# DEPARTMENT OF ECONOMICS THE COCHIN COLLEGE

# **Programme Outcome- B.A. Economics**

- Critical thinking- Ability to analyse and integrate knowledge, capability to evaluate the validity of arguments and conclusion.
- Effective communication Proficiency in speaking, reading, writing and listening.
- Social interaction –Helps to create social awareness and connect to the problems of the society.
- Effective citizenship- promote active citizenship and community engagement.

# **Programme Specific Outcome**

- It promotes an active learning approach to economics in which students think about real problems in an analytically rigorous way.
- In addition, the programme aims to teach students how to put the acquired skills to use in their own research.
- Students will find a cumulative and hierarchical body of knowledge laid out in a structured series of courses. This creates a foundation which the student can build on and apply to many areas.

### **Course Outcome**

- CO1: Methodology of Social Sciences with Special Reference to Economics (EC1B01U) The course intends to familiarize the students with the broad contours of Social Sciences and their methodology, especially of Economics.
  - CO2 –Development and Environmental Economics (EC2B02U)- To enable the students to understand the theories and strategies of growth and development, to impart knowledge about the issues relating to sustainable development, environmental protection and pollution control measures.
- **CO 3 Principles of Micro Economics (EC3B03U) -** Provides basic understanding of micro economic concepts, behavior of economic agents consumer, producer, factor owner price fluctuations in the market. The modules included in this course deal with the concepts of consumer behaviour, production and costs.
- **CO 4 Modern Banking (EC3B04U) -**Acquaint the students with the working of banks and to familiarize them with the basic principles and concepts which are often used in banking literature.

- Core 5 Micro Economic Analysis (EC4B05U) Provides basic understanding of micro economic concepts, behavior of economic agents consumer, producer, factor owner price fluctuations in the market. The modules included in this course deal with the concepts of markets, factor pricing and welfare economics
- Core 6 Public Economics (EC4B06U)- Gives an understanding of the role of state in fostering the economic activities via budget and fiscal policies. This course enables the students to understand the various issues between Central and State Governments
- Core 7 Quantitative Techniques for Economic Analysis(EC5B07U) Equips the students with primary statistical and mathematical tools for analysing economic problems.
- Core 8 Principles of Macro Economics (EC5B08U) This course is designed to make the students aware of the theoretical aspects of Macro Economics.
- Core 9 Indian Economy (EC5B09U) Equips the students with the theoretical, empirical and policy issues relating to the society, polity and economy of India. The course, in particular, has been prepared in the background of the globalization process and its diverse ramifications on the knowledge economy.
- Core 10 Economics of Financial Markets (EC5B10U) Acquaints the students with the changing role of financial sector in the economy. The stake holders are to familiarize with the basic concepts, the financial institutions and markets.
- Core 11 Quantitative Economics (EC6B11U) Equips the students with primary statistical and mathematical tools for analysing economic problems.
- Core 12 Macro Economic Analysis (EC6B12U) This course equips the students to understand systemic facts and the latest theoretical developments in Macro Economics.
- Core 13 Development Issues of the Indian Economy (EC6B13U) The objective of the course is to equip the students with the theoretical, empirical and policy issues relating to the society, polity and economy of India. The course, in particular, has been prepared on the background of the globalization process and its diverse ramifications on the knowledge economy.
- Core 15 International Economics (EC6B15U) The objective of this course is to arrive at an understanding of theories of international trade and to examine the impact of the trade policies on the world economy.

## Project (EC6B16U)

Equips the students to study of real issue or a problem intended to resolve the issue with application of concepts, principles, theories and processes. It should entail scientific collection, analysis and interpretation of data to valid conclusions.

**Open Course- Fundamentals of Economics (EC5D02U) -** This is designed to make the undergraduate students of other disciplines aware of the basic concepts in Economics.

