराया गया ।

CO2. महाकवि कालिदास के द्वारा रचित रघुवंशमहाकाव्यम् के द्वितीय सर्ग के माध्यम से विद्यार्थियों को कालिदास की रचना शैली और रघुकुल के इतिहास से अवगत कराया गया ।

CO3. क्त, क्तवतुशा शतृ, तुमुन, ण्यत्, क्त्वा, नच् अनीयर तव्यत्, यत्, इत्यादि कृदन्त प्रत्ययों के माध्यम से विद्यार्थियों को संस्कृत व्याकरण की प्रमुख प्रवृत्ति प्रकृतिप्रत्ययविभाग के स्वरूप से अवगत कराया गया ।

CO 4. द्वन्द्व बहुव्रीहि समास के माध्यम से विद्यार्थियों को संस्कृत समास प्रक्रिया से अवगत कराया गया ।

CO5. पाणिनीय प्रत्याहारसूत्र के माध्यम से विद्यार्थियों को संस्कृत व्याकरण के वैज्ञानिक स्वरूप से अवगत कराया गया । सरल विषयों पर संस्कृत में सरल निबन्ध लेखन के माध्यम से विद्यार्थियों की संस्कृत बोध क्षमता का विकास किया गया ।

संस्कृत (ऐच्छिक)

बीए ..(पञ्चम सामिसत्र)

CO1. संस्कृत व्यवहारसाहस्री पाठ्यपुस्तक के माध्यम से परीक्षा और छात्राः आदि के विषय में संस्कृत में सरल प्रश्नोत्तर रूप में विद्यार्थियों को अवगत कराया गया ।

CO 2. महाकवि कालिदास द्वारा रचित अभिज्ञान शाकुन्तलम् के माध्यम से संस्कृत भाषा के साहित्यिक सौन्दर्य से विद्यार्थियों को परिचित कराया गया ।

CO 3. संहिता से लेकर वेदाङ्ग साहित्य तक वेदाङ्ग साहित्य शिक्षा, कल्प, व्याकरण, निरुक्त, छन्द, ज्योतिष,संहितावर्ण्यविषय एवं काल अथर्ववेद ,सामवेद ,यजुर्वेद ,ऋग्वेद---, ब्राह्मण चारों संहिताओं से सम्बन्धित ब्राह्मण सामान्यपरिचयआरण्यक एवं उपनिषद चारों संहिताओं से सम्बद्ध सामान्यपरिचय इत्यादि के आधार पर संस्कृत साहित्य के इतिहास के प्रमुख कालखण्डों व भाषायी विकास से विद्यार्थियों को परिचित कराया गया ।

CO4. लघुसिद्धान्त कौमुदी स्त्री प्रत्यय प्रकरण के माध्यम से विद्यार्थियों को संस्कृत व्याकरण की प्रक्रियानुसारी पद्धति से अवगत कराया गया ।

संस्कृत (ऐच्छिक)

बीए .. (षष्ठ सामिसत्र)

CO 1. संस्कृतव्यवहारसाहस्री पाठ्यपुस्तक के माध्यम से परीक्षा और छात्राः आदि के विषय में संस्कृत में सरल प्रश्नोत्तर रूप में विद्यार्थियों को अवगत कराया गया ।

CO 2. महाकवि कालिदास द्वारा रचित अभिज्ञान शाकुन्तलम् के माध्यम से संस्कृत भाषा के साहित्यिक सौन्दर्य से विद्यार्थियों को परिचित कराया गया ।

CO 3. रामायणसुबन्धु ,बाणभट्ट ,कालिदास ,भास ,अश्वघोष ,महाभारत ,, दण्डी,भवभूति ,माघ ,भारवि , व्यास अम्बिकादत्त ,श्रीहर्षइत्यादि के आधार पर संस्कृत साहित्य के इतिहास की प्रमुख प्रवृत्तियों से विद्यार्थियों को परिचित कराया गया ।

CO 4.सरल विषयों पर संस्कृत में सरल निबन्ध लेखन के माध्यम से विद्यार्थियों की संस्कृत बोध क्षमता का विकास किया गया ।

CO 5. अनुप्रास, श्लेष, यमक, उपमा, उत्प्रेक्षा, रूपक,अर्थान्तरन्यासविशेषोक्ति ,विभावना ,अतिशयोक्ति , इत्यादि अलंकारों के माध्यम से विद्यार्थियों को अलंकार शास्त्र के स्वरूप व नियमों से परिचित कराया गया

B.A. HISTORY
COURSE OUTCOME

SEMESTER I

PAPER- HR-01 HISTORY OF INDIA (EARLIST TIME TO 1200 A.D.)

CO 1 It is to make the students familiar with ancient culture and civilization i.e. Harappan and Vedic period.

CO 2 Students will understand about the social, economic and political aspects of different religions like Jainism and Buddhism

CO 3 The students are to acquire knowledge about the foreign invasion, genesis of the Mauryan Empire and its decline as well as the growth of the Gupta regime.

CO 4 They are able to identify the main centres of Harappan period and trade routes of Ancient India. Kushan empire and Harshvardhan regime are also pointed out with the help of map for identification.

SEMESTER II

PAPER- HR-02-HISTORY OF INDIA (1200 to 1707A.D.)

CO 1 The students are to gain information about mediaeval India including expansion and consolidation of Delhi Sultanate and its decline.

CO 2 It is to analyse the major events of Mughal regime particularly of Babar, Akbar and Aurangzeb.

CO 3 It imparts knowledge about institutional development pertaining to Mansabdari. They also know about land revenue system, trade and socio-religious life during mediaeval period.

CO 4 It flashes light on the sites of Delhi Saltnat during Alauddin Khilji regime, Industrial and trading centres on map.

SEMESTER III

PAPER- HR-03 HISTORY OF INDIA (1707 to 1947)

CO 1 Students will be aware about the decline of Mughals and expansion and consolidation of British Empire in India under East India Company.

CO 2 They will be able to discuss the socio-economic conditions during British rule.

CO 3 The rise of nationalism, freedom movement, constitutional development can be the area of research analysis for the students in future.

CO 4 The students can trace out India during 1764, centres of 1857 Revolt and different areas of Revolutionary movement.

SEMESTER IV

PAPER-04-HISTORY OF HARYANA (EARLIST TIME TO 1947AD.)

CO 1 It will help the students to know about the sources and spaces of history of Haryana and rise of powers during ancient and mediaeval period.

CO 2 Students will be able to understand the circumstances and events of the Battles of Tarain and Panipat. They will also understand about the political, social and religious changes during Medieval period.

CO 3 The students will know about the early resistance against Britishers in terms of 1857 Revolt and freedom movement.

CO 4 Location of the main centres of Harappan civilization, urban Centre during mediaeval time, major centres of 1857 revolt and freedom movement in Haryana will be traced on the map to aware the students about all the above historical places.

SEMESTER V

PAPER-05- ANCIENT AND MEDIAEVAL WORLD

CO 1 The students will come to know about Pre-historic and Proto-historic cultures and civilization of world.

CO 2 Students will be able to understand about Greek and Roman civilization as well as feudalism and role of church in mediaeval Europe.

CO 3 It enables the students to understand the issues like Pre-Islamic Arabia, rise of Islam, state and Society.

CO 4 The main sites of Sumer, Egypt and Greek civilizations will be identified Geographically and also the trading routes and towns on map during mediaeval period for enhancing the knowledge of the students.

SEMESTER VI

PAPER-06-MODERN WORLD

CO 1 It will be helpful to make understand the events involving economic development in terms of Mercantilism, agricultural and Technical Revolution and rise as well as the growth of capitalism and imperialism.

CO 2 The students will understand the issue of political development that is French and Russian Revolution, rise of liberalism in Britain, Fascism and Nazism in Italy and Germany.

Co 3 The Rise and expansion of colonialism in India, China and Japan World War first and second and peace settlements as well the emergence of non-alignment movement etc. will be thought to the students to aware them about all these.

CO 4 Students will be able to identify the area of Agricultural Revolution, French Revolution and the unification of Italy and Germany on world map.

B.A (Political Science)

Course Outcomes (COs)

Semester-I

Paper: PS-01(Indian Constitution Option (i))

- CO1:** In a Democratic Republic like India, students are to be made aware of our Constitution and its understanding. This course contains Sources of Constitution, Fundamental Duties and Fundamental Rights of citizens which all must know for a healthy democracy.
- CO2:** Students will learn about levels, roles and responsibilities of the Executives for effective running of State and Central government. Students will understand the duties and constitutional powers of the President, Prime Minister, Governor, Chief Ministers and the Council of Ministers.
- CO3:** This course explains the composition and role of Lok Sabha, Rajya Sabha and the State Legislature. It is also beneficial to increase the knowledge about of the working of Gram Panchayat, Gram Sabha along with the duties and executive knowledge of the Sarpanch about the need and mechanisms of the Constitutional amendments.
- CO4:** This course provides a knowledge about the Judiciary which is an important pillar of a successful democracy and thus it is the utmost need of the hour that students must be aware about Judiciary by discussion and have a better understanding of the Judiciary levels – High Courts, Supreme Court and the Judicial Process.

Semester-II

Paper: PS-02 (Indian Politics Option (i))

- CO1:** India being a Federal State with unitary features, students will learn about Centre –State relations, Principles of healthy federation and also sharing of powers and revenue between Centre and the States. Students will learn about justification of more autonomy to the states and pros and cons of smaller states.
- CO2:** Exercising franchising in a transparent manner is necessary for Democracy. The students will know the composition, powers and duties of the Election Commission of India, challenges in smooth conduct of the elections; factors affecting voting behaviour, voters 'rights and responsibilities and need for new electoral reforms in India.
- CO3:** Knowledge about the political parties in India - both the National parties and the popularity of the regional parties and comparative study of dual party and the multi-party system.

CO4: Growing factionalism in Indian politics on the basis of region, religion, caste and language and its implication for democracy. Students shall learn the factors for these fissiparous tendencies and counter measures required.

Semester III

Paper: PS-03(Principles of political Science-I Option (i))

CO1: Understanding the Meaning, Nature and Scope of the Political Science for a common citizen in a young Democracy; relating the Political Science with other social sciences and the benefits derived in.

CO2: The origin and existence of the states in Democracy, Institutions building and role for smooth governess, the knowledge about theories of evolution of the state and its governess.

CO3: Nature of State in Democracy, Pros and Cons of Liberal and Non-liberal Democracies. The knowledge about the relevance of the Marxism views in the Capitalist systems.

CO4: Sovereignty - its importance, attributes, its relevance in changing political environment and threats to the sovereignty, comparative study of the Monistic and Pluralistic theories.

Semester IV

Paper: PS-04 (Principles of political Science-II Option (i))

CO1: Significance and relevance of the knowledge about Human Rights and its violations in the liberal democracies and its repercussions, the role and powers of the Human Rights Organisations and its importance in democracy.

CO2: Liberal democracy and its benefits, necessity of a democracy which develops inclusive society and all have equal rights to take part

CO3: Social changes due to working of democracy and need for Applying Gandhian Model and the concept of the welfare state.

CO4: The evolution of healthy democracy depends on inclusiveness and the non-discriminatory policies. Knowledge about the Right to Information Act and Consumer rights and protection and their importance in democracy

Semester V

Paper: PS-05 (Comparative Politics Option (i))

CO1: Need and significance of politics for modern state and comparison of different political systems in the world.

CO2: Knowledge about various approaches of comparative politics and relevance in changing political set up and political equations.

CO3: Knowledge about the basis of constitutionalism and different types of constitution and problems in constitutionalism.

CO4: Inter linkage and interdependence of pillars of democracy –Executive, Legislative and judiciary. The Pressure groups and the Political Parties

Semester VI

Paper: PS-06 (Comparative constitutions of UK & USA Option (i))

CO1: Fundamentals and significance of constitutions of the UK &USA in the Indian context and also the socio-economic basis in democracies.

CO2: Knowledge about the composition and powers of the executives and the roles of the legislature at different levels and its study Vis-a-Vis India.

CO3: The levels and mechanisms of judiciary in UK & USA and their role in keeping democracy transparent and also the role of the pressure groups and political parties.

CO4: The electoral Process in UK &USA and Its transparency; People's attitude towards franchising and consciousness towards politics; the quality and levels of bureaucracy in UK&USA.

B.A. Economics

Course Outcomes

Semester- I

Paper - Eco 1 Microeconomics - I

CO1:Students will understand and demonstrate core micro-economic terms, concepts and theories.

CO2:The student will be able to differentiate between positive and normative statements.

CO3:Students will learn the nature and objective of studying economics and know how to achieve maximum satisfaction through minimum sacrifice.

Semester-II

Paper - ECO2 Micro Economics-II

CO1:The course provides an understanding of the operational system of a market economy and the problem of how best to allocate society's scarce resources.

CO2:Students will learn how market can be made consumer friendly.

Semester – III

Paper - Eco 3 Macro Economics – I

CO1:The student will learn the Importance of Macro Economics.

CO2:Students will be able to analyze data to solve complex macro-level Economic problems. 3. Course is helpful to understand general macro-economics concepts like GDP, Employment, Consumption etc.

Semester IV

Paper- Eco4 Macro Economics- II

CO1:The learner is introduced to the macro - economic environment and principles underlying macro - economic policies and government strategies .

CO2:Knowing the advantages and working mechanism of International Trade for Individual country .

Semester – V

Paper – Eco5 Development Economics

CO1:The goal of this course is to provide students the essential tools and concepts of development economics.

CO2:To understand what makes underdevelopment persistent and what helps development succeed.

CO3:Students will learn that how environment and economic growth are interrelated and interdependent.

Semester - VI

Paper – Eco6 International Economics

CO1:Students will have a firm grasp of economic theories to put them into practice, use economic analysis and data to solve problems.

CO2:To use critical thinking skills to comprehend and discuss economic issues in the policy and professional arena.

CO3:Students will understand that how exchange rate influences, other variables in the economy.

BA (Mathematics)

Course Outcomes

Semester –I

Paper Code: BM-111 Algebra

CO1: Students will understand basic concept of matrices & will be able to identify its types & determine if a given square matrix is invertible. They learn to find and use Eigen values, Eigen vectors of a matrix & how to apply Cayley Hamilton Theorem for finding the inverse of a matrix.

CO2: It describes the students to solve systems of homogeneous & non homogeneous of linear equations & application problem.

CO3: Students will acquire knowledge about transformation of equation .The course content will enable them to learn coefficient of polynomial equations in one variable.

CO4: Students will learn how to solve roots of quadratic, biquadratic & cubic equations & identify the nature of roots of algebraic equations.

Paper Code: BM-112 Calculus

CO1: This course will enable the students to assimilate the notions of limit of a sequence and convergence of a series of real numbers.

CO2: Student will be able to calculate the limit and examine the continuity of a function at a point.

CO3: Student will understand the concepts of Leibnitz theorem, Maclaurin and Taylor expansions.

CO4: It will help students to find asymptotes, curvature and radius of curvature in Cartesian coordinates, polar coordinates and for pedal curves.

CO5: Students will be able to sketch curves in Cartesian and polar coordinate systems.

CO6: They will acquire the knowledge of Reduction Formulae, Rectification, Intrinsic equations of curve.

CO7: Students will come to know how to find the area bounded by closed curves, volumes and surfaces of solids of revolution.

Paper Code: BM-113 Solid Geometry

CO1: Students will acquire the basic knowledge of general equation of second degree, various applications of conics and will be able to trace the curve.

CO2: This course will enable the students to identify, describe, compare and classify different geometric solids and visualize and represent geometric figures like sphere, cone and cylinder.

CO3 :Students will learn the basic concepts of different conicoids, tangent planes, enveloping cone and cylinder to understand the advanced topics related to two and three dimensional geometry.

CO4:It will help students to recognize paraboloids and understand the geometric terminology of generating lines

Paper Code: C-102 Business Mathematics

CO1: The students will understand indices and logarithms and they will be able to describe union, intersection, complement and difference of sets, venn diagram, cartesian product of two sets. The course content would enable them to apply set theory to practical problems.

CO2: The students will be familiar with permutation and combination.

CO3: The students will study about sequence and series: AP, GP

CO4: The students will learn about data interpretation, analyze the practical problems with bar graph, pie charts, line graph & mix graph.

Semester -2

Paper Code: BM- 121Number Theory & Trigonometry

CO1: Students will be able to learn methods and techniques used in number theory and interpret the concepts of divisibility, congruence, greatest common divisor, primes and prime factorization.

CO2: This course will help students to formulate and prove conjectures about numeric patterns using Fermat's & Euler's theorem etc. This enables the students to apply the law of quadratic reciprocity and other methods to classify numbers as primitive roots.

CO3:It will demonstrate knowledge and understanding of trigonometric and inverse trigonometric functions useful in scientific calculations.

CO4: This course will enable the students to solve trigonometric equations and prove and apply trigonometric identities.

Paper Code: BM-122 Ordinary Differential Equations

CO1: Students will understand the genesis of ordinary differential equations.

CO2: Students will learn various techniques of getting exact solutions of solvable first order differential equations and linear differential equations of higher order.

CO3: Student will be able to find orthogonal trajectories in Cartesian coordinates and polar coordinates and solve linear differential equations with constant coefficients, homogeneous linear differential equations and equations reducible to homogeneous.

CO4: Students will grasp the concept of a linear differential equation of second order, reduction to normal form and transformation of equation and learn method of variation of parameters and method of undetermined coefficients.

CO5: They will be able to solve simultaneous differential equations.

Paper Code: BM-123 Vector Calculus

CO1: The students will understand the basic concept of scalars & vectors product. They acquire the basic knowledge of vector differentiable & vector integration. Students will be able to find length of a vector, direction of a given vector and the Cosine of angle between two vectors.

CO2: The course content helps students to be familiar with gradient of scalar point function and its characteristics. They learn about divergence and curl of vector point function and its characterization.

CO3: The students will learn Curvilinear Co-ordinates in terms of Cylindrical, Cartesian and Spherical Coordinates.

CO4: The course will help the students to find the line integral, surface integral & volume integral. They learn to analyze the problem based on Gauss divergence theorem, Greens & stoke theorem.

Paper code: C-202 Business Mathematics

CO1: The students will learn about matrices and determinant .They will be able to solve system of linear equations having unique solution and involving not more than three variables.

CO2: The students will understand applications of differentiation.

CO3: The course content will help the students to find compound interest , present value and amount of an annuity.

CO4: The students will be familiar with ratio and proportion . The course will help the students to understand the concept of percentage, profit and loss, their practical applications.

Semester -3

Paper code: BM-231Advanced Calculus

CO1: The students will be able to understand continuity, sequential continuity and its properties. They learn about uniform continuity and chain rule of differentiability, Rolle's theorem, Lagrange's mean value theorem and their geometrical interpretation, Darboux intermediate value theorem for derivatives, indeterminate form.

CO2: The students will know about partial and total differentiation. It describe the students about composite and implicit functions and Euler's theorem on homogeneous function.

CO3: The students will understand the concept of differentiability of real valued function of two variables, schwarz and young's theorem. They will learn about Maxima minima, saddle point of two variables.

CO4: The students will know about the curves and their tangents, principal normal's and binomials, serret- frenet formulae. The course will make the students to understand about Bertrand curves and one parameter family of surfaces.

Paper code: BM-232Partial Differential Equations

CO1: This course will enable students to form partial differential equation by eliminating arbitrary constants.

CO2: Students will be able to apply a range of techniques to solve first & second order partial differential equations.

CO3: They will be able to classify the linear partial differential equations of second degree as hyperbolic, parabolic and ellipse types.

CO4: They will be able to reduce second order linear partial differential equations to canonical forms and find their solutions.

CO5: It will enable them to solve Cauchy problem for second order partial differential equations.

CO6: It will help them to model physical phenomena using partial differential equations such as the heat and wave equations.

Paper Code: BM-233Statics

CO1: The Students will able to define Resultant, Component of a Force, Prove the Parallelogram of Forces, Triangle of Forces, Converse of the Triangle of forces, lami's theorem, Like and unlike parallel forces, Moment of a force and Couple with examples.

CO2: This course will help the students to learn the analytical conditions of equilibrium of coplanar forces, discuss Friction, Forces of Friction, Cone of Friction, Angle of Friction and Laws of friction, concept of centre of gravity

CO3: The students will acquire the knowledge of virtual work and learn the concept of forces in three dimensions.

CO4: The students will understand the concept of wrenches, null lines and planes, stable and unstable equilibrium

Semester -4

Paper code:BM-241 Sequences and series

CO1: The students will learn about boundedness, limit points, interior and closure of sets. The course will help the students to understand the concept of Neighborhoods, isolated points, limit points, compact set and Heine- Borel Theorem.

CO2: The students will acquire knowledge about sequences and their convergence, general principle of convergence. The course content would enable the students to understand the concept of bounded and monotonic sequences, infinite series, their convergence & divergence.

CO3: It describes the students about D' Alembert's Ratio test, Raabe's test, Logarithmic test, Demorgan and Bertrand's test etc. to determine the convergence and divergence of infinite series.

CO4: The students will understand the concept of alternating series and arbitrary series.

Paper Code: BM-242 Special functions & Integral Transforms

CO1: The students will understand integral calculus and special functions of various engineering problem and to know the application of some basic mathematical methods via all these special functions.

CO2: It will help students to explain the applications and the usefulness of these special functions.