# **Department of Zoology The Cochin College**

# Program Outcome (PO), Program Specific Outcome (PSO) and Course Outcome (CO) of B.Sc. Zoology (Model I)

### **PROGRAM OUTCOME:**

- **PO1** Acquire basic knowledge of various disciplines of Zoology and General Biology meant both for a graduate terminal course and for higher studies.
- PO2 Inculcate interest in nature and love of nature.
- **PO3** Appreciate the rich diversity of organisms and their ecological and evolutionary significance
- **PO4** Imbibe basic skills in the observation and study of nature, biological techniques, experimental skills and scientific investigation
- **PO5** Create awareness on the internal harmony of different body systems and the need for maintaining good health through appropriate lifestyle.
- **PO6** Acquire basic knowledge and skills in certain applied branches for self-employment Impart awareness of the conservation of the biosphere.
- PO7 Aware students about ethical principles and commit to professional ethics and responsibilities
- **PO9** Information and skill of advanced biological techniques for experimental purpose.

## **Program Specific outcome**

The three-year graduate programme should be able to

- **PSO1** Analyze the relationship among animals, plants and microbes
- **PSO2** Explain various physiological changes in our bodies
- **PSO3** Analyze the impact of environment on our bodies
- **PSO4** Appreciate the basic concepts of the different branches of biology
- **PSO5** Explain the role and impact of different environmental conservation programmes
- **PSO6** Identify animals beneficial to humans
- **PSO7** Identify various potential risk factors to health of humans

**PSO8** Perform laboratory works as per laboratory standards

**PSO9** Familiarize application of biological sciences in apiculture, aquaculture, agriculture and medicine

# **Course Outcomes- Core Courses**

# Semester 1

# ZY1CRT01 & ZY2CRP01- GENERAL PERSPECTIVES IN SCIENCE & PROTISTAN DIVERSITY

- CO1 Create an awareness on the basic philosophy of science, concepts and scope
- CO2 Appreciate different levels of biological diversity through the systematic classification
- CO3 Familiarize taxa level identification of animals
- **CO4** Impart interest in Protistan diversity.
- **CO5** Acquaint different parasitic protists

# Semester 2

# ZY2CRT02 & ZY2CRP01 - ANIMAL DIVERSITY - NON-CHORDATA

- CO1 Create appreciation on diversity of life on earth
- CO2 Recognize different levels of biological diversity through the systematic classification of invertebrate fauna
- **CO3** Familiarize taxa level identification of animals
- CO4 Appreciate the evolutionary significance of invertebrate fauna
- CO5 Instill curiosity on invertebrates around us.
- **CO6** Impart knowledge on parasitic forms of lower invertebrates.

#### Semester 3

#### ZY3CRT03 & ZY2CRP02 ANIMAL DIVERSITY -CHORDATA

- **CO1** Acquire in depth knowledge on the diversity of chordates and their systematic position.
- **CO2** Make them aware of the economic importance of some classes.
- **CO3** Familiarize d the evolutionary importance of selected chordate groups

# Semester 4

# ZY3CRT04 & ZY2CRP02 RESEARCH METHODOLOGY, BIOPHYSICS AND BIOSTATISTICS

- **CO1** Familiarize the learner the basic concept of scientific method in research process.
- **CO2** Have a knowledge on various research designs.
- **CO3** Develop skill in research communication and scientific documentation.
- **CO4** Create awareness about the laws and ethical values in biology.
- **CO5** Equip the students with the basic techniques of animal rearing collection and Preservation
- **CO6** Help the student to apply statistical methods in biological studies.

## Semester 5

#### ZY3CRT05 & ZY6CRP03 ENVIRONMENTAL BIOLOGY AND HUMAN RIGHTS

- CO1 Instill the basic concepts of Environmental Sciences, Ecosystems, Natural Resources, Population, Environment and Society
- CO2 Make the students aware of natural resources, their protection, conservation, the factors polluting the environment, their impacts and control measures.
- CO3 Teach the basic concepts of toxicology, their impact on human health and remedial measures
- CO4 Create a consciousness regarding Biodiversity, environmental issues & conservation strategies
- **CO5** Develop the real sense of Human rights its concepts & manifestations

#### Semester 5

#### **ZY3CRT06 & ZY6CRP03 CELL BIOLOGY AND GENETICS**

- **CO1** Appreciate the structure and function of the cell as the fundamentals for understanding the functioning of all living organisms.
- CO2 Conceptual clarity of different cell organelles, their structure and role in living organisms.
- CO3 Develop critical thinking, skill and research aptitudes in basic and applied biology
- **CO4** Emphasize the central role of genes and their inheritance in the life of all organisms.

#### Semester 5

# ZY3CRT07 & ZY6CRP04 EVOLUTION, ETHOLOGY & ZOOGEOGRAPHY

- CO1 Acquire knowledge about the evolutionary history of earth living and nonliving
- CO2 Familiarize about evolutionary concepts and theories
- **CO3** Study the distribution of animals on earth, its pattern, evolution and causative factors
- CO4 Impart basic knowledge on animal behavioral patterns and their role

#### Semester 5

# ZY3CRT08 & ZY6CRP04 HUMAN PHYSIOLOGY, BIOCHEMISTRY, AND ENDOCRINOLOGY

- **CO1** This course will provide students with a deep knowledge in biochemistry, physiology and endocrinology.
- **CO2** Defining and explaining the basic principles of biochemistry useful for biological studies for illustrating different kinds of food, their structure, function and metabolism.
- **CO3** Explaining various aspects of physiological activities of animals with special reference to humans.
- **CO4** Students will acquire a broad understanding of the hormonal regulation of physiological processes in invertebrates and vertebrates.
- **CO5** By the end of the course, students should be familiar with hormonal regulation of physiological systems in several invertebrate and vertebrate systems.

**CO6** This also will provide a basic understanding of the experimental methods and designs that can be used for further study and research.

# SEMESTER V. OPEN COURSES (FOR OTHER STREAMS)

# **ZY5OPT01 VOCATIONAL ZOOLOGY**

- CO1 Develop critical thinking skill and research aptitude among students, by introducing the frontier areas of the biological science.
- CO2 Emphasize the central role that biological sciences plays in the life of all organisms.
- CO3 Introduce the student to some of the present and future applications of biosciences
- **CO4** Acquire basic knowledge and skills in aquarium management, Quail farming, vermicomposting and apiculture for self-employment
- CO5 Learn the different resources available and to develop an attitude towards sustainability
- CO6 Give awareness to society about need for waste management and organic farming

#### Semester 6

#### ZY3CRT09 & ZY6CRP05 DEVELOPMENTAL BIOLOGY

- **CO1** To achieve a basic understanding of the experimental methods and designs that can be used for future studies and research.
- CO2 To provide the students with the periodic class discussions of current events in science which will benefit them in their future studies in the biological/physiological sciences and health-related fields
- **CO3** To contribute to critical societal goal of a scientifically literate citizenry.

#### Semester 6

# **ZY3CRT10 & ZY6CRP05 Microbiology and Immunology**

- **CO1** Familiarize the microbial world, its structure and function.
- CO2 Appreciate various microbial infections and their epidemiology
- CO3 Knowledge on fundamental aspects of basic biology of bacteria and viruses
- **CO4** Explain immunity and related aspects in human health and well-being.
- CO5 Provide basic microbiology laboratory skill for employment

#### Semester 6

# ZY6CRT11 & ZY6CRP06 - BIOTECHNOLOGY, BIOINFORMATICS & MOLECULAR BIOLOGY

The students should: -

- CO1 Acquaint with emerging field of biotechnology
- **CO2** Familiarize the applications in medical, industrial, environmental agricultural and nano-medicine.
- CO3 Develop critical thinking on biosafety, copyright and intellectual property rights issues related to biotechnology.
- CO4 Acquire basic knowledge in bioinformatics and its application
- **CO5** Appreciate the molecular mechanisms of cellular functions

#### Semester 6

# ZY6CRT12 & ZY6CRP06 OCCUPATIONAL ZOOLOGY (APICULTURE, VERMICULTURE, QUAIL FARMING & AQUACULTURE)

- **CO1** To equip the students with self-employment capabilities.
- **CO2** To provide scientific knowledge of profitable farming.
- **CO3** To make the students aware of cottage industries.

#### Semester 6

#### **ELECTIVE COURSE.**

# **ZY6CBT04. NUTRITION, HEALTH AND LIFESTYLE MANAGEMENT**

**CO1** Provide students with a general concept of health and the parameters that define health and wellness.

**CO2** Familiarize the principles of nutrition and its role in health.

CO3 Acquaint students regarding food safety, food laws & regulations.