CO3: Students will be familiar with Linear transforms and Fourier transforms of functions, their properties, Convolution theorem and relation between Laplace and Fourier transforms.

CO4: They will be able to explain Parseval's Identity and applications of Fourier transforms to boundary value problems.

CO5: Students will learn power series method, Bessel equations and its solution.

CO6: They will understand Legendre's and Hermite's functions, their properties, Rodrigues formula for Legendre and Hermite polynomials.

Paper Code: BM-243 Programming in C and Numerical Methods

CO1: This course will help the students to Understand the Computer fundamentals and the C programming language concepts, different data type and gain knowledge about types of Operators .

CO2: With the course content, students will be able to choose the Loops and Decision Making Statements to solve the problem and gain knowledge about arrays, functions and solve problems based on it.

CO3: The students will understand the concept of Pointers, Structures and Unions and the course content will help the students to obtain numerical solutions of algebraic and transcendental equations.

CO4: The students will acquire the knowledge how to find numerical solutions of simultaneous linear algebraic equations .

Semester -5

Paper code: BM-351 Real Analysis

CO1: The students will acquire the idea about Riemann integration. Learn some of the properties of Riemann integrable function and the application of the fundamental theorems of integral calculus , understand the mean value theorem of integral calculus.

CO2 : The students will learn the convergence of improper integral. They learn about Abel's & Dirichlet's test of convergence. It describes the students about continuity and differentiability and integrability of an integral of a function.

CO3: The students will understand the concept of metric space and their properties like openness, closedness , completeness. They learn about Cantor's intersection theorem, Baire's category theorem.

CO4: To make the students learn about continuous function, uniform continuity, continuity in relation with compactness, connectedness. The course content would enable them to learn about Bolzano Weierstrass property and finite intersection property

Paper Code: BM-352 Groups and Rings

CO1: The students will be able to acquire the basic knowledge of Group, Subgroup, Cyclic group and Normal subgroup and their properties and analyze the consequences of Lagrange's theorem.

CO2: The students will understand the concept of Homomorphisms and Automorphisms and they will be able to find cycles and transpositions of a given permutations and prove Cayley's theorem.

CO3: This course will enable the students to Know the fundamental concepts in ring theory such as the concepts of ideals, quotient rings, integral domains, and fields.

CO4: The students will be able to learn in detail about polynomial rings and irreducibility criterion.

Paper Code: BM-353 Numerical Analysis

CO1: This course will enable students to obtain numerical solutions of algebraic and transcendental equations.

CO2: Students will be able to find numerical solutions of system of linear equations and check the accuracy of the solutions.

CO3: They will learn about various interpolating and extrapolating methods.

CO4: It will help them to solve initial and boundary value problems in differential equations using numerical methods.

CO5: They will acquire the knowledge how to evaluate approximate numerical value of definite integral using different numerical methods.

CO6: Students will be able to apply various numerical methods in real life problems.

Semester -6

Paper code: BM-361 Real & Complex Analysis

CO1: The students will learn about Jacobian, Beta and Gamma functions, double and triple integrals.

CO2: The students will understand the concept of Fourier series and its properties, half range series.

CO3: The course content will help the students in understanding the elementary complex functions. To define & analyze limits and continuity for complex functions. The students will be able to determine whether a given function is differentiable and if so, then to find its derivative. They will be capable to understand the significance of differentiability of complex functions and be familiar with the Cauchy's Riemann equations. The course content will help them to learn the concept of analytic functions and harmonic functions.

CO4: Students will know about mappings by elementary functions. The course content would enable them to solve problems of conformal mappings, Mobius transformation, fixed point.

CO5: The students will be able to understand the concept of alternating series and arbitrary series:

Paper Code: BM- 362 Linear Algebra

CO1: This course will enable the students to understand the concepts of vector spaces, subspaces, bases, dimension and their properties.

CO2: The students will understand the concept of linear transformations and their properties and determine the rank and nullity of L.T.

CO3: The students will learn how to relate matrices and linear transformations, use change of basis, compute eigen values and eigen vectors of linear transformations.

CO4: This course will help the students to learn properties of inner product spaces and determine orthogonality in inner product spaces.

Paper Code: BM-363 Dynamics

This course will enable the students to:

CO1: Develop an understanding of the principles of dynamics.

CO2: Develop an ability to analyze problems in a systematic and logical manner, including the ability to draw free-body diagrams of rigid body.

CO3: Understand the concept of velocity and acceleration along radial, transverse, tangential and normal directions, simple harmonic motion and elastic strings.

CO4: Ability to analyze the dynamics of rigid body and discuss the motion on smooth and rough planes. Also understand the projectile motion of a particle in a plane.

CO5: Discuss general motion of rigid body, Kepler's law and apply Kepler's law to solve the problems.

CO6: An understanding of the analysis of distributed loads and knowledge of internal forces, Newton laws of motion, work, power and energy.

B.A (Physical Education)

Course Outcomes

Semester-I

Paper: PE-01 (Principles and foundations of Physical Education)

- CO1:** The students will understand the nature ,scope and objectives of physical education They will be able to differentiate between nature , scope, employment and objectives.
- CO2:** Students will acquire knowledge about the history , principles and nature of physical education. The course content would enable them to learn the different approaches of physical education.
- CO3:** To make the students learn how historical development of ancient Olympic & Modern Olympic Revival and progress.
- CO4:** It describes the students about sports Awards in India.

Semester-II

Paper : PE-02 (Health and Yoga)

- CO1:** The students will get guidance about health education.
- CO2:** This course will help the students in personal hygiene. The course content would enable them to be a good health hygiene.
- CO3:** The course content will help the students to know about communicable diseases.
- CO4:** The students will understand the concept of Yoga and aims.
- This unit will help the procedure and benefits of Asanas.

Semester III

Paper: PE-03 (Physical activity and Health)

- CO1:** Students will be able to understand the health and health education.
- CO2:** With the help of this course, the students will understand about food and nutrition.
- CO3:** Students will acquire knowledge regarding the posture of our body.
- CO4:** Students would learn how to do exercise and life style diseases.

Semester IV

Paper: PE-04 (Physical fitness & Yoga)

- C01:** After studying this course, the students will gain relationship of physical education with general education.
- C02:** It encourages students about physical fitness.
- C03:** With the course content, students will be able to do yogic kriyas.
- C04:** Students will be able to do campaigning.

Semester V

Paper: PE-05 (Socio – Psychological foundation of physical education)

- C01:** The students will understand psychological aspect of physical education.
- C02:** This course will help the students to know about sports socializing agency.
- C03:** The course content will help the students conditioning.
- C04:** The students will understand the type of doping and prevention of doping.

Semester VI

Paper: PE-06 (Organization and management of physical education)

- C01:** The students will understand how to conduct annual athletic meet.
- C02:** Students will acquire knowledge about sports management.
- C03:** To make the students how to learn sports injuries.
- C04:** It describes the students how to do professional preparations.

B.A (Home Science)
COURSE OUTCOMES

Semester – I

Paper: HS-01- (Resource Management)

- CO1 - Students will be able to study home management and shape preferred solution to a range of challenges in their persona, family, community and work roles.
- CO2 - Students understand and take action to enhance human growth and development.
- CO3 - Students take control of their health and develop health promoting behavior.
- CO4 - Students understand the human and material resources available for managing a home and decision making and consumer skills also.

Semester – II

Paper: HS-02 (Hygiene and applied science)

- CO1- Health education motivates students to improve and maintain their health, prevent disease and reduce risky behaviours.
- CO2- Students, understand the methods of saving water distillation, reverse osmosis, solar purification
- CO3- Students can get also the knowledge to choose a healthy life style including immune system, don't smoke, exercise regularly maintain healthy weight and minimize stress.
- CO4- Immunization schedule describe the students about vaccines to prevent infectious disease.
- CO5 The students will learn what precautions will be taken for different diseases and how we can strong our immune system. They get health education after studying different diseases.

Semester - III

Paper: HS03 (Clothing and Textiles)

- CO1- Students can describe textile fibres in term of their production and properties.
- CO2- Understand various production techniques and properties of Yarns.
- CO3- Identify fabrics and relate it to specific products keeping in mind fabric properties and characteristics.
- CO4- Understand various dyeing, printing and finishing techniques.
- CO5- Students can also understand the laundry techniques.

Semester IV

Paper: HS-04 (Human Physiology)

- CO1- Explain the basic knowledge of human physiology
- CO2- Lists tissues of skeletal system.
- CO3- Tells the properties of circulatory and respiratory system
- CO4- Explain properties of digestive and excretory systems
- CO5- Explains structure of female reproductive organ.

Semester V

Paper: HS-05 (Foods & Nutrition)

- CO1- Students will be able to interpret and apply nutrition concepts to evaluate and improve the nutritional health of communities.
- CO2- Students will be able to identify and apply food principles to food and nutrition systems.
- CO3- Students can utilize knowledge from foundational science as a basis for understanding the role of food and nutrients in health and disease.
- CO4- Understand the importance of a well balanced diet, including the importance of fluids.

Semester – VI

Paper: HS-06 (Human Development)

- CO1- Relate the principles of human development with self, family and society.
- CO2- Identify how families and communities influence the process of growth and development
- CO3- Gain advanced knowledge of developmental process and principles.
- CO4- Explore the critical areas in the study of development and change.
- CO5- Work with NGO, Govt. agencies, International agencies as well as self help groups.

B.A (Music)

Course Outcomes (COs)

Semester-I

Paper: Fundamental study of Music – 1

CO1: The student will understand the nature of raggas. How to play a Raga on harmonium and how to play the alankars of that raggas on harmonium and how to play it and sing it basically the whole knowledge about Raag Bhupali and Kafi will be there in this unit how to sing Raag Bhupali and how to sing Raag Kafi

CO2: Student will learn what is Sangeet ,Swar,saptak ,Naad ,Shruti ,Raag and thaat. The student will gain knowledge about Vadi ,Samwadi ,anuvadi, vivadi Swar. This concept of Swars will help students to understand the Ragas. Students will also understand the concept of khayal, Tarana and Taal system, in taal system what is khali and about Alankars of every Raga. It will help them to understand the Ragas and how to sing the Ragas. The student will also learn about the difference of margi and deshi sangeet.

CO3: Student will able to understand the concept of Taal in this section. How to play teen Taal and how to play keharwa Taal with hand beats and what is the contribution of Pandit Vishnu Digambar paluskar and Pandit v n bhatkhande towards music. The contribution of these two musicians will help student to understand the music and the history of music and the changes of music according to time it will help them in their practical work.

Semester-I

Paper: Fundamental study of Music – 1

CO1: In this section student will learn about Raag Bhairav and Raag Yaman how to Sing Raag Bhairav drut Khyal and how to sing Raag Yaman drut Khyal. The full description of Raag Bhairav and Yaman. It will help them in future if they opt the music field ,in second question what is the description of Tanpura and what is the description of harmonium will help them play a harmonium how to tune a Tanpura for classical music.

CO2: With the help of these questions students will be able to understand about aalap gan ,what is ancient aalap gan and what is present aalap gan gayko ke gun dosh will help them to improve themselves. Description of ektaal and Dadra Taal will tell about taal system. How many Martyrs are there in Ektaal and how it plays how many matras are in Dadra Taal and how it plays with hand beats these three questions will help them to understand about prachi aalap gan system in ragas.

CO3: In this section student will acquire knowledge about varna ,Vagyakar and parmeal Paryavekshak Raag . Students will also able to understand what is the role of music national

integration. Contribution towards music of Pandit Omkarnath Thakur ,Pandit Narayan Rao Vyas and Abdul Karim Khan will help them to learn about music of that time period and changes about music.

Semester III

Paper: History and applied theory of Music- 1

CO1: Student will learn how to sing Chhota Khyal of Raag bihag ,Raag bageshwari and Raag Ahir Bhairav. What is the system of swarlipi Paddhati. Students will understand the concept of Avirbhav Thirobhav,Alpatva- bhutva and jaati of Ragas.This notation system will help students to play the Bandish on harmonium easily and these jatis of Ragas will help them to introduce the Ragas. This knowledge will help them to understand the music

CO2: This section will help the students to understand about dhrupad,dhamar,Khayal, tappa,thumri. In next question students will learn what is Ada chautal ,what is Ektaal. How it plays on hand beats.

CO3: Student will learn the full introduction of Raag bihag, Raag bageshwari and Raag Ahir Bhairav this introduction of Ragas will help them in singing how to sing these Ragas how many swaras are there ,what is the Jathis of Ragas. Contribution towards music of Ustad Bade Ghulam Ali Khan, Ustad Faiyaz Khan and Pandit Krishna Rao Shankar Pandit will tell them about the contribution of these three big musicians it will help them to know about these personalities and what is the role of these personalities in music world as it is very necessary to know about famous musicians if they opt the music field.

Semester IV

Paper: History and applied theory of Music- 2

CO1: Student will be able to understand about drut khayal of Malkauns, Shuddh sarang and Des. This short notes of gram and Murchana will tell them about mathematically what is gram and morchana.

CO2: Detail study of Tirvat, Chaturang, Geet ,Bhajan, Folk song and gazal will give them to understand these musical shailies. Tanpura and it's Sahayak naad will help them to understand the concept of Swaras ,how to place a Swaras on Veena and what is the frequency of each Swara. This will help them to understand the sound concept.Detail study of Raag Malkauns, Raag Shudh Sarang and Raag Desh will give them knowledge about these raagas.

CO3: Tivra taal,tilwada Tal and Rupak Taal will help them to understand the concept of Taal system in classical music and in light music . Ramayan aur Mahabharat kalin sangeet will clear the concept of music of that days. Contribution towards music by Pandit D v paluskar, Pandit Bhimsen Joshi , Ustad you Aamir Khan will help them to understand the concept of music and the contribution of these personalities in music.

Semester V

Paper: Technical and Practical aspects of Music-1

CO1: Student will understand about vilambit Khayal of Raag Tilak Kamod, Raag Bhairavi and Raag Miyan ki Malhar on the same student will be able to Sing drut khayal of Raag Tilak Kamod, Raag Bhairavi and Raag Miyan ki Malhar. Detailed study of gharanas will help them to understand gayki concept of different gharanas like Gwalior,Agra and Kirana.

CO2: Detail knowledge of Taal will help them to understand the jhaptal and sultaal and it's dugun, Tigon, Chaugun. Detailed description of tabla will help them to understand the system of tabla and how to play tabla. hyow many mataras are there in each taal. What is the importance of tabla in classical music.

CO3: The whole description of Ragas :Tilak Kamod, Bhairavi, Miyan ki Malhar will be discussed it will help them to understand the raagas .Elementary knowledge of Folk music of Punjab will help them to understand the music of Punjab.Contribution of Pandit vinayak rao Patwardhan, Ustad Chand Khan will tell them about the music and what is the role of these musicians to improve the music shelley's in music world.Name of program:B.A.(pass)

Semester-VI

Paper: Technical and Practical aspects of Music-2

CO1: Student will understand about vilambit Khayal of Raag Bhimpalasi , Raag patdeep and Raag madhuvanti on the same student will be able to Sing drut khayal of Raags,. Detailed study of gharanas will help them to understand gayki concept of different gharanas like Gwalior,Agra and Kirana.

CO2: Detail knowledge of Taal will help them to understand the jhaptal and sultaal and it's dugun, Tigon, Chaugun. Detailed description of tabla will help them to understand the system of tabla and how to play tabla. hyow many mataras are there in each taal. What is the importance of tabla in classical music.

CO3: The whole description of Ragas :bhimpalasi ,Pardeep,madhuvanti will be discussed it will help them to understand the raagas .Elementary knowledge of Folk music of haryana will help them to understand the music of haryana .Contribution of pt Lal mani misra,kcd brahaspati will tell them about the music and what is the role of these musicians to improve the music shelley's in music world.

Programme Specific Outcomes (PSOS) for B.A

PS01: The utmost need for any course is to make students responsible citizens. B.A programme is providing them the base to be the responsible citizens.

PS02: The B.A programme enhances the confidence of the graduates. Curriculum for students is designed in such a way that its emphasis is on activities, practical learning and good interaction with teachers and fellow students.

PS03: The students acquire knowledge in the field of humanities, literature sports, Home – Science and social –Science which make students sensible human beings.

PS04: B.A programme enables students to acquire the knowledge with ethics and values to deal with various problems in life with humanity.

PS05: The B.A graduates will be familiar with the social, economical, historical, political, sports –spirit way of thinking.

PS06: The students will acquire skills and ability for lifelong learning.

PS07: Students will understand contemporary issues and provide solution with good communication skills in both written and verbal.

PS08: Our graduates will demonstrate strong bonding in team and display distinct leadership traits.

PS09: Our graduates will apply their knowledge and skills to succeed in their career / professional development or postgraduates education to pursue flexible career paths and future changes.

PS10: BA programme leads to a holistic understanding of applied and theoretical social sciences, critical thinking, understanding of historical events and places, economics activity and sociological concepts. The programme aims to develop a humanistic and sustainable approach.

PS11: BA Programme provides a multi-disciplinary and inter disciplinary perspective to the students and enables them to analyze and critique the existing policies and explore innovative solutions.

Programme Outcomes (POS) for B.A

1. Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.
2. Apply ethical principles and commit to professional ethics and responsibilities and norms of BA practice.
3. The students are enabled to acquire the knowledge with human values framing the base to deal with various problems in life with courage and humanity.
4. Learn the developmet issues of Indian Economy; learn the real and monetary sides of Economics monetary Analysis, behavioral pattern of different economics agents and their applications.
5. The skills and knowledge gained has intrinsic beauty, which also lead to proficiency in analytical reasoning. This can be utilized in modeling and solving real life problems.
6. Completion of the programme will also enable the learners to join teaching profession in primary and secondary school.
7. NGOs and Social welfare organizations also give employment to the graduates. Even graduates can a travel expert for tourist places having historical importance.

COURSE OUTCOMES

Name of Programme- BCA

Semester-I

Paper- BCA- 101 Computer and Programming Fundamentals

- CO1:** Students will understand the fundamental concepts of computer like basic components of computer, classifications of computer, generations of computer, Applications of Computers. They understand about Memory and different types of Memories.
- CO2:** The student will learn to demonstrate different types of operating system & their Functions and various classifications of Operating system. They Identify & analyze computer hardware, software and various types of Software ,Computer Virus and its types , Anti-Virus Software.
- CO3:** Students will be able to understand Computer Languages and different types of computer languages. They understand Structured Programming and its methods.
- CO4:** Student will understand the concept of Networking and its types, Network Topologies. They also understand Internet and its uses and various applications of internet, intranet and its applications.

Paper -BCA- 102 PC Software

- CO1:** Students will get introduced to opening system, Basic components of windows, Managing File & Folder and using Control Panel for various operation.
- CO2:** Students will learn about introduction to Word Processor , various components of MS Word and its features , Advanced features of Word Processor
- CO3:** Students will learn about introduction to Spreadsheet , various components of MS Excel and its features , Advanced features of MS Excel.
- CO4:** Introduction to PowerPoint Presentation, How to design your slides and applying various design effects on slides.

Paper: BCA-103 Elements of Mathematics

- CO1:** The students will understand the concept of sets, subsets, operations on sets and applications on sets, matrices, determinants and its properties, inverse, and they will be able to solve the system of linear equations using matrices.
- CO2:** This course will help the students to understand the concept of relations and functions and will acquire the knowledge of limit and continuity of a function at a point, on an interval and types of discontinuity.
- CO3:** With this course content, the students will learn the concept of differentiation and they will be able to find the derivatives of different functions.
- CO4:** The students will be able to acquire the knowledge of indefinite integral and methods to evaluate the integration of different types of functions.

Paper: BCA-104 Logical Organization of Computer-1

- CO1:** Students will understand the nature of Digital computer, its functioning, scope , representation of number into different number system , various codes for representation of a number and characters. Students also understand Binary Arithmetic as we use Decimal arithmetic in real life.
- CO2:** Students will acquire knowledge about Binary Logic, Boolean Algebra, Boolean Functions

and how to draw truth tables of various statement. Students also gain knowledge about various forms of Boolean Functions and its representation in various types such as Venn diagram and karnaugh maps.

CO3: Students gain knowledge about digital signals and various logic gates. Unit consider basic gates as well as universal gates. Students also acquire knowledge about implementations of various logical circuits, combinational logic, their characteristics their design and multilevel NAND and NOR implementation. Use Boolean algebra as related to designing computer logic, through simple combinational and sequential logic circuits.

CO4: Students acquire Knowledge about the combinational circuits like adders(Half Adder, Full

Adder), Subtractor (Half Subtractor, Full Subtractor), Parallel binary adder or subtractor ,Encoder, Decoder, Multiplexer, De-multiplexer, Comparators and Code Convertors and their application in real life.

Paper: BCA-105 Practical software Lab – Based on paper BCA-102 i.e.Word, Excel and Power Point

CO1: Students will understand the basic operations of a computer like how to manage files and folder and how to create shortcuts, using the control panel etc.

CO2: Students will get understand the MS-Office and its advanced features in detail.

CO3: Students will get introduced with MS-word and its various features like mail merge,macro

CO4: Students will understand the basics concepts of MS-excel and how to use the various advanced features of ms-excel like: formulas, various types of functions pivot table, pivot chart, linking and embedded objects, and Database Management in Excel.

Semester –II

Paper- BCA-106 'C' PROGRAMMING

CO1: Students will understand the basics of 'C' Programming language, like history of C',development of C', syntax of C'. They will also learn about the structure of 'C'.

CO2: Students will learn about decision making and branching statements. They also learn about how to use for loop,do- while, while and branching statements in different situations.

CO3: Students will learn about the usage of system input/output functions. They also learn about how to create user functions as per the requirement of user to solve a specific problems using programs.

CO4: Students will understand array, pointer, and string constants using programs. How they are created and used. They will be comfortable in Programming fundamentals like algorithms and flowcharts of programs.

Paper : BCA 107 (LOGICAL ORGANIZATION OF COMPUTER)

CO1: Students will be able to understand Sequential Circuit and designing of Sequential Circuit, FlipFlop and designing of various types of flipflops. They understand state table, state diagram and state equations and also understand Flip- Flop Excitation tables.

CO2: Students will get the ability of analyzing and designing of Registers and different types of registers ,Bidirectional Shift Register . They understand Counters and Designing of

Counters and various types of counters, Modulo-N counters and Up-Down Counters.

CO3: Students would understand the System Memory,. How different type of memory used and their uses in electronic devices. They will familiarize with various inputs-Outputs devices and how these devices are controlled using electronic circuit.

CO4: Student will get the ability to understand instructions sets and how different computer architecture are designed. How instruction cycle works and instruction get executed. They understand how data transfer take place between i/o devices and how we can use different technique of data transfer.

Paper: 108 Elements of Mathematical foundations of Computer Science

CO1: The students will be able to learn in detail about measures of central tendency, Dispersion,

correlation, Regression and they will be able to prepare frequency distribution table.

CO2: With this course content, the students will learn the concept of Algorithm and Graph theory and this course will make students learn how to compute complexity of algorithm and fast exponentiation.

CO3: This course will help the students to understand the concept of trees, shortest path and Recursion, Sorting and they will be able to learn decimal binary system.

CO4: This course will help the students in gaining the knowledge of Recurrence Relations, recursive Procedures, principle of Mathematical Induction, Euclidean Algorithm, congruences and equivalence relations, encryption and acquire the knowledge of how to find the solution to congruences relations.

Paper: BCA-109 (Structured System Analysis & Design)

CO1: Students will understand the concept of system, system development life cycle and familiar with the system planning and initial investigation. Student will also understand the concept of feasibility study.

CO2: This course would empower the student to learn the concept of structured analysis and their tools. They will understand the feasibility study report & cost benefits of system analysis.

CO3: Students will understand Design Methodologies and design objectives. Students will be able to construct input, output and form design for the system layout as well as form control.

CO4: Students will acquire knowledge of System testing to rectify the errors in the system. Students should acquire knowledge of quality assurance goals. They will evaluate the system, their maintenance and also able to prepare the efficient documentation of the system.

Paper- BCA-110 Practical Software lab based on BCA-106 'C' Programming

CO1: Students will learn the structure of 'C' Programs. They will also learn the syntax and understand the structure of 'C' Programme. They will also learn to create basic programs in 'C' Language with different types of operators.

CO2: They will be able to use FOR, WHILE, DO WHILE loops with programs. They would

use Branching statements like IF, IF- ELSE, SWITCH statement and differentiate them.

CO3: They would practically implement C language in built Mathematical Functions, formatted and Unformatted Functions like gets() ,puts().They will also learn to create user defined functions in C and implement in programs.

CO4: They will learn to create and use arrays with their types, strings and string constants and pointers. They will be able to implement these concepts practically.

Semester-III

Paper : BCA 201 (Introduction To Operating System)

CO1: The Students would be enabled to understand the concepts of Operating System and its Functions, Classifications of Operating System , processes in operating system and various operations on Processes and understand the concept of threads and inter- process communication.

CO2: They get the ability of analyzing Scheduling algorithms and Deadlock and methods of handling deadlocks.

CO3: Students get the ability to understand Memory Management and its techniques, concept of virtual memory, Demand paging and page replacement and its algorithms , Thrashing.

CO4: Student get the ability to understand File System and its Structure, File Allocation Methods. They understand the concept of disk scheduling and Its techniques.

Paper: BCA-202 (Data Structure-1)

CO 1: Students will be understand the basics of Data Structures, its Organizations. They will be aware about different Data Structures, their operations, their applications of data structure. Students also get knowledge about data type, data structure and difference between data types data structure. They will also be able to calculate the complexity of different algorithm. They will be able to use string, string operations and string algorithms.

CO 2: Students will learn about Array, Its representations, Address Calculations, various operations and its types. They will also be able to learn about Linked List data structure, creation of linked list and representation of Linked list in Memory. Section consider various operations, its types and applications in real life.

CO 3: Students will know about Stack, array and linked list representation of Stack, operations and applications of stack and in Queue Data Structure, Students covers topic of queue , its representations in queue and Various algorithms to create, modify and delete operations will be used by students. Students will also cover various operations and applications of queue.

CO 4: Students will aware about the basics of hierarchical data structures and its types such as Tree and Graph. In tree data structure student will be aware about representation of binary tree in memory. Traversing of binary tree and its various algorithms. In graph, student will cover topics of basics of graph, Sequential and linked representations of

graphs. They will learn to operate these data structures

Paper: BCA-203 Introduction to Database System

CO1: Students will be able to analyze database design methodology & able to master the basic concepts & understand the application of database system.

CO2: Students will be familiar with the architecture of database system, distinguished b/w centralized & client server architecture & understand the concept of data models.

CO3: Students will demonstrate & design ER- Models to represent simple database application scenarios & able to convert the ER model to relational tables & populate relation database

CO4: Students will acquire knowledge to analyze & apply the principle of database normalization

& able to construct structure query language to implement various operations like create, update, retrieve, delete on database.

Paper- BCA-204 Communication skills (English)

CO1: It assists students on professional approach. It helps to write comprehensive business reports, minutes of meeting, etc.

CO2: It helps students to acknowledge professional commitment. It helps in improving grammar skills of the students.

CO3: It facilitates students to organize and administer business projects and communication tactics.

It helps students to manage potent business research and communication process and findings in the parameters of business documents and oral communication.

CO4: It assists in deploying effective conciliation and discordant management skills. It enhances communication skills of the students and aids them in facing interviews.

Paper: BCA-205 practical based on BCA-202 & BCA -203

CO 1: Students will learn about practical knowledge of various data structures as well as basic queries of SQL. In data structure, students will learn about String and its Operations. In SQL, students will learn about different types of queries in Data Definition Language.

CO 2: students will learn to create Array, its Operations as well as Linked list with its operations and its various types in data structure. In SQL, students will learn about different types of queries in Data Manipulation Language.

CO 3: Students will learn to Stack, its operations and storage of data in Stack as well as Queue, its operations and storage of data in Queue. In SQL, Students will learn about various queries of Data Control language.

CO 4: Students will learn to create TREE and GRAPH. They will also learn to use, traverse and manipulate the Data Structure. They will also learn to use Transaction Control Language using SQL. In SQL, students will learn how we used various SQL injections for searching, sorting and merging of data.

Semester-IV

Paper- BCA-206 Web Designing

CO1: Outline the basic concepts of Internet and web architecture.

CO2: Understand, analyze and apply the role of languages like HTML in the workings of the web and web applications.

CO3: Understand the skills that will enable to design and build high level web enabled applications using HTML tags.

CO4: Understand, analyze and create web pages using HTML, DHTML and Cascading Styles sheets

Paper : BCA 207 (Data Structure)

CO1: Students will get the advance knowledge of Tree data structure. They will know about various types of Trees can be implemented. They will learn about various operations that can be performed on trees.

CO2: Students will become able to use Graph data structure. They will be aware about different types of graphs and operations that can be performed on graphs.

CO3: Students will be able to perform different Sorting and Searching techniques.

CO4: Students will be able to understand about File and various file structure and operations performed on different types of files.

Paper-BCA-208 Object Oriented Programming using C++

CO1: Students understand the basic concept of OOP (Object Oriented Programming), data types of OOP, Operators of OOP, Conditional statements in OOP.

CO2: Students would know about constructor and destructor. They get knowledge of how to develop programs by use of constructor and Destructor. Also student will get knowledge about operator overloading.

CO3: This course content empowers the students to acquire the skill of inheritance and its implementation & various other concepts like this pointer, friend function, abstract class etc.

CO4: They understand the concept of Exception handling, Template and their implementation, standard template library.

Paper I BCA-209 Software Engineering

CO1: The course contents will help the students to understand the basic principles and concept of Software Engineering. They will be able to define various software applications, components and their development process.

CO2: This course would give the students knowledge of the techniques for software development including requirement analysis, design, implementation, testing and maintenance under software development life cycle.

CO3: The methods and tools will help the students and give the knowledge of coupling cohesion, function oriented and object oriented design in software development.

CO4: The course will give the students detailed understanding of a complete cycle of a software development project and reverse engineering, re-engineering.

PAPER- BCA-210 Practical software Lab– Based on paper BCA206 & 208, i.e. C++ and HTML Programming

- CO1:** Students will get knowledge of using C++ constructs for making program of OOP (Object Oriented Programming). They get knowledge of how to develop programs by use of C++ concepts like constructor, destructor, friend function.
- CO2:** They will get familiarized with designing and implementation of function overloading, inheritance, Polymorphism, Virtual function, Templates and Exception Handling.
- CO3:** Students will get practical skills of using HTML Tags. They would get the ability of design web site for organization like schools, colleges.
- CO4:** By using other web designing techniques like CSS, JSSS, DHTML they will get the scope of web developer.

Semester-V

Paper-BCA-301 Management information system

- CO1:** The course would help the students to understand the system and its types, and role of information in decision -making in industry, understand the management levels.
- CO2:** This course would give the knowledge to students to understand the MIS framework, Simon's Model of Decision making and its types and apply them in actual use.
- CO3:** The basic knowledge given to students how to analyze and design of information system and how to implement and evaluate information.
- CO4:** This course will help students to understand Decision Support system for planning, control and decision making. The student will learn ecommerce technologies and its benefits.

Paper: BCA-302(Computer Graphics)

- CO1:** Students will learn basics of Graphics, Graphics System, applications of Graphics in real world and enable the students to scan convert the basic graphic primitives. Students will be able to learn various input and output devices in Graphics Workstations.
- CO2:** This course would empower the students to acquire the knowledge of geometric transformations like translation, rotation, scaling, reflection, shearing etc in 2-D Geometrical transform and would enable them for viewing transformations.
- CO3:** 3D object representation would enable the students to demonstrate the real world curve objects into graphical form in systems. Students will be aware about various types of Curve and polygon.
- CO4:** This course would empower the students to acquire the knowledge of various geometric transformations in 3-D transformation. Section also covers conversion of 3-D object into 2-D.

Paper :BCA 303 DATA COMMUNICATION AND NETWORKING

- CO1:** Students will get introduced Computer Network, various networking models and Network architecture.
- CO2:** Students will gain knowledge about Analog and Digital Communication, Concept of Data Channel, Guided and Unguided Media.
- CO3:** Students will gain knowledge about Data Link Layer, Error detection and Correction Techniques, various LAN technologies and Network hardware components.
- CO4:** Course content will help to students of Routing Concepts, Routing Algorithms & Network Security Issues and Algorithms.

Paper BCA-304 Visual Basic

- CO1:** Students will be able to understand & demonstrate the working of Integrated Development Environment of visual basic by using various control structure and also distinguish the event driven programming with other programming languages.
- CO2:** Students acquire the knowledge to design & analyze various I/O controls and efficient use of operators, variables and constants to write the coding easily.
- CO3:** Students will demonstrate knowledge of decision making, looping and learn to implement arrays and collections available in VB to solve problems.
- CO4:** Students will practically apply forms and menus in the program to develop the window applications in visual programming and enhanced their skills to implement real life.

Paper BCA-305 Practical Software Lab– Based on paper BCA-304 i.e. Visual Basic

- CO1:** Students will get introduced to programming in Visual Basic. Students will get introduced with Variables, types of variables, operators and controls in VB.
- CO2:** Students will understand the concept of Decision and condition statements in VB.
- CO3:** Students will understand the concept of procedures and functions in VB.
- CO4:** Students will be able to learn to create menus in VB.

Semester-VI

Paper BCA-306 E-COMMERCE

- CO1:** Student will be able to acquire the basic knowledge of Electronic Commerce, Impact of E-Commerce,
Internet Commerce, Direct Marketing selling, obstacle and future of E-Commerce.
- CO2:** The Student will understand the concept of Porter value chain Model, Inter Org value chain,
Strategic Business, unit chains, Industry value chain, Threats, Security Overview, Copyright .
- CO3:** This course will help the student to learn implementing security in E-Commerce, Protecting E-Commerce assets, Protecting intellectual property, channels, protecting commerce server, Electronic payment system.
- CO4:** The course will help the students to learn B2B E-Commerce, inter organisational transaction , credit transaction, trade cycle, EDI, benefits technology, implementation, agreement and security.

Paper BCA-307 Object Technologies & Programming using Java

- CO1:** The course content would cater to the needs of OOPS while programming and aware the Students about various Features and application areas of OOPS.
- CO2:** Students acquire the knowledge of basic concepts of JAVA, JDK,JVM and other object oriented concepts.
- CO3:** Students will be able to create their own packages and learn to import package and implement Exception handling.
- CO4:** The basic idea behind the course content would enable the students for Multiprogramming and run multiple processes at one go along with I/O handling.

Paper - BCA-308 Artificial Intelligence

- CO1:** This is an introductory course on Artificial Intelligence. The course will help the students

appreciate the importance of Artificial Intelligence in the field of Computer Science and understand the intelligent agents in machines.

CO2: Students will be able to define problems using state space representation and apply different heuristic search techniques over them for solving the problems

CO3: The course will help the students in representing knowledge using various approaches

CO4: Students will be able to understand concepts used in Natural Language Processing and also the Learning techniques used by machines.

CO5: The course gives insight of working of Expert Systems and students will understand the knowledge representation in specific domains.

Paper –BCA- 309 Introduction to .Net

CO1: Student should learn the framework of .Net with their building blocks, components and their architecture of web based development .

CO2: This course will understand the concepts of class libraries in .Net , metadata and their attributes and will empower the C# basics such as data types, value types ,reference types ,variables and constants .Student also understand the concepts of boxing and unboxing.

CO3: Students will learn various types of operators, expression and control structure in c# to develop the applications. Students also empower concepts of class ,methods,constructors,destructors.

CO4: Students will be able to construct the applications various features like Inheritance, Polymorphism, exception handling and automatic memory management to develop various applications.

Paper BCA-310 Practical Software Lab– Based on paper BCA-307 and 309 i.e. JAVA and .Net

CO1: Students will learn the syntax and structure of .Net Programs. They will also learn to create basic programs in C# Language.

CO2: They will be able to implement inheritance, polymorphism and I/O files programs in C# language to develop applications.

CO3: They would practically implement Basic programs in Java language. They will also learn to create Interface in Java..

CO4: They will learn to create and import packages and use I/O directories and files to store real life applications data in Java.

Course Outcome

Name of the Programme: BBA(3 years)

Semester I

Paper: BBAN-101 Business organization

CO1: Students gain complete knowledge about the basic terms of business, organizations and their functions and role in economy.

CO2: Students acquire knowledge about the various forms of Business organizations

CO3: Make students Learn about the concept of Entrepreneurship

CO4: Students are made aware about MNCs and various Chambers of Commerce.

Paper: BBAN-102 Business Mathematics

CO1: The students will learn about set theory and its practical applications.

CO2: Students will be able to understand the concept of Indices and Logarithms and business applications of arithmetic and geometric progression.

CO3: They will understand how to use permutations and combinations in daily life problems and learn about binomial coefficients.

CO4: Students will acquire the knowledge of matrices and determinants and how to use differentiation and integration for business applications.

Paper: BBAN-103 Financial Accounting

CO1: Students know about accounting practices & reading of transactions in journal.

CO2: The student will learn about subsidiary & Ledger book posting and how to draft the Final A/c & Balance Sheet.

CO3: The student will learn about preparing a Bank Reconciliation statement & Consignment account

CO4: The student will learn about Joint venture and Income & Receipt account preparation.

Paper: BBAN-104 Computer Fundamentals

CO1: Students will understand the fundamental concepts of computer like basic components of computer, classifications of computer, generation of computer. Students will understand memory, its types.

CO2: Students will learn number system, their classification, conversions of numbers from one base to another and vice-versa. Also students emphasis on role of number system in computer system.

CO3: Students will be able to understand operating system, its history, functions, types, structure. Also students understand memory management and file management system.

CO4: Student will understand various computer applications in offices, uses of computer in books publications, desktop publishing system, for data analysis, in educations, in banks, in medical field.

Paper: BBAN-105 Business Communication

CO1: The students will be able to understand the concept of communication and its relevance in business along with the understanding of its various networks and barriers.

CO2: This unit will provide clarity about the communication skills.

CO3: The students will gain knowledge about the written form of communication

CO4: The students will be able to enhance their knowledge about the making of business reports.

Paper: BBAN-106 Micro economic for business decision

CO1: Students will learn about significance and scope of macroeconomics.

CO2: Learning the ancient theory of National income determination where various concepts viz., consumption function, investment function, saving function, govt. expenditure function, tax function

CO3: Nature of fiscal policy, fiscal deficits, fiscal policy in relation to growth and price stability

CO4: Money supply measures; credit creation process and money multiplier, instruments of monetary policy

Semester II

Paper: BBAN-201 Principles of management

Co1: The students will know about what is management. Its nature and process what are the roles and skills of a manager. They also know about different types of approaches apply in the management what are its issues and challenges.

Co2: This course content will help the students about the purpose and process of planning. How to goal setting, how to take decision what are behavioural aspects of decision making and forms of group decision making in organisation.

Co3: This Course Content will help the students about the how to divide of work, authority and coordination in organisation structure. They also know about how to create leadership and its approaches.

CO4: The students will know about purpose and nature of controlling its techniques how they can be effectively applied for achieving goals and objectives.

Paper: BBAN-202 Macro-economic Analysis and policy

CO1: In this unit students will learn the nature and scope of macroeconomics and one main concept of calculating income of economy through national income with other variables and how our economy will come in equilibrium as economy is main factor for introducing the country.

CO2: This unit will help students in learning the concepts of macro analysis of consumer behaviour with different types of consumption. Income determination models and multiplier analysis will also be discussed with the students.

CO3: Students will be aware of policy that government makes for efficient running of the economy i.e. fiscal policy and how economy makes the balance in economy in case of deficit. Public debt is also explained.

CO4: Topics related to money with their measures and policy made by the government all will be discussed with the students. How central bank controls the money this aspect will also be taken in consideration.

Paper: BBAN-203 Company Accounts

CO1- Students will be able to describe the different types of shares and learn about how to acquire the business.

CO2- Enable the students to analyse complex issues related issue of shares, debentures and redemption of debentures.

CO3- Enable the students to prepare the financial statements of a company and also demonstrate a thorough knowledge of relevant accounting standards.

CO4- Students gain knowledge about calculation of Goodwill of company and will be able to learn about the system of banking company.

Co2: This unit will enable students to gain deep insights into the foundations of individual behaviour by understanding the concept of personality values, attitude, perception, and motivation.

Co3: It will throw light on the foundations of group behaviour and group dynamics as well as organizational conflicts.

Co4: The students will be able to cope with stress more effectively with the help of stress management and will gain knowledge about different types of organisational structure.

Paper: BBAN-204 Computer Applications in Management

CO1: Students will be able to understand the basic concept of computer its hardware – software and its classification, input-output devices, operating system, memory They will acquire the practical knowledge of networking and wireless connection to implement in real life.

CO2: This course would empower the student to acquire the knowledge of information Technology, www, Search engine, Web browsers, IP addressing, web hosting and web publishing and able to implement in various Internet applications in business, chatting and e-mailing etc.

CO3: Students will learn and understand the Data, Information and its types and various Information systems such as MIS, TPS, OAS, DSS, expert systems, executive information systems to implement real life application.

CO4: Students will be able to implement Multimedia applications in business; marketing and advertising; web applications of multimedia.

Paper: BBAN-205 Organizational behaviour

Co1: The students will be able to understand the concept of organizational behaviour, its elements, evolution along with the challenges faced in the current scenario.

Co2: This unit will enable students to gain deep insights into the foundations of individual behaviour by understanding the concept of personality values, attitude, perception, and motivation.

Co3: It will throw light on the foundations of group behaviour and group dynamics as well as organizational conflicts.

Co4: The students will be able to cope with stress more effectively with the help of stress management and will gain knowledge about different types of organisational structure.

Paper: BBAN-206 Business Statistics

CO1 : The students will get to know about the use of statistics in business world and how to classify the data and tabulation and presentation techniques of data.

CO2 : They will learn about the different averages and their practical applications.

CO3 : The students will understand the relationship between two variables using concepts of correlation and regression and its use in identifying and predicting the variables.

CO4 : This course will help the students to understand the role of index number and time series in business contexts and become aware of the patterns revealed by the data and to use it to make predictions for the future.

Semester III

Paper: BBAN-301 Cost & Management Accounting

CO1: Students acquire various concepts of cost and how it differs from financial accounting.

CO2: Students learn about purchase procedures of raw materials.