CO4 Provide knowledge and understanding regarding life style diseases.

**CO5** Promote an understanding of the value of good life style practices, physical fitness and healthy food habits for life style disease management.

#### **DEPARTMENT OF COMMERCE**

# PROGRAMME OUTCOME B.Com Model 1 Computer Application (SF)

The BCom Computer Applications is a degree that equips students with knowledge in both commerce as well as in computers. It enables the students to apply computer technology in the field of commerce.

More specifically, applying technologies for better growth of the economic system. It qualifies the students both in the IT and commerce sectors. The degree will teach the students all the technicalities involved with respect to the computer applications and how to use them in business after graduation. This course bridges commerce and computer applications which in turn helps the students to become smart and employable. Also, training in Computer Applications in the field of commerce provides extra mileage in placements. Students will gain an in-depth understanding of the working of the field of commerce as well as the IT field. This course is perfect for those who want to work in both the fields or even in either field as it will give them an edge over the competitors. The curriculum taught is modern and innovative which gives the students a much broader outlook on how the market functions.

#### **AIM AND OBJECTIVES**

At the end of 3 year B.Com model 1 programme with specialisation in Computer Application the Students will be able to:-

- Enable students efficient in office automation with computers and computer software applications.
- Understand the application of commerce in both theoretical and practical aspects.
- Equip with skill and knowledge to excel in their future career.
- Develop subject skill within various discipline of commerce, business, accounting,
   economics, finance, auditing and marketing with soft skills in Tally and ERP, E-commerce

#### **COURSE OUTCOME**

#### SEMESTER 1

#### Core Course

#### CM01BAA02. Modern Banking

- To acquaint the students with the knowledge of Banking Practice.
- To familiarize the students with the changing scenario of Indian banking

#### CM01CR001. Business Statistics

- > To provide basic knowledge of statistical techniques as are applicable to business.
- > To enable the students to apply statistical techniques for quantification of data in business

# CM01CR002. Business Regulatory Framework

- To provide a brief idea about the framework of Indian Business Laws.
- > To enable the students to apply the provisions of business laws in business activities.

#### Common Core Course

CM01BA901. Perspectives and Methodology of Business Studies

➤ To familiarise the students with the basic concepts and practice of banking and the principles of Insurance.

#### Semester 2

#### Core Course

#### CM02BAA04. Corporate Regulation and Administration

➤ To provide an understanding regarding the administration and management of corporate form of business and to give a first-hand exposure to corporate laws especially Indian Companies Act 1956.

#### CM02CR001. Quantitative Techniques for Business Research

- > To impart basic knowledge of research.
- > To enable the students to apply the simple statistical tools in business research

#### CM02CR002. Principles of Insurance

- To make the students explore with the fundamental principles of insurance.
- To impart knowledge on practice of insurance business.

## Common Core Course

#### CM02BA901. Business Communication and Management Information System

To familiarise the importance of communication in business and methods of communication relevant to various business situations and to build up communication skill among students.

#### Semester 3

#### Core Course

#### CM03BAA01. Marketing Management

- > To help students to understand the concept of marketing and its applications.
- > To make the students aware of modern methods and techniques of marketing.

#### CM03BAA02. Financial Accounting

➤ To familiarize the students with the accounting principles and practices of various types of business other than companies.

#### CM03BAA04. Business Management

> To familiarise the students with concepts and principles of Management

#### Common Core Course

#### CM03BAA03. E-Commerce and General Informatics

➤ The objective of this course is to make the students familiar with the mechanism of conducting business transactions through electronic media.

# **Optional Course**

#### CM03BBA01. Information Technology for Business

- The objective of this course is to make students:
  - Aware of the role of information technology in business.

 Capable of developing web pages for business and Acquaint with internet as a knowledge management tool.

#### Semester 4

#### Core Course

#### CM04BAA01. Capital Market

- To give the students an overall idea about Capital market.
- To familiarise the students with capital market operations in India.

#### CM04BAA02. Corporate Accounting

To provide a thorough knowledge about the accounting of companies

#### CM04BAA03. Financial Services

- > To develop entrepreneurial spirit among students.
- > To empower students with sufficient knowledge to start up their venture with confidence.
- > To mould young minds to take up challenges and become employer than seeking employment.
- To make them aware of the opportunities and support for entrepreneurship in India.

#### Common Core Course

#### CM03BA901. Entrepreneurship Development and Project Management

> To equip the students a craving for individual freedom, initiative and enterprise by pursuing self-employment and small business entrepreneurship as a viable alternative to salaried employment.

#### **Optional Course**

### CM04BBA01. Information Technology for Office

The objective of this course is to make the students capable of managing the office activities with the help of information technology.

#### Semester 5

#### Core Course

#### CM05BAA01. Cost Accounting

- To familiarise the students with cost concepts.
- ➤ To make the students learn the fundamentals of cost accounting as a separate system of accounting.

#### CM05CR001. Special Accounting

The purpose of the paper is to acquaint the students with advanced accounting principles and procedures.

#### **Complementary Course**

#### CM05CAB04. Advertising and Sales promotion

> To make the students aware of the strategy, concept and methods of advertising and sales promotion.

#### **Optional Core**

#### CM05CR001. Computerised Accounting

- To equip the students to meet the demands of the industry by mastering them with industry sought after computerised accounting packages.
- To expose the students to computer applications in the field of accounting.
- To develop practical skills in the application of Tally accounting package.

#### Open Course

#### CM05DAA04. CAPITAL MARKET & INVESTMENT MANAGEMENT

> To enable Students to get a base Knowledge for functioning of capital market in India and enable them to take investment management decisions

#### Semester 6

#### Core Course

#### CM06BAA01. Applied Cost Accounting – 2

- > To acquaint the students with different methods and techniques of costing.
- > To enable the students to identify the methods and techniques applicable for different types of industries.

## CM06BAA02. Practical Auditing

- To familiarize the students with the principles and procedure of auditing.
- To enable the students to understand the duties and responsibilities of auditors and to undertake the work of auditing.

#### CM06BAA03. Accounting for Managerial Decision

- > To equip the students to interpret financial statements.
- To enable the students to have a thorough knowledge on the management accounting techniques in business decision making.

#### CM06CAA01. Principles of Business Decisions

- To familiarise the students with the economic principles and theories underlying various business decisions.
- > To equip the students to apply the economic theories in different business situations.

## **Optional Course**

# CM06BBA01. Data Base Management System for Business

The objective of this course is to familiarize students with database concepts and equip them to handle database management system for business firms

#### Core Course

CM06BFA01. Project and Viva

#### AIMS AND OBJECTIVES OF THE BSc PHYSICS PROGRAMME

#### Aims:

The Board of Studies in Physics (UG) recognizes that curriculum, course content and assessment of scholastic achievement play complementary roles in shaping education. The committee is of the view that assessment should support and encourage the broad instructional goals such as basic knowledge of the discipline of Physics including phenomenology, theories and techniques, concepts and general principles. This should also support the ability to ask physical questions and to obtain solutions to physical questions by use of qualitative and quantitative reasoning and by experimental investigation. The important student attributes including appreciation of the physical world and the discipline of Physics, curiosity, creativity and reasoned scepticism and understanding links of Physics to other disciplines and to societal issues should gave encouragement. With this in mind, we aim to provide a firm foundation in every aspect of Physics and to explain a broad spectrum of modern trends in physics and to develop experimental, computational and mathematics skills of students.

The programme also aims to develop the following abilities:

- 1. Read, understand and interpret physical information verbal, mathematical and graphical.
- 2. Impart skills required to gather information from resources and use them.
- 3. To give need based education in physics of the highest quality at the undergraduate level.
- 4. Offer courses to the choice of the students.
- 5. Perform experiments and interpret the results of observation, including making an assessment of experimental uncertainties.
- 6. Provide an intellectually stimulating environment to develop skills and enthusiasms of students to the best of their potential.
- 7. Use Information Communication Technology to gather knowledge at will.
- 8. Attract outstanding students from all backgrounds.