CO3: They learn the techniques of controlling labour cost and concepts of cash flow, ratio analysis techniques

CO4: They also learn the role of Budget in economy and process of budgeting

Paper: BBAN-302 Marketing Management

CO1: Student and know-how approximately the idea of and marketing and apprehend current advertising and marketing idea in element they get an perception into the advertising and marketing surroundings purchaser behaviour and the way marketplace segmentation is done.

CO2: understand about the improvement and development of product and product life cycle. various techniques of branding and packaging and why do new products fail.

CO3: Students understands about the various strategies of pricing and rate and non rate conflict and diverse factors of advertising and marketing studies and advertising and marketing facts System.

CO4: Students can aware about idea of location and Salesforce. This is channel makes, alternator channel income corporation and approximately diverse gear of income promoting and its significance marketing.

Paper: BBAN-303 Capital Market

CO1: Students gain knowledge about the various instruments traded in capital market.

CO2: Students are enabled to identify primary & secondary market reforms.

CO3: Students gain knowledge about depository system and debt market.

CO4: Students gain knowledge about mutual funds & their types and difference b/w Physical shares & Demat shares

Paper: BBAN-304 Introduction to Information Technology

CO1: Students will learn and understand how to start MS-Word and its window. Students get knowledge of menu bars, tool bars, status bar, header and footer, Format, Drop cap, spelling and grammar tools, page formatting, mail merge and macros.

CO2: Students gain the knowledge about MS-Excel sheet- creating and editing, formatting, moving and copying data, functions, graph and types of graph, conditional formatting and macros.

CO3: Students will learn about how to use MS-Powerpoint and presentations in MS-Powerpoint. Students gain the knowledge about creating, manipulating and enhancing slides, layering and objects, excel charts, animation and sounds, inserting pictures, inserting sound.

CO4:- Students will learn about Tally and its features, Working in tally, Groups in Tally and

Tally Vouchers.

Paper: BBAN-305 Environmental Studies

CO1: This subject focuses on greenhouse gases and greenhouse effects and teaches the individuals their role in global warming and how population, industrialization and urbanization are responsible for climate change.

CO2: Describe and awareness about the role of deforestation, desertification, mining and oil exploration in degrading the environment.

CO3: Describe the various sources and harmful effects of atmospheric gases which are responsible for air pollution. Water pollution, soil pollution and solid waste cause toxicity and degradation of land.

Paper: BBAN-306 Disaster Management

CO1: This subject offers knowledge and help in understanding about the disaster, climate, coastal zone and way of tackling the disastrous situation.

CO2: The course prepares the student about the environmental challenges like flood, cyclone, and tsunamis and learns about how to deal such type of problems.

CO3: It focuses on preparing the individual modern defending technique and instruction during earthquake, volcanic eruption and helps in maintaining the coordination during emergency and critical situation.

Semester IV

Paper: BBAN-401 Financial Management

CO1- Students gain knowledge about the concepts of financial management and time value of money.

CO2: They learn to know about the acquisition and investment of various types of funds and acquire complete knowledge about the various techniques of capital budgeting decisions

CO3: They learn about capital structure theories and various sources of long term finances

CO4: Students acquire knowledge about the dividend policy and concept of management of working capital and various types of inventories.

Paper: BBAN-402 Human Resource Management

CO1: The Students will know about the Human Resource Management Nature, Functions, Policies, Strategies and Outsourcing of HR.

CO2: This Course content will help the students, How HR planning creates and what are the procedure about Recruitment Selection placement and Induction.

CO3: This Course content will help the students about how to develop Human Resources by training and development and what is career and succession planning and Employee Retention.

CO4: The Students will know about the performance Management system and how to establish rewards and pay plans for the Employees who provide safe and healthy work environment to the employees and what is competency based HRM.

Paper: BBAN-403 Business research method

CO1: This course help to know business research, framework research, Hypothesis & Business research proposals.

CO2: The student learn Research to know design, Experimental& measurement of scales.

CO3: It helps in understand the concept of Sampling, Data collection, Data processing & Questionnaire.

CO4: Student are also able to analysis & interpretation of data, Statistical model, research report & use of computer in research.

Paper: BBAN-404 Business law

CO1: This unit gives the awareness of many laws that come under Indian contract act with explaining the details of all the essentials of the valid contract.

CO2: In this unit contract of guarantee, contract of bailment and contract of indemnity are considered and explained by containing their duties as well as rights.

CO3: Mainly two Contract will be discussed with the students. The contract of agency and Contract of sale.

CO4: In this unit RTI act, Negotiable act and IT act will be explained to the students.

Paper: BBAN-405 Database Management System

CO1: Student will learn about basic concepts of database and comparison of file versus database system

CO2: Student will know about database architecture, mapping and various data models.

CO3: Student will understand concept of database security, recovery techniques and the purpose of DDBMS.

CO4: Student will know and learn about data warehouse and mining techniques.

Paper: BBAN-406 Human Rights and Values

Co1: Students gain complete knowledge about human rights, importance of human rights, and take responsibility for respecting, defending, and promoting human rights.

Co2: Inculcate students to work together to bring about human rights, justice, and dignity for all.

Co3: Will help the students to identify and adopt personal and social values that they can call on to guide their decisions, relationships, work, and life as a whole.

Co4: Enable the Students to develop a depth of character and a clear sense of their own identity, integrity, and what they believe to be important in life.

Semester V

Paper: BBAN-501 Production and Material management

CO1: Students gain complete knowledge about the production process in the organization.

CO2: Students are acquainted with the various techniques of quality control.

CO3: Students are made aware about the various method and equipments of material handling.

CO4: Gain in-depth knowledge of mechanism for disposal of scrap, surplus and obsolete materials.

Paper: BBAN-502 Company Law

CO1: Students learn about the various acts of Indian Company Law.

CO2: The student will learn about the various important documents required for registration such as MOA & AOA.

CO3: Students gain complete knowledge about the shares & debentures.

CO4: They acquire an insight about the company administration, various meetings & winding up of the company.

Paper: BBAN-503 Indian Business Environment

CO1: In this unit students will understand the concept of business environment and their responsibility towards society.

CO2: This unit will help in knowing about the industry sector, their policies and some of the private sector reforms are also included.

CO3: Students get awareness about the SEBI and all the factors related to SEBI. Some non-bank institution structure are also discussed.

CO4: BOP, foreign trade and all the trends related to these are being told to the students. This unit also includes the role of MNCs and impact of multilateral institutions on our Indian business environment.

Paper: BBAN-504 Computer Networking and Internet

CO1: Students will get knowledge of network, its types and topologies which we use for data communication.

CO2: They learn about analog and digital signals and various transmitting media used for transmitting data.

CO3: Student will learn about various layer of OSI and TCP/IP reference models with their protocols.

CO4: They learn how to secure data using cryptography, firewall and other security techniques.

Paper: BBAN-505 Presentation Skills and Personality Development

CO1: Students grab highly effective presentation skills and a sense of confidence.

CO2: They learn about listening and speaking skills.

CO3: Students acquire knowledge about self-awareness and personal development.

CO4: They learn to deal with nerves and think more positively about public speaking and the ways of grabbing the listeners attention, holding their interest and concluding strongly.

Paper: BBAN-506 Cyber Security

CO1: Students get introduced to Concept of Information Society .

CO2: They get details about Critical Infrastructure and also learn about Digital Economy.

CO3: Students know about the concept and uses of ICT; its importance in studies and organization.

CO4: Students learn about Information Security.

Semester VI

Paper: BBAN-601 Income Tax

CO1: Students get complete knowledge about the basic terms of Income Tax.

CO2: Enable the students to know about the residential status, incidence of tax and income exempted from tax .

CO3: Help the students to gain complete knowledge about the income from salaries, income from house properties, income from profit & gains of business, income from capital gains & income from other sources.

CO4: Inculcate students with how to set off & carry forward of losses, various concepts of clubbing of income & deduction of tax at source and rules of deduction from gross total income, assessment of individual etc.

Paper: BBAN-602 System Analysis & Design

CO1: Students will understand the concept of system, system development life cycle and familiar with the system planning and initial investigation. Student will also understand the concept of feasibility study.

CO2: This course would empower the students for designing of applications in graphical form with various graphical tools like DFD, form designs, screen designs, structure charts, input-output designs.

CO3: Students will understand implementation phase with data dictionary, decision table, decision trees, logical implementation to physical implementation. CO4: Students will acquire knowledge of distributing data processing and real time system, evaluation of distributing system, designing distributed database, state transition diagram, real time analysis tools.

Paper: BBAN-603 Foundation of International business

CO1: This course is help to understand international business, risk analysis, barriers, global trading& financial system.

CO2: The student get the knowledge about foreign market strategies, portfolio investment & control method.

CO3: It help to understand foreign manufacturing, sourcing decision, branding, approaches of foreign channel.

CO4: Student will learn how to face Cross cultural challenges in international marketing, staffing & technique of risk management.

Paper: BBAN-604 Consumer Protection

CO1: This course make understand the students about the Consumer Protection Act and various consumer rights.

CO2: The Students learn about the quasi-judicial machinery called consumer courts and what are basic provisions of CPA 1986 and gain complete knowledge about the approaches to consumerism.

CO3- The students gain knowledge about how government and business play role in consumer welfare? They also seek to know the importance of role of voluntary consumer organisation and role of media in this regard.

CO4- Enable Students to learn about how information is a tool in the hands of consumers to be safe and role of ethical marketing in consumer protection.

Paper: BBAN-605 E-commerce

CO1: The students will get a clear understanding of the concept of online business and how it is different and much more efficient than brick and mortar system.

CO2: The students will be able to learn various mechanisms involved in making digital payments.

CO3: This unit will provide deep insights into the concept of e-commerce and its various applications.

CO4: Students will be able to understand the latest concept of virtual organizations and will gain an understanding of the security issues involved in e-commerce transactions.

Program Outcome

PO1: The students gain exposure to the industrial world by visiting to various manufacturing plants and having an interaction with the experts in the various fields by means of various seminars and workshops.

PO2: One can opt for MBA entrance exams like CAT, GRE, GMAT, MAT, Symbiosis National Aptitude Test etc. depending on their choice of institutions.

PO3: This course will make them learn about various business and management practices.

PO4: This course also makes the students learn about various terminologies of banking sectors and their functioning.

Programme Specific Outcomes (PSOs) BBA (GEN)

PSO1: Irrespective of theoretical knowledge, BBA Programme also includes practical management training followed by a research project submitted by students which can prepare them to successfully work within a large or small organization.

PSO2: The students also gain exposure to the industrial world by visiting to various manufacturing plants and having an interaction with the experts in the various fields by means of various seminars and workshops.

PSO3: One can opt for MBA entrance exams like CAT, GRE, GMAT, MAT, Symbiosis National Aptitude Test etc. depending on their choice of institutions

PSO4: Starting up of own business would be a great option for budding entrepreneurs who don't want to work under the other companies and have a zeal of leading the others. This course will make them learn about various business and management practices

PSO5: One can also go for competitive exams like Indian railways, IBPS, SBI and much more. With a graduate degree in BBA, you can easily crack these exams. This course also makes the students learn about various terminologies of banking sectors and their functioning

PSO6: Various foreign embassies require students with a management degree. You can learn a foreign language and go on to work in that particular embassy. You can also take up exams like TOEFL or IELTS and move abroad for further studies.

PSO7: One can pursue any other courses of his/her choice later on like Hospitality or Tourism Management.

COURSE OUTCOMES

Name of Programme: B.Sc. (Non- Medical)

Mathematics

Semester I

Paper: 12BSM111 Algebra

C01: This course content will make students to understand symmetric , skew symmetric , hermitian and skew hermitian matrices , operation on matrix, rank and inverse of matrix , LI and LD matrix and they will be able to explain eigen values and eigen vectors , characteristics equation .

C02: With this course content, the students will be familiar with system of linear equations, consistency of Linear equation , unitary and orthogonal matrix , bilinear and quadratic forms.

C03: The students will understand the of concept of relation between roots and coefficients of general polynomials, equation in one variable, solution of polynomials and they will be able to learn about common and multiple roots and transform of equation ..

C04: This course will help the students in gaining the knowledge of nature of roots, discrete rule , solution of cubic equation and they will be able to understand Cardan's method , biquadratic equation and its solutions.

Paper: 12BSM112 Calculus

C01: The students will be able to understand the of concept of limit of a function, properties of limits, continuous function and types of discontinuities and they will be able to learn differentiability, successive differentiation, Leibnitz theorem and Taylor series expansions.

C02: This course will help the students to understand the concept of asymptotes, intersection of curve and asymptotes, curvature, radius of curvature, parametric and polar curves, Newton's method they will be able to learn circle of curvature , chord of curvature, evolutes and types of cusps.

C03: With this course content, the students will be able to classify tracing of curves in Cartesian , parametric and polar co-ordinates , they will be able to understand the concept of reduction formula , rectification and intrinsic equation of curves .

C04: The students will be able to acquire the knowledge regarding quadrature area , sectorial area , closed curve , volume and surface of solid revolution .

Paper code- 12BSM 113 Solid Geometry

CO 1: Students will acquire the basic knowledge of general equation of second degree, various applications of conics and will be able to trace the curve.

CO 2: This course will enable the students to identify, describe, compare and classify different geometric solids and visualize and represent geometric figures like sphere, cone and cylinder.

CO 3: Students will learn the basic concepts of different conicoid, tangent planes, enveloping cone and cylinder to understand the advanced topics related to two and three dimensional geometry.

CO 4: It will help students to recognize paraboloids and understand the geometric terminology of generating lines.

Semester II

Paper code- 12BSM 121 Number Theory & Trigonometry

CO1: Learn methods and techniques used in number theory, define and interpret the concepts of divisibility, congruence, greatest common divisor, primes and prime factorization

CO 2: Formulate and prove conjectures about numeric patterns using Fermat's, Euler's theorem etc. Apply the law of quadratic reciprocity and other methods to classify numbers as primitive roots

CO3: Demonstrate knowledge and understanding of trigonometric and inverse trigonometric functions useful in scientific calculations

CO4: Solving trigonometric equations and prove and apply trigonometric identities

Paper: 12BSM122 Ordinary Differential Equation

CO1: The students will be able to understand the concept of differential and exact differential equation, integrating factor, Lagrange's equation, Clairaut's equation and they will be able to learn equation reducible to Clairaut's for and singular solutions

CO2: This course will help the students to understand the concept of orthogonal trajectories, self orthogonal, linear and homogeneous ODE, they will be able to learn equation reducible to homogeneous linear ODE.

CO3: With this course content, the students will be able to classify linear differential equation, reduction and transformation of equations and they will be able to understand the concept of reduction of order of differential equation, method of variation of parameters and undetermined coefficients.

CO4: The students will be able to acquire the knowledge of ODE, solution of ODE, total differential equation, condition to be exact, method of auxiliary equations..

Paper: 12BSM123 Vector Calculus

CO1: This course content will make students to understand scalar and vector product of vectors, vector differentiation, scalar point functions and they will be able to explain derivative along a curve and directional derivative.

CO2: With this course content, the students will be familiar with gradient of a scalar and divergence and curl of a vector, properties of gradient, div and curl, Laplacian operator.

CO3: The students will understand the concept of orthogonal curvilinear coordinates, grad, div, curl and Laplacian operator in terms of orthogonal curvilinear coordinates and they will be able to learn about spherical coordinates..

CO4: This course will help the students in gaining the knowledge of vector integration, line integral, surface and volume integral and they will be able to understand theorems of Gauss, Green and Stokes.

Semester III

Paper: 12BSM231 Advanced Calculus

C01: The students will be able to understand the of concept of continuity and sequential continuity and they will be able to learn differentiability, chain rule , rolle's theorem , LMV, Taylor's theorem, Darboux intermediate value theorem and various forms , indeterminate forms .

C02: This course will help the students to understand the concept of limit and continuity of real valued function of two variables , partial differentiation, total differentiation and composite and implicit functions they will be able to learn how to solve Euler;s theorem on homogenous functions.

C03: With this course content, the students will able to classify the differentiability of real valued functions of two variables , Schwarz and Young's theorem and implicit function theorem, maxima, minima and saddle point of two variables .

C04: The students will be able to acquire the knowledge for solving Curve tangents , principle normal, binormals, Serret Frenet formula, locus of centre of curvature, spherical curvature locusof centre of family of curvature.

Paper: 12BSM232 Partial differential equations

C01: The students will be able to understand the of concept of Partial differential equation and its formation and they will be able to learn linear and non-linear PDE of first order and methods to solve partial differential equation.

C02: This course will help the students to understand the concept of linear PDE of second and higher order and they will be able to learn how to solve homogeneous and non-Homogeneous with constant coefficients, equation reducible to linear equations with constants coefficients.

C03: With this course content, the students will able to classify the linear Partial differential equations of second order, reduce the linear PDE to Canonical form, methods to solve PDE of second Order.

C04: The students will be able to acquire the knowledge for solving Cauchy's problem, characteristics equations, methods of separation of Variables, Diffusion in Cartesian Co-ordinate system.

Paper : BM 233 Statics

CO1: The Students will able to define Resultant, Component of a Force, Prove the Parallelogram of Forces, Triangle of Forces, Converse of the Triangle of forces, lami's theorem, Like and unlike parallel forces, Moment of a force and Couple with examples.

CO2: This course will help the students to learn the analytical conditions of equilibrium of coplanar forces, discuss Friction, Forces of Friction, Cone of Friction, Angle of Friction and Laws of friction ,concept of centre of gravity

CO3: The students will acquire the knowledge of virtual work and learn the concept of forces in three dimensions.

CO4: The students will understand the concept of wrenches ,null lines and planes ,stable and unstable equilibrium

SemesterIV

Paper: 12BSM241 Sequence and Series

CO1: This course content will make students to understand boundedness of \mathbf{R} , LUB, GLB neighbourhood, interior points, isolated and limit points open and closed set and its properties and they will be able to explain Bolzano Weiestrass theorem.

CO2: With this course content, the students will be familiar with Sequence, real sequence and their convergence, bounded and monotonic sequence, Cauchy general principle of convergence, subsequences, infinite series.

CO3: The students will understand the of concept of infinite series, D'Alemberts Ratio test, Rabbe's test, Logarithmic test, D'morgan, Gauss test and they will be able to prove Cauchy integral test, Cauchy condensation test.

CO4: This course will help the students in gaining the knowledge of Alternating Series Leibnitz's test, absolute and conditional convergent, arbitrary series, abel's test, abel's lemma, dirichlet's test and they will be able to rearrange term in a series, Cauchy product of series..

Paper: 12BSM242 Special Functions and Integral Transforms

CO1: This course content will make students to understand power series, Beta and Gamma functions, their properties and they will be able to express the differential equations in the terms of power series.

CO2: With this course content, the students will be familiar with Legendre and Hermite's polynomial, their properties and solutions, Recurrence Relations.

CO3: The students will understand the of concept of Laplace Transform, Differentiation and integration of Laplace Transform, Inverse Laplace Transforms and they will be able to find Laplace transforms by various methods.

CO4: This course will help the students in gaining the knowledge of Fourier Transforms, various methods to find Fourier transform, solution of differential equations using Fourier transforms. and they will be able to differentiate between Laplace and Fourier Transform.

Paper : BM 243 Programming in C and Numerical Methods

CO1 : This course will help the students to Understand the Computer fundamentals and the C programming language concepts, different data type and gain knowledge about types of Operators.

CO2: With the course content, students will be able to choose the Loops and Decision Making Statements to solve the problem and gain knowledge about arrays, functions and solve problems based on it.

CO3: The students will understand the concept of Pointers, Structures and Unions and the course content will help the students to obtain numerical solutions of algebraic and transcendental equations.

CO4: The students will acquire the knowledge how to find numerical solutions of simultaneous linear algebraic equations.

Semester V

Paper code :12BSM 351 Real Analysis

CO 1: To know about Riemann Integral, integrability of different functions and various forms of mean value theorems

CO 2: Learn techniques of checking convergence of improper integrals and continuity & differentiability of integral of a function of a parameter

CO 3: To acquire the knowledge of metric spaces, its basic terminologies and completeness of various metric spaces

CO 4: Defining continuity, uniform continuity, compactness and connectedness in metric spaces and their relation with each other

Paper : BM 352 Group and Rings

CO1: The students will be able to acquire the basic knowledge of Group, Subgroup, Cyclic group and Normal subgroup and their properties and analyze the consequences of Lagrange's theorem.

CO2: The students will understand the concept of Homomorphisms and Automorphisms and they will be able to find cycles and transpositions of a given permutations and prove Cayley's theorem.

CO3: This course will enable the students to know the fundamental concepts in ring theory such as the concepts of ideals, quotient rings, integral domains, and fields.

CO4: The students will be able to learn in detail about polynomial rings and irreducibility criterion.

Paper: 12BSM 363 Numerical Analysis

CO1: The students will understand the concept of finite differences operator, Interpolation with equal intervals, Newton's forward and backward formulae, Interpolation with unequal intervals, Newton divided formulae, Hermite formula.

CO2: This course will help the students to understand the concept of central differences: Gauss forward and backward interpolation formulae, Sterling, Bessel's formulae, probability distribution of random variables, Binomial distribution, Poisson's distribution, Normal distribution.

CO3: With this course content, the students will learn the concept of numerical differentiation of various interpolation formulae discussed in CO 1 and CO 2. They also will be able to learn eigen values problems: power method, Jacobi's method, Given's method, Householder's method, QR method, Lanczos method.

CO4: The students will be able to acquire the knowledge of Newton-Cotes's Quadrature formula, Trapezoidal rule, Simpson's one third and three-eighth rule, Chebyshev formula, Gauss Quadrature formula. They also will be able to solve Numerical solution of ordinary differential

equations by Single step methods-Picard's method. Taylor's series method, Euler's method, Runge-Kutta Methods. They also will be able to learn Multiple step methods; Predictor-corrector method, Modified Euler's method, Milne-Simpson's method.

Semester VI

Paper code : 12BSM 361 Real & Complex Analysis

CO 1: Students will know about the use of Jacobians for differentiation, Beta & Gamma functions and Double & Triple integrals and their practical applications.

CO 2: To learn about the use of Fourier series in solving problems in Physics

CO 3: To understand the concept of complex plane, continuity & differentiability of complex functions, use of Analytic functions in solving field and flow problems

CO 4: Learn about the various elementary mappings and mobius transformations.

Paper: BM362 Linear Algebra

CO1: This course will enable the students to understand the concepts of vector spaces, subspaces, bases, dimension and their properties.

CO2: The students will understand the concept of linear transformations and their properties and determine the rank and nullity of L.T.

CO3: The students will learn how to relate matrices and linear transformations, use change of basis, compute eigen values and eigen vectors of linear transformations.

CO4: This course will help the students to learn properties of inner product spaces and determine orthogonality in inner product spaces.

Paper: 12BSM 353 Dynamics

C01: The students will be able to learn in detail about Velocity and acceleration along radial, transverse, tangential and normal directions, Relative velocity and acceleration, Simple harmonic motion. Elastic strings.

C02: With this course content, the students will learn the concept of Mass, Momentum and Force. Newton's laws of motion, Work, Power and Energy, Definitions of Conservative forces and Impulsive forces.

C03: This course will help the students to understand the concept of Motion on smooth and rough plane curves, Projectile motion of a particle in a plane, Vector angular velocity.

C04: This course will help the students in gaining the knowledge of General motion of a rigid body, Central Orbits, Kepler laws of motion, Motion of a particle in three dimensions, Acceleration in terms of different co-ordinate systems.

B.Sc.(N.M.) Physics

Semester-I

Paper: Mechanics (Phy-101)

CO 1: This course enables the students to understand the basic concepts of Classical Mechanics. In this section students will get the knowledge of centre of mass, conservation laws and constrained motion.

CO 2: This section helps students to understand Newton's laws and get the knowledge about forces of physics in everyday life. The velocity, displacement and acceleration give the knowledge about how the things around us move.

CO 3: This section helps students to understand the rolling concept, rotation concepts and concept of inertia and moment of inertia which they see and use in real life situations.

CO 4: This section helps students to understand the concept of Lagrangian and its real-life applications which further helps them to understand and solve problems related to simple physical systems.

Paper: Electricity and Magnetism (Phy-102)

CO 1: This course deals with scalar and vector quantities and apply the del operator on these physical quantities and also would be able to build up logical and analytical skill to work on new complex physical world by applying the same del operator on the physical quantities of their own choice.

CO 2: This will be able to understand the effect of a charged particle/body in the form of electrostatic and electrodynamics fields.

CO 3: From this course students will be able to visualise the invisible world of accelerated charged particle in the form of electromagnetic field or electromagnetic waves which has socio anthropological settings across the world by connecting every human being through communication as outcome of electromagnetic waves.

CO 4: This will be able to meet the course objectives in all respects by orienting teaching and other academic processes adopted by the faculty to facilitate the students to do what they are expected to do.

Paper: Physics Practical (PHY – 103)

CO 1: The set of experiments helps the students to understand the meaning of minute observations and measurements and helps to understand role of measurement in the practical world.

CO 2: All the experiments are based on the theory course therefore these experiments are essential part of the curriculum.

CO 3: Experiments based on moment of inertia gives technical knowledge to the students and provides a path towards industries related to machinery and vehicles.

CO 4: Experiments related to the measurement of acceleration due to gravity and elastic constants gives the knowledge of universal constants to the mind of students and these experiments also raise the imagination power of the students.

Semester-II

Paper: Properties of Matters, Kinetic Theory and Relativity (PHY - 201)

CO 1: This course enable the students to understand the fundamental concepts related to Hook's law and Poisson's ratio and elastic properties of materials and their relations that have useful applications in daily life.

CO 2: This section helps the students to understand the concept of bending of beam, cantilever as well as the concept of twisting couple that have useful application in industries.

CO 3: The Section helps the students to understand the concept of energy distribution, specific heats and Maxwell laws of distribution that have statistical and experimental verifications.

CO 4: Theory of relativity is most interesting part of the mechanics. It gives the idea of time dilation, length contraction and variation of mass with velocity.

Paper: Electromagnetic Induction and Electronic Devices (Phy-202) .

CO 1: From this course students will be able to apply and check the results theoretically and experimentally when passive elements are connected to Alternating and Constant source of electromotive force .

CO 2: This course will be able to understand the role of a semiconductor elements in controlling the applied source of voltage and current and how these elements have brought up a big change after the discovery of transistor as a semiconductor device.

CO 3: To see the effect of positive feedback in generating the oscillations without any prerequisite input and the effect of negative feedback in generating the amplification of input signal as this law of physics is explicitly a consequence of law of nature.

CO 4: This course objectives to study active electrical components such as vacuum tubes, transistors, diodes, integrated circuits, optoelectronics, and sensors, associated passive electrical components, and interconnection .

Paper: Physics Practical (PHY–203)

CO 1: The experiments of this course are framed so as to understand comprehensively the meaning of minute observations and measurements. These experiments are primary lesson to the learners that how essential is the role of measurement in the practical world.

CO 2: These experiments have foundation in the theory course of the students in the same year. Therefore, these laboratory experiments are elemental part of the curriculum and helps in improving the widespread knowledge to the students.

CO 3: Experiments based on special type of diode provide scientific temperament and an industrial hand to the students and opens a pathway to the manufacturing world related to machinery and vehicles.

CO 4: The students by performing the experiments based on current and electricity, learner could realize the many theoretical concepts solenoid, magnetism, frequency of A.C. mains. These experiments provide answer to many queries of the students which is the part of their thoughts so far.

Semester III

Paper: Computer Programming and Thermodynamics (Phy-301)

CO 1: This unit will help the students to understand the concept of Heat and its conversion from one form to another and this concept of heat transfer is used in wide range of devices like heat exchangers, evaporators, condensers, radiators, coolers, heaters, etc. Students will also understand the laws of Thermodynamics which they use in their daily life like in refrigerators, air-conditioners, heat pumps etc.

CO 2: In this unit students will get the knowledge from laws of thermodynamics about energy behaviour, for example, why and how heat transfers between two objects and about different forms of energy.

CO 3: This section will help the students to understand the concept of Entropy, Specific heat and Maxwell relations which further helps the students to relate changes in one set of thermodynamic variables to other variables.

CO 4: This unit enables the students to understand Programming which is very important to create software and applications that help computer and mobile users in daily life. Programming is important to collect, manage, calculate and analyse the processing of data and information accurately.

Paper: Optics – I (Phy-302)

CO 1: From this course students will be able to understand and correlate various optical phenomena related to light with practical problems/applications in day-to-day life.

CO 2: To establish a bridge that link mathematical equations with their physical aspects and comprehensive recognition with conceptual clarity.

CO 3: To understand the different dimension of laws of reflection, refraction and other equations based on them is shown in Matrix methods. These methods results in simplification/alternate of complicated and lengthy equations studied in twelfth class.

CO 4: To understand the wave nature of light is described by interference of light and it answers many observations in our daily life. For e.g. : coloration in the soap bubble, fringe patterns observed somewhere and laser phenomena based on coherence of light. Thus, students are able to observe and analyse various naturally occurring phenomena.

Paper: Physics Practical (PHY–303)

CO 1: The experiments of the Optics branch enable the students to understand and verify the various laws related to the light.

CO 2: By performing the experiments based on current and electricity, learner could realize the many theoretical concepts solenoid, magnetism, frequency of A.C. mains. These experiments provide answer to many queries of the students.

CO 3: Use and handling of the instruments of the optical phenomena such as telescope and microscope would provide make learner an expert in the field on measurements.

CO 4: The fundamental concepts of theory, the laboratory experiments could provide learner a potential to be absorbed in the industrial world.

Semester IV

Paper: Statistical Mechanics (Phy-401)

CO 1: This course helps the students to understand the methods of statistical mechanics used to develop the statistics for Bose-Einstein, Fermi-Dirac and photon gases.

CO 2: To understand the concept of microstates and macro states and how the particles are distributed in the system in different states.

CO 3: To understand the macroscopic and microscopic description of temperature, entropy and free energy and their descriptions in terms of probabilities.

CO 4: To understand the concept of canonical and micro canonical ensemble.

CO 5: To learn different types of statistical approach for the evaluation of data.

Paper: Optics - II (Phy- 402)

CO 1: This course helps the students to understand wave nature of light by interference of light that have many observations in our daily life. For e.g. : coloration in the soap bubble

CO 2: This section enables the students to understand fringe patterns and laser phenomena based on coherence of light. Thus, students are able to observe and analyze various naturally occurring phenomena.

CO 3: The concept of polarization would describe the bifurcation between longitudinal and transverse waves. Students can learn the practical aspect to distinguish between polarized and unpolarized light.

CO 4: This section enables the students to understand and correlate various optical phenomena related to light with practical applications in day-to-day life. For e.g. - the distinction between various type of light and different set of polarimeters.

Paper: Physics Practical (Phy-403)

CO 1: To make use of and handling of the sophisticated optical instruments such as Bi -prism arrangement, telescope and microscope would provide learner an expertise in the field of measurements.

CO 2: The experiments of the Optics division would assist students to recognize and verify the various laws related to the light and optical event which is just a part of their imagination till now.

CO 3: In addition to realize the fundamental concepts of theory, the laboratory experiments could make available learner a potential candidate to be absorbed in the industrial world.

CO 4: The computer programming would help students to get familiar with software skills. It not only develops a skill in the students but also opens up another way to the students after completing their graduation course.

Semester-V

Paper: Solid State Physics (Phy-501)

CO 1: This course (Solid-state physics) deals with the properties of solids, from the atomic level upwards and gives an extended knowledge of the principles and techniques of solid state physics. The course covers the physical understanding of matter from an atomic view point.

CO 2: It helps us in determining the structures by diffraction (X-rays method)

CO 3: This helps in determining the mechanical strength of materials, how they interact with light, how they conduct electricity, etc.

CO 4: Graduates may pursue careers in applied research or education and work in a variety of industries such as aerospace, engineering and in government laboratories.

Paper: Quantum Mechanics (Phy-502)

CO 1: This unit helps students to understand the basic concepts of Quantum mechanics and its applications like the co-existence of particle and wave nature of matter particles, photoelectric effect, Compton effect (particle nature), interference, diffraction and polarisation (wave nature)

CO 2: This section helps student to differentiate between the two states of electrons i.e. free and bound. It also gives the knowledge about Schrodinger wave equations, eigen values and functions, normalization and operators.

CO 3: This section explains the concept of uncertainty principle in Physics and how it can be applied to explain various phenomenon of quantum physics like time energy relationship and position uncertainty.

CO 4: This section explains the behaviour of a free and bound particle with the help of Schrodinger equation and explains the concept of potential and its applications such as potential barrier, particle in a box. It also helps students to understand the concept of tunnelling, reflection and transmission probabilities at different energies of the particle.

Paper: Physics Practical Paper (Phy-503)

CO 1: This program helps students in gaining practical knowledge of CB, CE amplifiers & indetermining their various parameters. It also helps in gaining knowledge of Hartley Oscillator, biprism, Corona rings etc.

CO 2: This course helps students to gain practical knowledge of FORTRAN programming.

CO 3: This course helps students in gaining practical knowledge of resolving power of prism & plane transmission grating & in determining their various parameters. It also helps in gaining knowledge of Rydberg constant.

Semester-VI

Paper: Atomic, Molecular & Laser Physics (Phy-601)

CO 1: After studying this course students are able to analysis different spectrums of alkali atoms.

CO 2: The effect of electric and magnetic fields on alkali atoms spectrums is also analysed and studied.

CO 3: Students are also able to analyse the Raman Effect which gives insight into irrational and rotational energies.

CO 4: The students get in-depth knowledge of He-Ne and RUBY laser, different type of coherence. They can design simple lasers after studying this course.

Paper: Nuclear Physics (PHY-602)

CO 1: This course helps students to have a deep understanding of basic and fundamental concepts of nucleus in terms of its composition (i.e. mass, charge and size), its stability (i.e. binding energy) and various properties (nuclear spin, parity, magnetic and electric dipole moment etc.) and various nuclear reactions.

CO 2: This course enables the students to study the various experimental methods for the acceleration of charged particles (LINAC, Cyclotron, Betatron, etc.)

CO 3: This section enables the students to understand the concept of Interaction of charged particles (such as Alpha and Beta particles) and Gamma radiations with matter and their detection (G.M. Counter, semi-conductor detector, etc.) and understand the energy loss mechanism of various particles.

CO 4: It also helps student to understand the concept of energy emission during a nuclear chain reaction (fission or fusion reaction) and the management of this energy for either the useful purpose (i.e. nuclear reactors) or the destructive purpose (i.e. nuclear bomb)

Paper: Physics Practical (Phy-603)

CO 1: The computer programming would help students to get familiar with software skills. It not only develops a skill in the students but also opens up another way to the students after completing their graduation course.

CO 2: The experiments of electricity such as Transistor, Amplifier, Oscillator would assist students to recognize and verify the various laws related to the electricity which is just a part of their imagination till now.

CO 3: To make use of and handling of the sophisticated optical instruments such as G M Counter would provide learner an expertise in the field of measurements.

CO 4: In addition to realize the fundamental concepts of theory, the laboratory experiments could make available learner a potential candidate to be absorbed in the industrial world.

Sh. L.N. Hindu College, Rohtak

B.Sc.(N.M.) Chemistry

Semester-I

Paper: CH-101 (Inorganic Chemistry Theory)

CO 1: understand the structure of atom and the particles which constituting it.

CO 2: Will be familiar with the periodic table in which how different elements are placed according to their unique properties in different rows and periods.

CO 3: will Understand the concept of bonding and how the theories of bonding govern the structures of different compounds. Further on the basis of basic information will develop skills to analyse compounds in unknown compounds.

CO 4: how structure of ionic solids can be drawn and understand its properties.

Paper: CH-102 (Physical Chemistry Theory)

CO 1: Differentiate between the states of matter which is based on the interactions existing amongst their particles.

CO 2: Understand the simultaneous relationship between pressure, temperature and volume amongst different states of matter.

CO 3: Measure the numerical ability.

CO 4: Recognised the theoretical knowledge into the practical world by understanding the basic concepts of matter.

CO 5: Learn why different substance have different melting or boiling points.

Paper: CH-103 (Organic Chemistry Theory)

CO 1: be able to Understand the different kinds of bonds existing in organic compounds.

CO 2: will be able to Learn how to name different compounds according to IUPAC nomenclature.

CO 3: Be able to visualize the 3D-structures of organic compounds.

CO 4: be able to recognize and draw constitutional isomers, stereoisomers, including enantiomers and diastereomers, racemic mixture and meso compounds.

CO 5: be able to study different kind of reactions occurring amongst the organic compounds.

CO 6: Be able to differentiate between reactant and reagents.

Paper: CH-104 (Practical)

CO 1: Will be able to apply the theoretical concepts while performing experiments.

CO 2: Will be able to design, carry out, record and analyse the results of chemical experiments.

CO 3: Will be able to titrate different mixtures.

CO 4: Will acquire the how to work safely with the chemicals and handling of equipment.

CO 5: Will learn, how to make solutions of different concentrations generalizing the concept of normality, molarity and molality.

CO 6: Design experiments that can be applied in everyday life based on the parameters of viscosity, surface tension and specific refractivity.

CO 7: try to Learn the basics of precipitation.

CO 8: Acknowledge experimental errors and their possible sources.

CO 9: Try to learn statistical approach for evaluation of data.

Semester-II

Paper: CH-201 (Inorganic Chemistry-Theory)

CO 1: Knowledge enhancement to understand the geometry of molecules.

CO 2: to understand the concept of the classification of periodic table.

CO 3: Analyse various factors on which the elements are classified in the periodic table.

CO 4: Analysis of the formation and structure of various compounds by varying the chemical composition thereby enhancing their skill growth.

Paper: CH-202 (Physical Chemistry Theory)

CO 1: Understand that every reaction has a unique time of occurrence due to the involvement of different chemical species and with effect of various parameters under observation.

CO 2: Apply the kinetic concept in this field of science and also in the real world.

CO 3: Study the concept of half life time.

CO 4: Enhance their numerical ability by solving numerical from different parameters of these two branches.

CO 5: Differentiate between conductance and resistance and how both the terms are related to each other.

CO 6: Study the factors of acidity and basicity with their pH and pKa and apply this knowledge with daily usable products.

CO 7: Visualise the importance of buffer solutions and how they are used by on daily basis.

Paper: CH-203 (Organic Chemistry Theory)

CO 1: Students will be able to analyse the route of formation of certain products.

CO 2: Students will be able to differentiate between the aromatic, antiaromatic and non aromatic compounds and how Huckel rules govern the phenomenon of aromaticity amongst different organic compounds.

CO 3: Students will be able to clearly distinguish the basic difference between alkyl and aryl compounds.

CO 4: Students will be able to relate the concept of stability of compounds with the phenomenon of conjugation and conditions necessary for a system to be a conjugating system.

CO 5: Students will be able to clearly identify the role of hybridization and how the physical and chemical reactivity of these compounds are affected because of different hybridization.

Paper: CH-204 (Practical)

CO 1: Design, carry out, record and analyse the results of chemical experiments.

CO 2: Understand the principle and applications of chromatography.

CO 3: to do skillfull synthesis of organic compounds.

CO 4: Perform different methods and learn the importance of purification.

Semester-III

Paper: CH-301 (Inorganic Chemistry Theory)

CO 1: Students will have the ability to demonstrate knowledge and understanding of essential facts, concepts and principles of inorganic chemistry.

CO 1: Students will be able to relate the basic difference amongst transition metals. Metal complexes itself covers a broad expect of chemistry and has a wide applicability in quantitative and qualitative analysis and metal extraction.

CO 2: Students will have an insight idea of spectral properties of different inorganic compounds based on their electronic properties.

CO 3: Students will be able to understand the need of development of co-ordination chemistry and its relation with d- block elements.

CO 4: Students will be able to relate with the basic nature of solvents and how different solvents act differently.

Paper: CH-302 (Physical Chemistry Theory)

CO 1: Students will be able to relate the basic concept of thermodynamics with their every day world and will understand that how the stability of whole universe is effected with different laws of thermodynamics.

CO 2: Students will analyse the basic difference between path and state functions.

CO 3: Students will understand the concept of entropy and how the whole universe is related to it.

CO 4: Students will recognize the importance of equilibria and how different forms of equilibrium are different from each other and are affected by various external parameters

CO 5: Students will be able to calculate thermal efficiency of heat energies and solve problems based on laws of thermodynamics.

CO 6: Students will be able to determine the Nernst distribution law and can relate to various factors causing its deviation.

Paper: CH-303 (Organic Chemistry Theory)

CO 1: Students will understand the need for introducing IUPAC nomenclature for organic compounds and will also be able to write IUPAC nomenclature for different functional groups.

CO 2: Students will be able to differentiate between different chemical and physical reactivity amongst organic compounds based on presence of different functional groups.

CO 3: Students will be able to learn how alcohols and phenols are considered in two different classes.

CO 4: Student will get a deep learning of the basic concept of UV spectroscopy and how it can be used in organic chemistry to identify the type of electronic transitions, reason for the colour of compounds and their stability.

Paper: CH-304 (Practical)

CO 1: Experimentation enhances the skills of managing the resources, time and team work.

CO 2: Students will be able to function as a member of an interrelated problem solving team.

CO 3: Students will be skilled enough to perform gravimetric analysis.

CO 4: Students will be forced to think in an inclined manner via performing chemistry experiments.

CO 5: Students will be able to detect the presence of extra elements in any given unknown sample, thereby consider the concept of logical thinking.

Semester-IV

Paper: CH-401 (Inorganic Chemistry Theory)

CO 1: Enables to describe the chemical and physical properties of f-block elements including lanthanides and actinides specifically reasoning for anomalous electronic configuration.

CO 2: Enables to differentiate between acidic and basic radicals and how they can be further useful in research as well as day to day life.

CO 3: Enables to individuate qualitative analysis from qualitative analysis.

CO 4: Enables to understand different types of theories of precipitation and how they are interrelated from each other.

Paper: CH-402 (Physical Chemistry Theory)

CO 1: Enables to understand the advance and higher study of thermodynamics.

CO 2: Enables to conceptualize the second law of thermodynamics and how it is related to entropy.

CO 3: Enables to clearly distinct entropy and enthalpy .

CO 4: Students will acquire knowledge of how to apply third law in calculating entropy associated with various phases of matter and pure crystalline solid.

CO 5: Students have advance knowledge of work function, Gibb's energy and their significance for criteria of spontaneous reactions.