#### Objectives:

The syllabi are framed in such a way that it bridges the gap between the plus two and post graduate levels of Physics by providing a more complete and logical framework in almost all areas of basic Physics. By the end of the first year (2nd semester), the students should have attained a common level in basic mechanics, a secure foundation in mathematics, electronics, Languages and other relevant subjects to complement the core for their future courses and developed their experimental and data analysis skills through experiments at laboratories. By the end of the second year (4thsemester), the students should have been introduced to powerful tools for tackling a wide range of topics in Optics, Laser, Fiber optics, Semiconductor devices and circuits. Along with Languages, they should have been

familiar with additional relevant techniques in mathematics, Electronics and developed their experimental and data analysis skills through a wide range of experiments through practical at laboratories. By the end of the third year (6th semester)r, the students should have developed their understanding of core Physics by covering a range of topics in almost all areas of physics including Classical and Quantum Mechanics, Electricity and Electrodynamics, Relativity and spectroscopy, Thermal and Statistical Physics, Nuclear and Particle physics, Solid State Physics, Digital Electronics etc. along with one choice based courses, Open course and had experience of independent work such as projects; seminars etc. and thereby developing their experimental skills through a series of experiments which also illustrate major themes of the lecture courses.

# MSc Physics- Aims and objectives of the course

MSc. Physics forms the final formal training of Physics and hence the program aims at providing an in depth knowledge of Physics to the student. After the successful completion of the program, a student should be capable of pursuing research in theoretical/ experimental physics or related areas. The student is expected to acquire a thorough understanding of the fundamentals of Physics so as to select an academic career in secondary or tertiary level. The program also aims at enhancing the employability of the student. Rigorous training requires phased teaching. With this intention credit and semester system is followed in this program. An MSc student should be capable of doing research at least in the preliminary way. To accomplish this, research oriented project is made part of this curriculum

# OBJECTIVES OF B COM DEGREE (C B C S S ) –MODEL I FINANCE & TAXATION

Course	Name	Outcome
CO1	Business Statistics	Acquire basic knowledge of statistical techniques and application of those techniques for quantification of data in business.
CO2	Modern Banking	Obtain knowledge in banking and changing scenario of Indian banking system with regard to innovation and reforms.
CO3	Business Regulatory Framework	Provide framework of Indian Business Laws and equip the students to apply provisions of business laws in business activities.
CO4	Perspectives and Methodology of Business Studies	Impart relevance of business in the society, understanding entrepreneurship and to enhance the students to undertake business activities.
CO5	Quantitative Techniques for Business Research	Attain knowledge in research and application of simple statistical tools in business research.
CO6	Principles of Insurance	Knowledge in fundamental principles of insurance and practice followed by insurance business regarding insurance policies.
CO7	Corporate Regulations and Administration	An in-depth knowledge with respect to Companies Act 2013 for administration and management of Indian Companies.
C08	Business Communication and Management Information	Provide awareness about the importance of communication in business, various methods of communication relevant to business situations and to build up communication skill among students.
C09	Marketing Management	Acquiring knowledge in marketing concepts, modern

methods and techniques of marketing and its applications in	
Industry.	

C010	Financial Accounting	Knowledge in accounting principles and practices of various types of business excluding companies.
C011	E-Commerce and General Informatics	Familiarising the students with the mechanism of conducting business transactions through electronic media.
C012	Financial Management	Understanding the ideas and theories of finance and learning about the practical applications of financial management concepts.
C013	Capital market	To gain an idea about capital market and its operations in India.
C014	Corporate Accounting Entrepreneurship	A thorough knowledge about the accounting of companies.
CO15	Development and Project  Management	Create an awareness amongst students to carve for individual freedom by taking initiative by starting small business enterprise as a viable alternative
CO 16	Value Added Tax – Concepts and Practices	Understanding the concept of VAT and providing an insight into the aspects and procedures of Kerala Value Added Tax Act and Rules as an aid for emerging entrepreneurs.
CO17	Cost accounting	To get idea about cost concepts and knowledge in cost accounting as a separate system of accounting.
CO18	Advertising and Sales promotion	Knowledge is imparted regarding strategy, concept and methods of advertising and sales promotion.
CO19	Special Accounting	To acquaint the students with advanced accounting principles and procedures.