CO 6: Students understand the essential conditions for a system to be spontaneous or nonspontaneous.

Paper: CH-403 (Organic Chemistry Theory)

CO 1: Enables to familiarize with the concept of IR spectroscopy and how it can be applied in day to day life.

CO 2: Enables to differentiate between compounds containing oxygen and nitrogen functional groups.

CO 3: Enables to understand the effect of different reagents like LiAlH_4 , NaBH_4 etc. in presence of different functional groups.

CO 4: To study the understanding of mechanisms going in organic synthesis.

Paper: CH-404 (Practical)

CO 1: To determine the methods for calibration to quantitative analysis.

CO 2: Help to perform graphical analysis for determining experimental results in the laboratory.

CO 3: Enables to analyse that how the colour of solution vary in different solutions and their absorption properties.

CO 4: Enables to handle the apparatus used in calorimetric experiments.

Semester-V

Paper: CH-501(Inorganic Chemistry Theory)

CO 1: Students will understand the postulates and limitations of Valence bond theory (VBT) and how the structures of different compounds can be drawn which were not satisfied with the help of VBT.

CO 2: Students got an idea why crystal field theory (CFT) was introduced.

CO 3: Students got introduced by the difference in CFT of octahedral and tetrahedral complexes.

CO 4: Students will get a detailed knowledge about magnetic and electronic properties of transition metal complexes.

CO 5: Students will be able to understand the stability in metal complexes governed by kinetic and thermodynamic parameter.

Paper: CH-502 (Physical Chemistry Theory)

CO 1: Students will understand the need of quantum mechanics and limitations of classical mechanics.

CO 2: Students acquire quantitative knowledge of operators in quantum mechanics corresponding to classical observables.

CO 3: Students acquire the detail knowledge for probabilities, postulates, wave functions and expectation values.

CO 4: Students will acquire extensive knowledge about spectral information.

CO 5: Students got skills of understanding molecular spectroscopy, knowledge of vibrational, rotational and Raman spectra that plays key role in chemistry.

Paper: CH-503 (Organic Chemistry Theory)

CO 1: Students will have the knowledge of principles of spectroscopy.

CO 2: Students got knowledge of organic compounds using spectroscopic techniques.

CO 3: Students able to understand that how NMR spectroscopy can be used to identify unknown organic compounds.

CO 4: Students enable to classify different carbohydrates based on their structural and positional composition.

CO 5: Students enable to understand the nature of metal-carbon bond present in organic compounds.

CO 6: They understand the mode of action of different organic reagents because of the presence of different metals in them.

CO 7: Students will be able to understand the nature of action of reagents depend on the nature of metal-carbon bond.

CO 8: Will be able to acquire knowledge how use of organometallic compounds in biological systems and chemical reactions can be done.

Paper: CH-504 (Practical)

CO 1: Students will have a comparative knowledge of different types of chromatography.

CO 2: Students can relate that how different RF values can be determine in separation techniques.

CO 3: Students will have a vast idea of different types of salts and the factors on which they are categorized into different groups.

CO 4: Students will be able to categorize and maintain a detailed record for differentiating different radicals on the basis of different factors.

CO 5: Students will be able to apply the theory of common ion effect in the precipitation of compounds.

Semester-VI

Paper: CH-601 (Inorganic Chemistry Theory)

CO 1: Students will be able to relate the basic difference between acids and bases.

CO 2: Students will be able to imply this theoretical knowledge of acid-bases into practical world.

CO 3: Students will have an deep idea of the composition of different biomolecules.

CO 4: Students will learn about the roles of metal ions in different biological and chemical processes.

CO 5: Students will be able to relate to the compounds of silicon and phosphorous and applications of these compounds specially in greases.

Paper: CH-602 (Physical Chemistry Theory)

CO 1: Students will be able to understand the electronic spectral properties of different compounds and how these properties affect the nature of compounds.

CO 2: Students will get thoroughly knowledge of interaction of electromagnetic radiations with matter.

CO 3: Students will have a deep knowledge of different types of solutions, on what factors the miscibility of different solutions depend, how colligative properties are related to different solutions, difference between ideal and non-ideal solutions.

CO 4: Will learn about the concept of phase equilibria and how phase equilibria's of two components are related.

CO 5: Will possess the skills to solve problems within broader context related to field of photochemistry.

CO 6: Will be able of analysing the impact of photochemistry in development of society.

Paper: CH-603 (Organic Chemistry Theory)

CO 1: Students will get knowledge of heterocyclic compounds in organic chemistry.

CO 2: Students will learn about how introduction of heteroatom amongst cyclic hydrocarbons change the properties of entire compounds.

CO 3: Will be given an idea of the application part of organic chemistry i.e. how they can use their theoretical knowledge into the real world.

CO 4: Will be taught about proteins, how they are formed from their smallest monomers amino acids and how arrangement of different amino acids changes the basic composition of proteins and peptides.

CO 5: Will be able to distinguish between primary and secondary structure of proteins.

CO 6: Students will be able to describe the advantages of heterocyclic compounds in materials and pharmaceutical chemistry.

CO 7: Students will be able to explain the synthesis and applications of important polymers that we find in our everyday life.

Paper: CH-604 (Practical)

CO 1: Students will be skilled to perform skillful experiments.

CO 2: Students will be able to understand experience on pH meter and potentiometer.

CO 3: Students will be able to perform different synthetic reactions.

CO 4: Students will be able to measure that how different processes are used for a single step reactions in synthesis of compounds.

CO 5: Students will be able to carry out and record these experiments in a skilful manner.

CO 6: Students got an idea how to show obtain and interpret data in different experiments.

Sh. L.N. Hindu College, Rohtak

सेमेस्टर-III

पेपर:HI03 हिंदी (अनिवार्य)

CO 1.प्रमुख लेखकों के साहित्यिक परिचय द्वारा हिंदी साहित्य में उनके साहित्यिक अवदान से विद्यार्थियों को अवगत कराना।

CO.2 विद्यार्थियों को सरकारीपत्र, अर्द्ध सरकारी पत्र तथातार लेखन से अवगत कराना जो उनके जीवन में उपयोगी हैं।

CO 3.विभिन्न निबंधों के माध्यम से विद्यार्थियों की वैचारिक सोच को विकसित करना।

CO 4. विद्यार्थियों को वैज्ञानिकशब्दावली से परिचित कराना।

सेमेस्टर-IV

पेपर:HI04 हिंदी (अनिवार्य)

CO 1.विद्यार्थियों को प्रमुख लेखकों के जीवन से परिचित कराना।

CO 2.निबंधोंके माध्यम से विद्यार्थियों में वैचारिक दृष्टिकोण में अभिवृद्धि करना।

CO 3.पत्रलेखन प्रत्येक व्यक्ति के कार्यकारी जीवन में महत्व रखता इसलिए विद्यार्थियों को पत्र तथा तार लेखन से अवगत कराना।

CO 4.विद्यार्थियों को पारिभाषिक शब्दावली से परिचित कराना।

B.Sc. (N.M.) English

Semester-I

Paper: EN-01 English

CO 1: The syllabus of the course enables the students to achieve an increased fluency in both reading and writing skills and made aware of the common errors which they commit in using words and sentences of daily use in English.

CO 2: The student will achieve an increased awareness of translations, sentence formations and structuring along with various grammatical rules.

CO 3: The poetry in the course enables the students to understand various elements of poetry such as tone, diction, genre, figures of speech, symbolism, etc.

CO 4: The accomplishment of the course will facilitate the students to assimilate personal experiences which can be used in creative writing and composition.

Semester-II

Paper: EN-02 English

CO 1: The students will achieve a critical thinking and conceptual consciousness of the course.

CO2: The essays enhance the students to develop a multi-dimensional approach and sensitizes them towards a logical outlook.

CO 3: The demonstration of writing letters makes the students capable for future professional correspondence and enhances their creative writing skills.

CO 4: The syllabus tries to incorporate in students' personal experiences which enables them to become more responsible and mature human beings.

Paper- ENV- Environmental Studies

CO1: The students will understand the nature, scope and objectives of environmental studies. It provide the fundamental knowledge biological, physical, social sciences and the broad and multidisciplinary nature of environmental studies enables the student to work in variety of institutions in both public and private sector.

CO2: This subject focuses on natural resources and their importance and role in the individual life. It learns the students to proper use and conserves the natural resources to the next generation.

CO3: Students will acquire knowledge about the relationship and interactions among living organism and their physical environment. It teaches the importance and cooperation of trophic levels in food chain and food web.

CO4: The curriculum provides the immense knowledge about the biodiversity contains different species of plants, animals and microorganism. Biodiversity holds the ecological and economic significance. This course gives a very important message to every individual to have a good knowledge of biodiversity for a sustainable livelihood.

CO5: It will enable the students to understand the environmental problems, looking at causal linkage pollution sources, exposure pathways and impacts to environmental quality and human health.

CO6: Students will be able to get awareness about the social issue like sustainable development, climate change, global warming, acid rain, ozone layer depletion and nuclear accident. The knowledge of environment law will enable the students to join with law firm to solve various disputes arising out of environmental issue.

CO7: It helps in understanding the population explosion its causes, consequences and strategies to solve these problems. It aware the students about schemes of UNITED NATION INDIAN Govt and NGO regarding the family welfare, family planning human health and human right.

Programme Outcomes (POs) for B.Sc. (Non- Medical)

PO1: Develops Scientific temperament and attitude among the science graduates.

PO 2: Develops the sense of observation, precision, analytical mind, logical and abstract thinking, systematic approach, qualitative and quantitative measurements.

PO 3: The program also enables the graduates to appear for various competitive examinations or they can go for higher studies and become post graduate in the field of Physics, Chemistry or Mathematics of their choice.

PO 4: This course enables the learners to extract information, formulate them and solve problems in a systematic and logical way.

PO 5: This programme trains the learners to perform the jobs in various fields such as science, engineering, industries, education, banking, development-planning, business, public service, companies, self-business etc. very efficiently.

Programme Specific Outcomes (PSOs) for B.Sc. (Non- Medical)

PSO 1: This Programme enables the students to get knowledge about basic concepts of physics and various physical properties e.g. mechanical, electrical, Quantum, magnetic, electronic &

optical etc. They also gain practical knowledge of applications of probability, mechanics, programming language, solid state physics, quantum, optics & nuclear physics.

PSO 2: Students acquire knowledge about fundamental theories of chemistry and its practical applications in everyday life and also become aware about various phenomenon of chemistry and its effect on the environment and other areas.

PSO3: Students also acquire Basic knowledge of Mathematics & its practical applications and also trains the learners to extract information, formulate and solve problems skilfully by applying the analytical reasoning & critical thinking.

PSO 4: Students get training of scientific experiments which enables them to record the measurements accurately and analyse the experimental results.

PSO 5: The qualities such as observation, precision, analytical, logical and abstract thinking, clarity in scientific thought & expression, systemic approach, qualitative and quantitative approach are enhanced.

PSO 6: Students gain confidence in presenting the scientific results and will increase the capability of students in exploring interdisciplinary scientific research areas.

PSO 7: This Programme also enables students to go for master's degree in physics, chemistry and Mathematics and pursuing research in science & technology. It also enable the graduate to appear for various competitive exams in various fields such as Defence, Banking, Industries & other Public Services to serve the nation.

COURSE OUTCOME
Name of Programme : BAJMC (3 years)

Semester I

Paper I :BAJ101 Introduction to Communication I

CO1: Students grab highly effective communication skills and a sense of confidence.

CO2: They learn about listening, speaking, writing and reading skills

CO3: They also learn to draft various forms of business letters and how to prepare a report, notice, memos and minutes of a meeting

CO4: They learn about presentation skills; how to be more effective while communicating with Others either formally or informally.

Paper II :BAJ102 Communicative Hindi I

CO1 :हिंदी भाषा का विकास क्रम विद्यार्थियों ने समझा।

CO2 :शब्द संरचना एवं वाक्य संरचना को गहनता से समझा।

CO3 :संचार भाषा के महत्व को जाना।

CO4 :प्रयोजन मूलक हिंदी एवं कार्यालय हिंदी के अंतर को स्पष्ट करते हुए विद्यार्थियों ने परिभाषा एवं स्वरूप को जाना।

Paper: III- BAJ103 Communicative English-I

CO1: Through the paper Communicative English the course aims to improve the vocabulary, grammar, speaking and writing skills of students.

CO2: This course provides an opportunity to the students to understand and practise the English grammar basic topics.

CO3: It will help to improve the learner's overall understanding of the sentence construction as well as develop and sharpen their writing skills.

CO4: At the end of this course students will be able to use all verb makers, parallel structures with coordinating conjunctions.

CO5 : Demonstrate correct use of Noun, Adjective , Adverb phrases and Articles.

Paper IV :BAJ104 Essentials of Writing

CO1: students will understand purpose,scope and basic elements of writing.

CO2: students will understand content and various styles of good writing.

CO3: students will acquire knowledge about various forms of writing.

CO4: students will learn about how to write CV and formal letters of job application.

Paper V : - BAJ105 Computer Applications

CO1 :Students will understand about computer and its components, Generations of computers, use of Computer in Human Life.

CO2 : Students will acquire knowledge about Types of Computers and various Functioning of Computers, Computer Hardware, Software and its Types.

CO3 : Students will acquire knowledge about Operating System and its Types, Memory and its types.

CO4 :Students will acquire knowledge about MS-Word, MS-Excel and MS-PowerPoint. Students will gain knowledge about Page Maker and Quark Express.

Semester II

Paper VI : BAJ106Introduction to Communication II

CO1: This unit will help the students in knowing about the concept of communication with its meaning and nature. Two of models are also discussed in this i.e. aristotle's model, lawsell's model.

CO2: In this unit students will be able to know more models that make communication more better. Importance as well as utility are also taught to the students.

CO3: George Gerbner's, Westley and Maclean's, Newcomb's models are explained to the students.

CO4 : This unit relates to the communication chain and dynamics, barriers of communication are told and some of the theories are also explained in this unit.

Paper VII : BAJ107 Communicative Hindi II

CO1 : विद्यार्थियों ने स्वर, व्यंजन, वर्ण, पद तथा पदबंध के बारे में जानकारी प्राप्त की।

CO2 : विद्यार्थियों ने मीडिया की भाषा के उपयोग, प्रकृति और विशेषताओं के बारे में जानकारी ग्रहण की।

CO3 : विद्यार्थियों ने मीडिया की भाषा के विकार एवं समस्याओं के बारे में जाना तथा पारिभाषिक शब्द सीखे।

CO4 : विद्यार्थियों ने समाचार, फीचर तथा आलेख लेखन के विषय में जानकारी प्राप्त की।

Paper VII : BAJ108 Communicative English II

CO1 : Students will heighten their awareness of correct usage of English grammar in writing and speaking and will paraphrase information from outside sources effectively and accurately.

CO2 : Students will summarize information from academic sources, distinguishing between main ideas and details. They can develop public speaking abilities both informally and formally.

CO3 : Increase in self-awareness about the English language and the culturally-bound conventions of American academic writing and British academic writing. The students will demonstrate an increase in awareness of translation, sentence formation and structuring and various grammatical rules.

CO4 : It will help the students to develop their technical writing skills i.e. Report Writing, Precis Writing etc. The conclusion of the course will enable the students to enhance their understanding of vocabulary.

Paper IX : BAJ109 Creative and Journalistic Writing

CO1 : Students will be able to learn what is creative writing, Beyond news writing and what are the new trends in creative writing.

CO2 : Students will be able to understand the essential elements of creative writing and the difference between Essays, Article and Feature and the qualities of a good feature writer.

CO3 : Students will be able to understand what is style types and importance of Editorial writing and the essentials of article writing and will also learn what is Letter to editor.

CO4 : Students will understand what is Book and Film review, cultural review and understand what is Life style writing.

Paper X : BAJ110 Computer Applications -II

CO1: Students will understand about DTP, CorelDraw and Photoshop, Computer Network and its Types, Page Setup and Formatting Technique.

CO2: Students will acquire knowledge about Internet and its Features, Applications of Internet, Internet Protocol, Domain Name.

CO3: Students will understand about Internet Functions and WWW, E-Mailing and important internet Sites.

CO4: Students will understand about Search Engines, Web-Surfing, Facebook, Orkut and Twitter, Blogging.

Semester III

Paper XI : BAJ111 Sociology

CO1 : Students will understand Relationship of Sociology with other sciences.

- CO2 : Students will understand Social inter dependence with the help of Media.
 CO3 : Students will learn how does media help in Social change?
 CO4 : Students will understand characteristics and social problem of Indian society.

PaperXII :BAJ112 Political Science

CO1: Understanding the Meaning, Nature and Scope of the Political Science for a common citizen in

a young Democracy; relating the Political Science with other social sciences and their importance for the Media Students.

CO2: The Media students understand the Meaning, Significance, Nature and Scope of the Political Thoughts and also been aware about the Nation, State, Government, Power & authority.

CO3: This course is helpful for the students to understand about the Meaning, Concept, importance of Democracy, Types, Theories of Rights, Liberty, Equality, Justice, Governance and also know about the importance of People Participation in Democratic process.

CO4: The students are to be made aware of our Constitution and its understanding. This course contains Sources of Constitution, Fundamental Duties and Fundamental Rights of citizens which all must know for a healthy democracy in a Democratic Republic like India. This course is helpful to know about Legislature, Executive, Judiciary, Indian Political system, Political parties & Election process in India.

PaperXIII :BAJ113 Introduction to Mass Communication

CO1 : Students will be able to understand about the nature and the scope of mass communication and the process of mass communication and the characteristic feature of mass communication.

CO2 : Students will learn the elements functions and the process of mass communication.

CO3 :Students will learn about the tools of mass communication like Radio, T.V., Film, Internet, etc and the role of mass communication in our life.

CO4 :Students will be able to understand the mass media and society, democracy, culture and the theories of mass communication like Authoritarian, Libertarian, Social responsibility, Democratic participant and Development media theory.

Paper XIV :BAJ114 News Writing

CO1: students will understand various news values.

CO2: students will learn about news structure and news styles.

CO3: students will learn about various types of headlines and techniques of writing headline.

CO4: students will acquire knowledge about Hard news and soft news.

Paper XV : BAJ115 Print Production

CO1: students will be introduced to printing process and various types of composition of printing.

CO2: students will understand basic principles and tools of layout designing.

CO3: students will acquire knowledge about basic elements and principles of newspaper makeup and magazine layout.

CO4: students will learn about usage of multimedia in print production.

Semester IV

Paper XVI :BAJ116 Psychology

CO1 : Students will understand relationship of psychology with other Social Sciences.

CO2 : Students will learn how to understand human behaviour and attitude.

CO3 : Students will learn how does media help in perception, learning and thinking.

CO4 : Students will understand role of Media in Motivation.

Paper XVII :BAJ117 Economics

CO1: The students will be able to understand the concept of economics, its nature, scope and how it is related with other social sciences.

CO2: Students will get deep insights about the principles of demand and supply and will get clearer picture about the economic growth, development and inflation in the Indian economy.

CO3: This unit throws light on the features of Indian economy by encompassing the status of agriculture, industrial sector as well as trade and commerce in Indian economy.

CO4: Economic policy reforms 1991 have been elaborated in detail along with the impact of population growth on economic development of a country.

PaperXVIII :BAJ118 Print Media

CO1 : Students will learn the origin of Print Media and the role of press in Indian Freedom Movement and the importance of print media in social reformation.

CO2 : Students will understand the role of print media in post-independence and role of press in democratic process and will also learn the press council of India and the press commission.

CO3 :Students will learn about the News Agencies like PTI, UNI, VAARTA, BHASHA. They will understand the National Press and Regional Press and will also learn about the emergent of print media.

CO4 :Students will learn the emerging trends in Indian print media and will learn about the magazines like Women's magazine, News magazine, Sports magazines, Business magazines and will learn about the important newspaper of India.

PaperXIX :BAJ119 News writing

CO1: students will understand basic elements and principles of radio writing.

CO2: students will learn about concept and script writing of various radio programmes.

CO3: students will learn about basics of script writing for various TV programs.

CO4: students will acquire knowledge about essentials of writing for New media, Advertising and Public Relations.

PaperXX :BAJ120 Production Portfolio I

CO1 : Students will learn the importance of letter to the editor and how to write letter to editor.

CO2 :Students will learn the value of news and how to write news.

CO3 : Students will understand the article writing.

CO4 : Students will understand what is article writing and the importance of article writing.

CO5 : Students will understand what is creative writing and learn about the poem writing, personality feature writing and humorous piece of writing.

CO6 : Students will learn how to write Bio-data.

CO7 : Students will understand what is interview and what is its importance.

CO8 : Students will learn what is Editorial and how to write an Editorial.

Semester V**Paper XXI: BAJ121 Reporting**

CO1: students will learn about principles, functions and responsibilities of reporting.

CO2: students will understand qualities, duties and responsibility of a reporter.

CO3: students will acquire knowledge about various types of news reports.

CO4: students will understand basics of reporting for TV and radio.

PaperXXII :BAJ122 Public Relations

CO1: students will understand the concept scope and how does it help in communication.

CO2: student will get to know about history of PR in world and India and how does it work in management.

CO3: students will acquire knowledge about various stages and types of public in public relations.

CO4: students will learn how to use PR to use in in public relations practice.

PaperXXIII :BAJ123 Introduction to Electronic Media

CO1 : Students will learn the role of radio as the medium of mass communication, characteristics of Radio and the history of radio especially AIR (All India Radio).

CO2 : Students will learn the role of radio in societal and national development they learn the about the various radio programmes the will also learn about the AM/FM radio equipments and will also learn the difference between community radio and the educational radio.

CO3 : Students will understand the importance of Television and its importance as a medium of mass communication. They will lean the various T.V. channels like Doordarshan and the various T.V. Serials and the recent trends in T.V. broadcasting.

CO4 : Students will understand about the Indian cinema and they will understand about the Film and their types. They will understand how the cinema effects the society and the emerging trends in Indian cinema.

Paper XXIV :BAJ124 Media Laws and Ethics

CO1 : Students will understand about the Indian constitution and the freedom of speech and expression and they will also understand the defamation and the contempt of legislature and privilege.

CO2 : Students will learn about the right to information, contempt of court, press and registration of Books Act 1967 they will also learn about the censorship and media freedom issues.

CO3 : Students will learn about the Copy Right Act 1957, Press Council Act 1978, Press Council of India and their functions they will also learn about the PrasarBharti Act 1990, Cable T.V., Networks Act 1995and the Information Technology Act 2000.

CO4 : Students will learn about the issues of Media Ethics, Invasion of Privacy, Obscenity, etc. they will learn about the Code of ethics and the ethics in Advertising and the Press Ombudsman.

Paper XXV : BAJ125 Media Management

CO1 :Students will understand the concept, significance and functions of management and the basics of media management.

CO2 : Students will learn about the ownership patters in media and the organizational structure of newspaper and will also learn about the news agencies like PTI, UNI, BHASHA, VAARTA.

CO3 : Students will learn about the organizational structure of the Advertising Agencies, Radio and T.V. and the role of various departments/sections in media organizations.

CO4 : Students will learn about the government agencies like Press Information Bureau (PIB) D.A.V.P., N.F.D.C. They will also learn about the media marketing- Techniques/ New Trends. They will learn about the media and branding and the important media houses in India.

Semester VI

PaperXXVI :BAJ126 Editing

CO1 :Students will learn about the principles and functions of editing and the significance of editing in journalism.

CO2 : Students will learn about the editorial desk in Newspapers and Magazines and the role and responsibilities of editorial staff and their qualities.

CO3 : Students will understand the role function and the responsibilities of sub-editor, chief sub-editor and the news editor. They will learn about the copy editing and the preparing copy for press.

CO4 : Students will learn about the editing symbols proof reading symbols and their significance. They will learn about the Headlines, Sub-headlines, style sheets, page make-up

basics and the basics of editing electronic media and the linear and non-linear editing. They will also learn the difference in print editing and Electronic/New Media Editing.

PaperXXVII :BAJ127 Advertising

CO1 :Students will learn about the concept and need and scope of advertising and the functions of advertising.

CO2 : Students will understand the classification of advertisement and the various types of advertisement and advertising as a marketing function.

CO3 : Students will learn about the structure and functioning of Advertising Agencies and the important advertising agencies. They will learn about the advertising and media planning and the advertising and branding.

CO4 : Students will learn about the advertising campaign- Target audience, stages, process, Ad appeal, copy writing visualization, advertising and creativity and the basics of preparing Print/ Radio/ T.V./ Web Advertisement.

PaperXXVIII:BAJ128 Introduction to New Media

CO1: students will understand concept and scope of new media and what are Emerging trends in New Media.

CO2: students will learn about basics of Cyber media and cyber journalism and comparison of New Media with various Media.

CO3: students will learn about basics of writing for new media and various tools and applications of web publishing.

CO4: students will acquire knowledge about Important Indian News portals, E-magazines, Web journals and Social Media Network.

PaperXXIX :BAJ129 Media and Society

CO1: students will understand relationship between media and Society role and importance of media in Indian society.

CO2: students will learn about media literacy and media coverage on various issues in society.

CO3: students will learn about how does media helping development of scientific temperament democracy and secularism in any country.

CO4: students will acquire knowledge about Media accountability and Ethical issues raised in Media coverage and publication.

PaperXXX :BAJ130 Production Portfolio II

CO1: students will understand how to write press release and various types of advertisements.

CO2: students will learn about how to write script for radio and TV.

CO3: students will learn about how to do media coverage seminars and conferences how to write news stories on various type of news.

CO4: students will acquire knowledge about how to write various type of features and article social issues.

Programme Outcomes

PO1 :This course helps students in development of Communication and writing skills.

PO2: This course helps students in Personality development and creativity.

PO3: To help the students for seeking suitable careers in Media ,Public Relations and other fields.

PO4: To help the students to gain knowledge about legal and ethical issues in Media industry.

PO5: To provide in-depth understanding of various industries of Media i.e. T.V , Cinema, Print Media, Radio, Advertising and Public Relations.

PO6: To enable the students to serve as a human resource not just for media industry but for other fields too i.e. Defence, Co-operate, Literature, education , Public Administration etc.

Programme Specific Outcomes

PSO1: Equip the students with higher level of information and understanding of emerging trends of various types of Media.

PSO2: this course imparts conceptual and practical knowledge of script writing for various media sectors.

PO3: students will gain complete knowledge of reporting, writing and editing during the course.

CO4: students will gain confidence to work on and off stage during any event.

CO5: students will learn how to plan, organise and cover any event and how to make media relations.

CO6: students will gain confidence to interview any official person and eminent personality.

CO7: students will acquire knowledge about how to create short movies.

CO8: students will learn photography and videography skills.

COURSE OUTCOMES

Name of Programme:- B.COM HONS.

Semester:--1

BCH-1.01 INTRO TO STATISTICS

CO1: The students will understand the nature, scope, objectives, functions of statistics, and it describes the students about collecting, classifying, organising, presenting the data.

CO2: The students will be able to learn in detail about measures of central tendency, Dispersion.

CO3: This course will help the students in gaining the knowledge of Skewness, Kurtosis, Index Numbers.

CO4: With this course content, the students will learn the concept of Probability, probability theorems and they will be able to find the probability in different situations

BCH-1.02 BUSINESS COMMUNICATION

CO1- The students will learn about the importance of business communication and to ball aspects of communication.

CO2- This course make students learn the different levels of communication, channels of communication, mode of communication, consequences of miscommunication methods and policies or making verbal and non-verbal, oral and written, online and offline communication effective and productive.

CO3- Students gain knowledge about various steps regarding the various types of communication.

CO4- This course will help the students how to write the report.

BCH-1.03 BUSINESS ORGANISATION

CO1:It will help the students to learn the scope of business activity and Contribution of manufacturing and service sectors in Indian economy.

CO 2: The student will enable tounderstand the concept of globalization, liberalization and privatization.

CO 3: This course will help in enhancing the awareness among students about BPO, Networking Marketing, E- Commerce and M- Commerce, franchising.

CO 4: This course willenable the students to know which steps should be taken while setting up a business enterprise and to achieve the goal of the entrepreneur.

BCH-1.04 INTRO. TO ACCOUNTING

CO1:- The students will understand the meaning ,objectives basic terms of Accounting and they will be able to Generally Accepting Accounting Principles and Accounting standards.

CO2:- The students will understand Accounting Process like Journal, Ledger cashbook and other subsidiary books.

CO3:-The students will acquire knowledge regarding Capital & Revenue expenditure ,Depreciation & its methods.

CO4:- The students will understand the non-corporate business entities or non-profit organizations and accounting errors and its rectification. .

BCH-1.05 FUNDAMENTAL OF ECONOMICS

CO1:- The students will be able to know conceptual knowledge related to demand and Its elements.

CO2:- This course content will help the students gain knowledge related to price effect, income effect and substitution effect.

CO3:- The students will be able to gain conceptual knowledge regarding consumer surplus and revealed preference.

CO4:- Gain in-depth knowledge of production function and isoquant concept.variable input substitute

BCH-1.06 BUSINESS LAW

Co1: This unit will help the students to demonstrate the relationship between law and Economic activity by developing in the student an awareness of legal principles .

Co2: Students acquire knowledge about various types of contracts.

Co3: This unit will help the students to demonstrate the relationship between law and Economic activity by developing in the student an awareness of legal principles

Co4: Students are made aware about Sales of Goods Act ,1930

Semester:--2

Paper- BCH-2.01 FINANCIAL ACCOUNTING FOR BUSINESS

C01:-The Students will know about the Hire purchase system and instalment payment system and their difference. They will also know about the lease Accounting.

C02:- The Students will be able to identify overall about the branch their types and accounting system and different types of departmental accounts.

C03:- This course content will be helpful for the Students about the Partnership amalgamation and sale of partnership firm dissolved according to the rule of Garner v/s Murray.

C04:- This course content will helpful for the students to know about the Royalty accounting system and “An Introduction to Tally Software” will be useful for business

Paper- BCH-2.02 BUSINESS ECONOMICS

CO 1: This course will enable students to understand and grasp basic principles of Micro economics.

CO 2: The students will be able to acquire the Knowledge of cost theories and profit maximisation behaviour which will be helpful in taking business decisions.

CO 3: Students will be able to critically analyse firm's behaviour under different market conditions.

CO 4: Students will have a deep understanding of how physical capital ,human capital and technology can be used effectively to attain sustainable development in an economy.

Paper- BCH-2.03 BUSINESS STATISTICS

CO1: This course will help the students to gather knowledge about various probability concepts and distributions and their business applications.

CO2: The students will understand the relationship between two variables using concepts of correlation and regression and its use in identifying and predicting the variables.

CO3: This course will help the students to understand the role of time series in business contexts and become aware of the patterns revealed by the time series data and to use it to make predictions for the future.

CO4: The students will understand the concept of Statistical decision Theory and gain knowledge about statistical quality control to take decisions by using different techniques

Paper- BCH-2.04 BUSINESS MANAGEMENT

Co1: This unit will enable the students to know about the evolution of management and its various modern and traditional approaches.

CO 2: The students will be able to understand the concept of management planning in-depth and analyze the environment surrounding them and make effective decisions after studying the decision-making process

Co3: The unit will benefit the students by providing deep insights into the concept of organizing, directing, and staffing. The students will get to know what are the different needs of human beings and how they can be satisfied via motivational theories.

Co4: The students will get a clear picture of the concept of communication and controlling techniques and how they can be effectively applied for achieving goals and objectives

Paper- BCH-2.05 BUSINESS LAW

CO1 : Students will be able to understand basic provisions of partnership Act 1932 and understand the legal system prevailing in to practice.

CO2: This unit intends to provide a basic understanding of the mechanism of Foreign Exchange Management Act.

CO3 : Students will be able to understand industrial disputes and will gain an understanding of various forms ,causes and authorities under the act.

CO4: This unit will provide deep insights in to Factories Act 1948 and its various provisions.

Paper- BCH-2.06 INTRODUCTION TO COMPUTER

CO 1: Understand applications of computer, Generations ,Input/Output Devices of computer
Types of Programming Languages.

CO 2: Recognize types of networking LAN,WAN,MAN and word-processing advance features in detail.

CO 3: Make Familiar with Spreadsheet software and uses of formulas, how to make charts and Pivot Table in Ms Excel.

CO 4: Help identifying the components of Database and Database Models and basic knowledge of Ms Access.

Semester-03

Paper- BCH-3.01 BUSINESS MATHEMATICS

CO1: The students will learn how to describe matrix concept and linear equations and input output model.

CO2: The students will understand the concept of compound interest ,annuities, time value of money. They will be able to evaluate the role played by mathematics in the world of business and economy.

CO3: The students will be able to explain variables, constants, algebraic functions and derivative functions and integrating functions

CO4: This course will enable the students to analyse and solve linear programming models of real life situations, provide graphical solutions, Understand the theory of the simplex method, learn about the applications to transportation and to define set theory.

Paper- BCH-3.02 CORPORATE ACCOUNTING

CO1: Would help in understanding regulatory environment in which the companies are formed and operate in India.

CO2: Enable the student to analyse issue related issue of shares, debentures and redemption of debentures.

CO3: Students will acquire knowledge regarding the valuation of goodwill and valuation of shares.

CO4: Enable the students to analyse complexities related to holding company.

Paper- BCH-3.03 COST ACCOUNTING

CO1: This course will assist students in learning the principles of cost and cost accounting.

CO2: This will improve students' knowledge of cost estimation.

CO3: Encourage students to pursue a career in cost accounting.

CO4: Help students to calculate the costs of goods and services.

Paper- BCH-3.04 COMPANY LAW

CO1- Students gain knowledge about the basic structure of the company.CO2- Enable the students to understand legal process regarding company establishment.

CO3- Enhance the knowledge about the various instrument plan opportunities.

CO4- Provide help to know about the corporate constitution.

Paper- BCH-3.05 PRINCLES OF MARKETING

CO1:-Students will be able to acquaint knowledge regarding marketing and consumer related issues.

CO2:-This course content will help to gain knowledge regarding concepts of market segmentation, branding, trade-mark and product life cycle.

CO3:-Students will be able to know different forms of Pricing and channel of distribution.

CO4:-This course content will help to gain knowledge regarding Promotion and Advertising

Paper- BCH-3.06 BASICS OF INFORMATION TECHNOLOGY

CO1: Students will understand the fundamental concepts of data, information and data processing, types and uses of information, Methods and Applications of data processing, Memory and its types, software and its types, Operating system and its classifications.

CO2: Students will acquire knowledge about Data Communication and various forms of data transmission, modes of data transmission, data transmission media and its types, E-commerce and its types, EDI, Mobile, Bluetooth and Infrared Communication, Smart card.

CO3: Students will understand the basic Concepts of Computer Network and its types, Network Topologies and its types, Internet and its applications, ISP, Multimedia and its various components and Applications of /multimedia.

CO4: Students will acquire knowledge about PowerPoint and its Features, creating presentation in PowerPoint, Sound and Animation effects in PowerPoint, Printing in PowerPoint. Students also acquire knowledge about Tally and its Features, Preparation of Vouchers, Salary Statement, Maintenance of Accounting Books and Final Accounts.

Semester:--4**Paper:- BCH-4.01 CORPORATE ACCOUNTING**

CO1: Students will be able to describe the different types of relationships amongst business entities and identify these relationships for financial reporting purposes

CO2: Determine the reporting entities for each inter-entity relationship, and explain the appropriate accounting policy choices.

CO3: Enable the students to demonstrate a thorough knowledge of relevant accounting standards and the ability to apply them to solve practical problems .

CO4: Provide the appropriate accounting techniques, as prescribed by the relevant accounting standards.

Paper:- BCH-4.02 BUSINESS ETHICS

CO1 : Students will be able to understand conceptual about Politics ,Business Ethics, idea of good society and corporate social responsibility.

CO2 : The students will get deep Insights in to Approaches to moral reasoning which would enable them to become Good citizen.

CO3: Students will be able to Analyse various ethical codes in Corporate Governance.

Co4 : Students will be able to Analyse Employees conditions and Business Ethics.

Paper:- BCH-4.03 COMPANY LAW

CO1- The students will be able to understand the concept of share and stock and provision and procedure of allotment of shares.

CO2: This course make students information about the difference between shareholders and members and gain knowledge about alteration of share capital.

CO3: This course will help to develop knowledge about meeting and its procedure in a legal manner.

CO4: Enable the students to gain knowledge about methods and consequences of winding up of company.

Paper:- BCH-4.04 STATISTICAL ANALYSIS USING MS-EXCEL

CO1: This course will help the students to learn in detail about Experiments, Surveys, collection of data, Data preparation process, missing values, outliers.

CO2: This course will help the students to understand the concept in detail about Descriptive statistics, sampling and statistical interference, Degree of freedom, central limit theorem and they also will be able to calculate descriptive statistics in MS-Excel.

CO3: This course will help the students to learn the concept of Hypothesis testing in depth and will be able to calculate z-test, t-test with the help of MS-Excel.

CO4: This course will help the students to understand the concept of chi-square test, Anova, SPSS, pivot tables, missing values calculation of various test with the help of MS-Excel.

Paper- BCH-4.05 FINANCIAL INSTITUTIONS AND MARKETS

CO1: Explain and learn about the function of regulatory agencies is regulating and how banks manage their capital.

CO2: Describe and comprehend the many types of equity instruments that can be used by businesses to raise equity capital, as well as how these securities can be listed and traded on the Stock Exchange.

CO3: Determine share prices using various company valuation procedures.

CO4: Describe the elements that influence derivative instrument price. Have the capacity to discuss and write about the connections between financial market theory and financial market reports.

Paper- BCH-4.06 AUDITING

CO 1: First unit will give the basic knowledge of auditing. Their objectives, principles and techniques all will be explained.

CO2: The students will get a deep insight into the different procedure of audit i.e. routine checking, vouching and verification of assets and liabilities.

CO3: This unit will provide the rules for appointment of an auditor by a company. Their qualification, powers, duties all aspects will be explained to students in detail.

CO4: Students will be benefitted by knowing the procedure of making the audit report. Auditing and assurance standards and the concepts of investigation with their objectives , nature all will be explained in this unit

Paper:- BCH-5.01 FINANCIAL MANAGEMENT

CO1: Students will be able to understand the conceptual framework of financial management.

CO2: Help the students how to apply measures of cost of capital and financial leverage to form long term financial policies for business.

CO3: Students are acquainted with working capital concept.

CO4: Develop critical thinking and problems solving competencies at both individual and group levels.

Paper:- BCH-5.02 INVESMENT ANALYSIS

CO1:- Students will have knowledge and skills to select base level tools for investment activities.

CO2:- This course content will provide overview of investment theories : Efficient Market theory, Technical analysis.

CO3:- Have a practical understanding of industry and company through the process of analysis.

CO4:- Have a practical understanding of stock market and various types of options..

Paper:- BCH-5.03MONEY AND BANKING

CO1- Students learn the importance of the functions of money and to understand all evils of money.

CO2- Will help the students to understand the flow of money in Indian economy & rest of world.

CO3- Make the students enriched with the study of banking structures.

CO4- Provide the students to understand the concept of employment level, inflation & micro economic activity.

Paper:- BCH-5.04 CONTEMPORARY ISSUE IN COMMERCE

CO1 : Students will be able to know conceptual knowledge regarding contemporary issues.

CO2: This unit helps in acquiring knowledge concerning recent trends in banking and financial services.

CO3: This unit will enable students to gain deep insights in to e-marketing ,social networking websites and modern retailing challenges in India.

CO4: This unit will enable students to gain deep insights in to human resource issues.

Paper:- BCH-5.05 INCOME TAX

CO1: Will assist students in understanding several basic principles used in the Income Tax Act.

CO2: Make it possible for students to understand how to calculate income tax under various head.

CO3: Educate students on the deductions available under sections 80 C to 80 U.

CO4: Develop sophisticated knowledge of tax accounting, rules, and regulation as well as assess and resolve tax issues

Paper:- BCH-5.06 ENTERPRENURESHIP AND SMALL BUSINESS

CO1: Teach students how to turn an initial idea into a full-fledged business opportunity and how to successfully communicate that potential through a business plan.

CO2: Improve the student's understanding of the features and components of the internal and external business environments.

CO3: Recognize various approaches for evaluating the attractiveness of business possibilities.

CO4: Improve students' understanding of opportunity identification and selection.

SEMESTER 6TH

Paper:- BCH-6.01 Accounting for Manager

CO 1: This unit relates to the meaning of management accounting with their objectives and nature. Introduction of financial statements with their forms as well as ratio analysis aspects will also be taught.

CO2: Students will get the information about the valuation of assets and the cash flow statement with their objectives, meaning and limitations.

CO3: The concept of inflation accounting, marginal costing and cost profit volume analysis all will be discussed considering their practical practices.

CO4: This unit gives the awareness of capital budgeting and standard costing to all the students with practical portion.

Paper:- BCH-6.02 PROJECT PLANNING AND MANAGEMENT

CO1-This course are help to knowledge of Project planning , strategies, demand ,market, technical analysis.

CO2-The students will learn Project cash flow, risk analysis, social cost benefit analysis.

CO3-Sudent get the knowledge of valuation of real option, financing of project &venture capital.

CO4-They are also learnt the implementation of project management, technique & project review.

Paper:- BCH-6.03 INCOME TAX LAW AND ADMINISTRATION

CO1: Help in recognizing tax planning opportunities and recommending appropriate

Tax – saving strategies.

CO2: Provide help in addressing tax situations for a variety of taxpayers, such as wage earners, salespersons.

CO3: Enable the students to calculate the individual tax liability.

CO4: Enable the students to prepare tax forms for individual

Paper:- BCH-6.04 HUMAN RESOURCE MANAGEMENT

CO1-This course make students learn to assess the development, implementation and evaluation of employee recruitment process, and selection and retention plans.

CO2-This course will help the the students to analyze the importance of various training methods

CO3- Enable students to learn about wage concept and various incentive plan of wage and theories of wage payment.

CO4- Students gain knowledge about the concept of industrial relation and industrial disputes.

Paper:- BCH-6.05 BUSINESS ENVOIRNMENT AND INTERNATIONAL BUSINESS

CO1: Students will be able to understand and apply appropriate frameworks to Analyse Business Environment.

CO2: The Students will be able to get information about problems of Growth e.gPoverty ,Regional Imbalances ,Social Injustice etc.

CO3: Students will be able to apply the Trade theories , Investment theories , Exchange rate theories and their impact on economic welfare.