CO20	Applied Cost Accounting	To acquire knowledge in different methods and techniques of costing and identification of those techniques those are applicable to different types of industries.
CO21	Income Tax Law & Practice	Getting familiarised with The Income Tax Act,1961 and
CO22	Practical Auditing	Familiarising principles and procedure of auditing and to enable the students to understand the duties and responsibilities of auditors for dealing with auditing work.
CO23	Accounting for managerial decisions	To equip the students to interpret financial statements and to have a thorough knowledge on management accounting techniques that are used for business decision making.
CO24	Consumer behaviour	Familiarising students with the behavior of consumers in market.
CO24	Income Tax Assessment and Procedure	Understanding determination of Total Income and tax payable and getting knowledge about filing of returns to also assessment procedure.
CO25	Capital Market & Investment management (Open Course)	Knowledge is imparted to get a base for functioning of capital market in India and enable them to take investment management decisions.

# Programme Specific Outcome

# PSO 1 Applications of Financial Management Concepts

Enables the student to have a better understanding of intricacies of modern day finance world by imparting the knowledge of financial management concepts and theories and also auditing.

# PSO 2 Understanding Relevant Value Added Tax Acts.

Makes the student capable to handle all the tax related matters, right from the computation of VAT to filing of returns to be done by the dealers.

# PSO 3 Handling of Income Tax Matters

Competency in the matters relating to Income tax, its computation under various heads , tax slabs etc is achieved. The student becomes independent to handle the income tax related issues arising in case of his business or other sources of employment.

#### Adept at Tax Management

PSO 4 Proficiency in matters of tax planning and tax management is imbibed in the students so as to make them capable of looking after their personal tax matters.

# Program Outcome

PO1: The Programme enables the student to demonstrate their competence at applying the basic theoretical principles of marketing management in problem identification and solving, and reflect it on application in various industries. Entrepreneurship capabilities are developed through knowledge gathered from aspect of entrepreneurship development and project formulation. They become competent to make informed and ethical decisions based on thorough knowledge of commerce concepts. Also, an ability to effectively communicate both orally and verbally is developed. They develop an understanding of various commerce functions such as finance, accounting, financial analysis, project evaluation, and cost accounting. More important, the students becomes independent enough to handle income tax matters and adept at tax management and planning.

# OBJECTIVES OF B COM DEGREE (C B C S S ) –MODEL II MARKETING

Course	Name	Outcome
CO1	Business Statistics	Acquire basic knowledge of statistical techniques and application of those techniques for quantification of data in business.
CO2	Modern Banking	Obtain knowledge in banking and changing scenario of Indian banking system with regard to innovation and reforms.
CO3	Business Regulatory Framework	Provide framework of Indian Business Laws and equip the students to apply provisions of business laws in business activities.
CO4	Perspectives and Methodology of Business Studies	Impart relevance of business in the society, understanding entrepreneurship and to enhance the students to undertake business activities.
CO5	Quantitative Techniques for Business Research	Attain knowledge in research and application of simple statistical tools in business research.
CO6	Principles of Insurance	Knowledge in fundamental principles of insurance and practice followed by insurance business regarding insurance policies.
CO7	Corporate Regulations and Administration	An in-depth knowledge with respect to companies act 2013 for administration and management of Indian Companies.
C08	Business Communication and Management Information	Provide awareness about the importance of communication in business, various methods of communication relevant to business situations and to build up communication skill among students.

C09	Marketing Management	Acquiring knowledge in marketing concepts, modern methods and techniques of marketing and its applications in Industry.
C010	Financial Accounting	Knowledge in accounting principles and practices of various types of business excluding companies.
C011	E-Commerce and General Informatics	Familiarising the students with the mechanism of conducting business transactions through electronic media.
C012	Product management	Provide a base for concepts and strategies involved in product and brand management.
C013	Capital market	To gain an idea about capital market and its operations in India.
C014	Corporate Accounting	A thorough knowledge about the accounting of companies.
CO15	Entrepreneurship Development and Project Management	Create awareness among the students to carve for individual freedom for taking initiative by starting small business enterprise as a viable alternative to salaried employment.
CO 16	Service marketing	To develop insights into emerging trends in the service sector and tackle issues involved in the management of services.
CO17	Cost accounting	To get idea about cost concepts and knowledge in cost accounting as a separate system of accounting.
CO18	Advertising and Sales promotion	Knowledge is imparted regarding strategy, concept and methods of advertising and sales promotion.
CO19	Special Accounting	To acquaint the students with advanced accounting principles and procedures.
CO20	Applied Cost Accounting	To acquire knowledge in different methods and techniques of costing and identification of those techniques those are