CO4: Students will be able to integrate the concept and opening economies of developing countries like India through World Bank and World trade Organisation

Paper:- BCH-6.06 RETAIL MANAGEMENT AND SALES PRODEDURES

CO1: The students will get a clear picture of what the retail sector means, and what are the different career options which they can opt for in the retail sector

CO2: The students will get a deep insight into the various forms of retailing which would enable them to make the distinction between various types of stores in real life.

CO3: This unit will provide how to manage retail operations, get a clear picture of the retail management process and the Total Performance Model.

CO4: The students will be able to get information about the various retailing strategies as well the utility of the retail planning process

Programme Outcomes (POs) for B.Com (Hons.)

Students would have a good understanding in the principles of Commerce and Finance after completing the three-year Bachelor of Commerce (Hons.) Programme, and the outcome would be

PO1: Building a strong foundation of knowledge in several areas of Commerce.

PO2: Improving the ability to apply concepts and procedures learned in Commerce.

PO3: Instilling a mindset for working effectively and efficiently in a corporate setting.

PO4: Integrating knowledge, skill, and attitude to sustain a learning and creative environment among students

PO5: Equipping graduates with the ability to make personal and professional decisions.

PO6: Enabling people to manage office tasks with the use of information.

PO7: Conduct research in their selected fields of marketing, finance, and human resources.

B.Com Programme Specific Outcomes (PSOs) (Hons.)

PSO1: This programme would teach professionals for the industries, banking, and government. Sectors, Insurance Companies, Financing Companies, Transportation Agencies, Warehousing, and so on, to satisfy the demand for well-trained labour.

PSO2: Graduates will have hands-on experience in a variety of areas, including portfolio management, marketing management, sales management, and overall company administration.

PSO3: Upon completion of the programme, students should have the knowledge, abilities, and attitudes to work as a Manager, Accountant, Management Accountant, Cost Accountant, Stock Agent, or Government Employee.

PSO4: Through internship training, students will gain experience working independently and in groups. This training will increase awareness and self-confidence in general societal challenges.

Course Outcomes
Name of Programme: B.Com (Pass)

B.COM (Pass)-1st Semester

Financial Accounts

Paper :1.01

CO1: The student will acquire conceptual knowledge of basics of accounting, identify events that need to be recorded in the accounting records; develop the skill of recording financial transactions and preparation of reports in accordance with GAAP.

CO2: Students will acquire knowledge about the capital and revenue item and depreciation. The Course content would enable them to learn different methods of solving depreciation.

CO3: Equip with the knowledge of accounting process and preparation of final account of sold trader and learn to rectify errors

CO4: Students will understand the meaning and features of Non-Profit organizations, learn to prepare Receipts & payment Account; Income & Expenditure Account and Balance Sheet for Non- Profit organizations and consignment Accounts.

Business Mathematics

Paper code: 1.02.

CO1: The students will understand indices and logarithms and they will be able to describe union , intersection, complement and difference of sets ,venn diagram, cartesian product of two sets. The course content would enable them to apply set theory to practical problems.

CO2: The students will be familiar with permutation and combination.

CO3: The students will study about sequence and series: AP , GP

CO4: The students will learn about data interpretation, analyze the practical problems with bar graph, pie charts, line graph & mix graph.

Business Economics

Paper code-1.03

CO1: Students will be able to understand the basic terms and concepts of micro economics. Students will acquire the knowledge of basic economic problems and how these problems are solved in different economic systems.

CO2: To grasp the knowledge of production and cost structure. Students will be able to conduct economic analysis and understand the optimum production and cost levels of business firms.

CO3: To enhance ability to analyze economic issues related to consumer behavior and maximum satisfaction which in turn impact the business demand.

CO4: To familiarize the students with different features and structure of market. This will be helpful in understanding Policy decisions.

Business Management

Paper code-1.04

CO1: The students will understand the nature, scope and objectives of business and they will be able to differentiate between business, employment and profession.

CO2: Students will acquire knowledge about the significance and nature of management. The course content would enable them to learn the different approaches of management.

CO3: To make the students learn how managerial functions, planning and decision making are to be done to run the organization effectively.

CO4: It describes the students about organizing, organization structure, delegation and decentralization.

Business Communications

Paper code: 1.05

CO1: The course content will improve to demonstrate his verbal and non-verbal communication ability through presentations.

CO2: The course content will improve the knowledge to demonstrate his/her ability to write error free while making an optimum use of correct Business Vocabulary & Grammar.

CO3: The students will help to distinguish among various levels of organizational communication and communication barriers while developing an understanding of Communication as a process in an organization.

CO4: The course content will help to draft effective business correspondence with brevity and clarity.

CO5: The student will understand an online learning environment successfully by developing the implication-based understanding of Paraphrasing, deciphering instructions, interpreting guidelines, discussion boards & Referencing Styles.

Basics of Computer

Paper Code: 1.06

CO1: Able to understand the basics and application of computer

CO2: To understand the difference between software and hardware

CO3: Help to develop the understanding in computer language

CO4: MS word and uses in different files of life

CO5: Demonstrate different operations of input and output software and hardware

CO6: Be fluent in application of RAM and ROM

B.COM(Pass)-Semester-2

Financial Accounts

Paper code: - 2.01

CO1: The student will understand the need of Hire- Purchase system and procedure of accounting. Differentiate between Hire-Purchase system and Installment payment system.

CO2: The Student will understand the concept of Branch Accounts and learn the accounting treatment of branch account. Understand the meaning and features of Departmental Accounts.

CO3: The Course content will help the students to prepare accounts at the time of Dissolution of partnership firm and to know about the gradual realization and piecemeal distribution and Garner V/S Murray Rule importance.

CO4: The students will understand the concept of Joint venture and Royalty Accounts; learn the methods of maintaining records under joint venture and Royalty.

Business Mathematics

Paper code: 2.02

CO1: The students will learn about matrices and determinant. They will be able to solve system of linear equations having unique solution and involving not more than three variables.

CO2: The students will understand applications of differentiation.

CO3: The course content will help the students to find compound interest, present value and amount of an annuity.

CO4: The students will be familiar with ratio and proportion. The course will help the students to understand the concept of percentage, profit and loss, their practical applications.

Business Economics

Paper Code-2.03

CO1: Students will be able to understand pricing strategies of firms under different market structures.

CO2 To understand firm's behavior of profit maximization, and output decisions.

CO3: Students will come to know about Demand and supply of factors of production.

CO4: It will help them to grasp theories of Determination of Rent, Wages, Interest and Profit.

Business Management

Paper code: 2.04

CO1: The students will learn how to appoint competent person in business organization.

CO2: This Course will help the students in gaining knowledge about motivating employees by providing financial and Non financial incentives. The course content would enable them to be a good leader.

CO3: The Course content will help the students in developing communication skill and the course will make the students learn how controlling techniques is to be adopted to achieve the predetermined goals.

CO4: The students will understand the concept of 'change', which is a necessary thing to implement for the survival and growth of business unit.

Business Environment

Paper Code -C 2.05

CO 1: To make the students aware about the business and business Environment

CO 2: To develop entrepreneurial awareness among students

CO 3: To motivate the students to make their mind set for adopting entrepreneur ship as career.

CO 4: To discuss the nature and scope of business

Basics of Computers

Paper code: 2.06

CO1: Understand the basics and application of computer

CO2: Differentiate between digital computer and analog computer

CO3: Comprehend the fundamentals of different operating systems

CO4: Have an expertise in Windows and that will helpful to handle different IT tasks.

CO5: Demonstrate different operations of MS-Excel

CO6: Be fluent in application of GUI and CUI

B.COM (Pass)--3rd Semester

Corporate Accounting

Paper code: 3.01

CO1: Students will be able to understand the accounting treatment of issue of shares and issue of bonus shares.

CO2: With the help of this course, the students will understand redemption of debentures.

CO3: Students will acquire knowledge regarding the valuation of Goodwill and valuation of shares.

CO4: Students would learn how to prepare final accounts of companies and they will be able to understand the accounting treatment of Profit or Loss before and after incorporation.

Business Statistics

Paper Code: 3.02

CO1- The students will improve themselves to explain the features and methods of statistics.

CO2- The students will be able to apply and analyze the appropriate sampling survey method and data collection & interpretation.

CO3- The course content will help to the students to calculate the desirable properties of measure of central tendency.

CO4- The student will understand to calculate an appropriate measure of dispersion.

CO5- The course content will improve the knowledge of the students to provide exposure on calculation of measures of correlation.

CO6- The student will understand to provide exposure on calculation of Regression and difference between Correlation & Regression.

Business Regulatory Framework

Paper code: 3.03

CO1: Students will acquire knowledge about the valid contract and contractual capacity of parties and lawful consideration. The Course content would enable them of Indian contract Act.

CO2: With the help of this course, the students will understand contingent contracts and contract of indemnity and guarantee.

CO3: Students will understand the concept of bailment and pledge and they will be able to understand the uses of bailment.

CO4: At the end of this course the students will get information about Consumer Protection Act.

Corporate Law I

Paper: 3.04

CO1: The students of Corporate Law become familiar with the provisions of companies Act 2013 and understand the concept of company, its different types, advantages and disadvantages over other forms of businesses.

CO2: Students will be aware of the various provisions and Stages of formation of a company and will be able to understand the role, duties and liabilities of promoters of a company.

CO3: Students will acquire the knowledge of two very significant documents of company; Memorandum of association and Articles of association of a company and learn how to prepare these documents.

CO4: The course will provide a thorough knowledge of raising capital by a company by way of issuing debt instruments and related provisions.

Overall, in this semester, students will learn all the provisions regarding formation of company and its requirements.

Human Resource Management

Paper code:3.05

CO1: The student will understand the importance of human factor in the organization and come to the knowledge about evolution and growth of Human Resource Management in India.

CO2: The students will learn how to appoint and trained competent person in business organization.

CO3: The course content will help in understanding the wage concept and incentives and how these concepts help in increasing the efficiency.

CO4: This part will help students to understand about the Industrial Relations and industrial unrest causes, Factors will tell how better industrial relations develop and how we can curb disputes in the industry.

Basics of Retailing

Paper code:3.06

CO1: The students will understand about the retail sector, its nature, scope, importance, present size, career options, Technology Induction and future of retail sector in India.

CO2: In this part, Student can understand types of Retailing, Traditional and modern retail formats, franchiser franchisee model, Theories and Conflicts.

CO3: This Content talks about management of retail operations, functions of retail management and strategic retail management process.

CO4: Student can understand Retail Planning and Developing retailing Strategies and to prepare action Plans

B.COM (Pass)-Semester-4

Corporate Accounting

Paper code: 4.01

CO1: After studying this course, the students will gain information about Internal Re-construction and External Re-Construction in the nature of merger and purchase.

CO2: It endeavors the students about liquidation of companies and financial reporting for financial institutions.

CO3: With the Course Content students will be able to prepare final accounts of Banking Companies.

CO4: Students will be able to understand the accounts of Holding Companies and consolidated balance sheet.

Business Statistics

Paper code: 4.02

CO1 The course content will help to the students with the concept of index number.

CO2 The students will familiarize to introduce the students about the concept of provability.

CO3 The students will acquire the knowledge to about time series analysis.

CO4 The course content will improve the knowledge of the students to interpolate and extrapolate a value from a series and use it for forecasting.

CO5 the course will also help to improve the knowledge of the students to use of theoretical and practical Probability Distribution. this topic covers Binomial Distribution, Poisson Distribution and Normal Distribution.

Business Regulatory framework

Paper Code: 4.03

CO1: Students will be able to understand the Indian Partnership Act and Dissolution of Firm.

CO2: With the help of this course the students will know what Negotiable Instruments Act .

CO3: The Course will help the students in gaining knowledge about sales of goods Act. The course content would enable them to know about each and every aspect of sales.

CO4: At the end of the course the students will be able to understand the concept of Right to information Act, which is necessary for consumers' safety.

Corporate Law-II

Paper code: 4.04

CO1: Students will get the acquaintance of Depository system and paperless trading, provisions related to allotment of shares, transfer & transmission of shares and the difference between transfer and transmission provisions.

CO2: In this semester, students will get the comprehensive knowledge of share capital of company. The various provisions of issue of shares, reduction of share capital, further issue of shares etc. comes under the purview of this course

CO3: Students will be taught about various meetings of a company and the related provisions. The knowledge of duties, liabilities, Appointment and removal provisions of directors of a company are also a module of the course

CO4: This course will provide detailed knowledge of winding up procedure of a company and its consequences.

Overall, in this semester, students of corporate law will be educated with the provisions of functioning of a company at different levels till winding up of a company.

Marketing Management

Paper code:4.05

CO1: The student will understand the meaning, importance, Modern concepts of Marketing, Difference between old and new concepts, Market Segmentation and Buyer Behavior determinants.

CO2: Students will understand the product development Phases and P& D procedure, Branding, Packaging strategies etc.

CO3: The course content will help in understanding the product life cycle stages, factors effecting Pricing decisions, Pricing strategies and methods.

CO4: This part will help in understanding the promotional activities as sales Promotion techniques i.e., advertising, media types, sales promotion tools, Publicity and public Relations

Secretarial Practices

Paper: 4.06(iii)

CO1: The students of Secretarial Practices become familiar with the overall qualities, functions, Appointment & Removal Procedure of Company Secretary in the Company. Students also understand the overall Role of CS in a Company.

CO2: Students will get the detailed knowledge of Duties of company Secretary in all the phases of Formation of the company and the related provisions.

CO3: Students will acquire the knowledge of Role and functions of CS in the various meetings of shareholders and board of Directors. In this subject they learn documentation as specimen of various documents are the core fragment of the Subject

CO4: The course will provide a thorough knowledge of the provisions and secretarial duties regarding Voting, Motions and proxy.

On the whole, in this semester, students will learn the overall Functions and role of Company Secretary in the Company.

B.COM- Semester -5

Taxation Law-I

Paper code: 5.01

CO1: The students of taxation law become able to understand the different concepts related to tax assessment. They get knowledge of Residential status and incidence of tax liability. The knowledge of exempted income also comes under the purview of their study which helps them to make assessment of tax

CO2: Students will understand the provisions of computation of Income under 5 heads of Income: Salary, House Property, PGBP, Capital gain and other sources according to Income Tax Act.

CO3: Students will acquire the knowledge of clubbing of income concept and will understand the provisions of set off and carry forward the losses.

CO4: Taxation law will provide thorough knowledge of Deductions from 80C to 80U to the students and with the help of which they can learn how to reduce the tax liability of Assessee by availing these deductions.

Overall in this semester, students will learn to calculate the income of the person under various heads which is prerequisites of computation of total income of the assessee.

Cost Accounting

Paper Code: 5.02

CO1: Understand the conceptual knowledge & significance of cost accounting in the modern economic environment.

CO2: Select the costs according to their impact on business and methods of calculating stock consumption and levels of material.

CO3: Identify the specifics of different costing methods, Interpret the impact of the selected costs method and evaluate and project business performance.

CO4: Maintain the record of labour, apply wages payment system in manufacturing units.

CO5: Understand the concept of overhead, Allocation, Apportionment and Absorption of overhead and Machine Hour Rate.

Accounting For Financial Management

Paper Code: 5.03

CO1: The students will improve themselves by learn the theoretical foundations of Financial Management and Financial management decisions.

CO2: The students will familiarize about the theories of capital structure and the concept of cost of capital

CO3: The course content will help to the students by evaluating feasibility of various investment options

CO4: The student will understand to provide basic knowledge about working capital management.

CO5: The course content will improve the knowledge of the students to understand the factors determining dividend policy adopted by companies with the help of Case Studies.

Semester -5

Paper: 5.04-Financial Market Operations

CO1: The students of Financial Market operations become familiar with the overall composition and structure of financial market along with the knowledge of financial institutions, financial players and different financial services provided by these institutions.

CO2: Students will get the detailed knowledge of Securities and exchange board of India. The course offers detailed guidelines provided by Government and SEBI to protect the investors from various kinds of grievances.

CO3: Students will acquire the knowledge of different functionaries of stock exchange and various financial services offered by financial market.

CO4: The course will provide a thorough knowledge of Development financial Institutions of India and types of mutual funds.

On the whole, In this semester, students will learn the overall structure of financial market, its functioning, its components and various guidelines which govern the market.

Entrepreneurship and Small-Scale Business

Paper Code: 5.05

CO1- To understand the concept, functions and growth of entrepreneurship to familiarise with project identification and feasibility analysis

CO2- To learn to design and appraise the project and factors influencing the plant location.

CO3- To understand for the importance of the impact of globalization and diversity in modern organizations.

CO4- To understand the ethical and environmental issues and responsibilities for the growth of Small-Scale Business.

International Trade

Paper code: 5.06 (ii)

CO1: Students will be able to understand key terms and theories of International Trade. They will become aware of different strategies and methods of entering into international business.

CO2: They will have knowledge of various types of risks and challenges associated with international trade. They will be familiar with and able to evaluate the international business environment.

CO3: Students will be able to critically analyze why and how international trade takes place.

CO4: Students will get familiar with role and functions of International Institutions and their importance in international Trade.

B.COM-Semester -6

Taxation Law-II

Paper Code: 6.01

CO1: Students will get the knowledge of rebate and relief of tax, computation of total income and tax liability and the procedure of ITR Filing.

CO2: Students will be taught about the Assessment of HUF, Firm, AOP and BOI during this semester.

CO3: The subject will give comprehensive knowledge of Income tax authorities, their functions and assessment procedure to the students. They will also get a hold on provisions of TDS and Advance payment of Tax

CO4: This course will provide detailed acquaintance of recovery and refund of tax, penalties, offences and prosecutions related to taxation law to the students.

Cost Accounting

Paper code- 6.02

CO1: Define and apply process costing and apportionment of joint cost in manufacturing concern and identify cost-volume-profit relationships

CO2: Identify and apply contract costing, job costing and batch costing

CO3: Prepare and explain master budget, responsibility accounting and application of standard costing in manufacturing units.

CO4: Identify and analyze variances, flexible budgets, management control and inventory costing and capacity.

Financial Management

Paper Code – 6.03

CO1: The course content will help to the students to aware fundamentals of Financial Management in an Organization

CO2: The course content will improve the knowledge of the students to provide the participants various techniques in Financial Management

CO3: The students will improve themselves to study about various financial decisions and theories of capital structure

CO4: The student will understand the concept of working capital management and study about policy and types of dividend decisions. The course covers Walter Model, Gordon Model and MM Model.

Auditing

Paper Code – 6.04

CO1 In this, student will understand the meaning of Audit, types of audits, importance, audit Programme necessity and how important is internal check and internal control for the Auditor.

CO2 Students will understand the importance of vouching and routine checking and difference between vouching, verification and valuation of assets.

CO3 The Course content will help about the appointment, duties, liabilities, rights, remuneration of Auditor and student will get knowledge about divisible profits, Depreciation and Reserves etc.

CO4 This part will help in understanding about Report, Audit reports, types and elements and more knowledge about in investigation of accounts

Goods and Service Tax

Paper Code: 6.05

CO1- To provide knowledge about goods service tax and to create employability to the students in the commercial tax practices.

CO2- To understand the procedure for registration, assessment, payment and refund of GST.

CO3- To know tax related with utilization of Input Tax Credit and understand the appeals, offences and penalties with respect to GST.

CO4- To provide knowledge about Custom Duty, Procedure of Importation & Exportation and Export Promotion Schemes.

International Marketing

Paper Code – 6.06

CO1: Students will have the Basic knowledge of international Marketing. They will be able to analyze challenges in the international marketing environment and critically evaluate international marketing related strategies and their implementation.

CO2: Students will have the basic understanding of 4Ps of marketing. They will come to know about different pricing strategies and payment terms.

CO3: Students will acquire knowledge about Channel Structure and Learn to manage channel Conflicts. They will also be able to understand different Export Procedures and Documentation.

CO4: Students will learn different Methods of International Product Promotion.

Program Outcome

- This program could provide Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, warehousing etc., well trained professionals to meet the Challenges in different areas.
- After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, HR Manager and other managerial skills, over all Administration abilities of the Company.

- Capability of the students to make decisions at personal & professional level will increase after completion of this course.
- Students can independently develop their entrepreneurship Skills and start up their own business.
- Students can get thorough knowledge of Finance, Commerce and Management.
- The students will acquire the knowledge, skill in different areas of communication, decision making, innovations and problem solving in day-to-day business activities.
- Students can also get the practical skills to work as accountant, audit assistant, tax consultant, and computer operator. As well as other financial supporting services.
- The knowledge of different specializations in accounting, costing, banking and finance, Income Tax, Business Statistics and Goods and Service Tax & Customs Law with the practical exposure helps the students to survive in organization.

Program Specific Outcome

- The students can get the knowledge, skills and attitudes during the end of the B.com degree course.
- By goodness of the preparation, they can turn into a Manager, Accountant, Management Accountant, cost Accountant, Bank Manager, Auditor, Company Secretary, Teacher, Professor, Stock Agents, Government employments and so on.
- Students will prove themselves in different professional exams like C.A., C S, CMA, MPSC, UPSC. As well as other coerces.
- Students will gain thorough systematic and subject skills within various disciplines of finance, auditing and taxation, accounting, mnced accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
- Students will be able to do their higher education and can make research in the field of Finance and Commerce.