# applicable to different types of industries.

CO21	International Marketing	To acquit the students with environmental, procedural, institutional and decisional aspects of international marketing.
CO22	Practical Auditing	Familiarising principles and procedure of auditing and to enable the students to understand the duties and responsibilities of auditors for dealing with auditing work.
CO23	Accounting for managerial decisions	To equip the students to interpret financial statements and to have a thorough knowledge on management accounting techniques that are used for business decision making.
CO24	Consumer behaviour	Familiarising students with the behavior of consumers in market.
CO24	Marketing Research	Creating awareness among the students regarding methods and techniques of marketing research.
CO25	Capital Market & Investment management (Open Course)	Knowledge is imparted to get a base for functioning of capital market in India and enable them to take investment management decisions.

# Programme Specific Outcome

# PSO 1 Product and Brand Awareness

Makes a student capable of grasping the concept of brand equity and the effective strategies to be adopted while marketing a product.

# PSO 2 Service Marketing Oriented

The significance of service industry and its need in the modern day world is impressed on student so that they have a better understanding of what makes the service marketing tick.

# International Marketing capability:

PSO 3 Promote responsible local and global citizenship through their approach towards the holistic application of marketing management beyond national edges.

# PSO 4 Plan and execute research Understands the relevance of s

Understands the relevance of adopting various research techniques in marketing of the product and innovative concepts of decrypting the minds of consumers. Competencies are developed for gathering, analysing, synthesising and interpreting relevant information correctly and reflecting on research undertaken on various marketing management issues.

# Program Outcome

**PO1**: The student develops an understanding of commerce, the areas where the skills and knowledge in the fields of financial and cost accounting to be applied. Also develops self-confidence and awareness of general commercial issues prevailing in the society. The programme enables a student to practice the applications of theory covering research, the nature of consumers, sales management, advertising, quality management, law and ethics in the marketing environment.

# **OBJECTIVES OF M COM DEGREE (C S S )**

#### CO1: ADVANCED FINANCIAL ACCOUNTING-1

The subject helps the student to know the methods of valuation of goodwill and share, the amalgamation and reconstruction procedures of companies and also to learn the proceedings of insolvency of an individual and international reporting standards.

#### CO 2: PRINCIPLES OF MANAGEMENT AND ORGANISATIONAL BEHAVIOUR

It enables the students to understand the conceptual frame work of management and organizational behaviour and also to understand the managerial applicability of the concepts.

### CO 3: FINANCIAL MANAGEMENT PRINCIPLES

The student is introduced to the subject of financial management in order to acquaint the him with various methods and techniques of financial management.

#### CO 4: RESEARCH METHODOLOGY

Subject enables the students to understand how to do research in the area of commerce and management.

# CO 5: QUANTITATIVE TECHNIQUES

• Statistical tools for quantitative analysis is made clear to the student. And the student understands the application of the statistical tools for research and business decision making.

#### CO 6: ADVANCED FINANCIAL ACCOUNTING

This creates an understanding of the proceedings of the preparation of consolidated balance sheet. The idea of Green accounting, Double accounts, Farm accounts, voyage accounts, and liquidation proceedings of companies are clarified to the student.

### CO 7: HUMAN RESOURCE MANAGEEMNT

The students understands the human resource functions in an organization.

# CO 8: FINANCIAL MANAGEMENT STRATEGIES

The subject intends to acquaint students with the advanced concept of financial management and to develop financial strategies for the organization.

#### CO 9: STRATEGIC MANAGEMENT

This helps the students to understand the frame work across strategic analysis, strategy formulation, and strategic implementation

#### CO 10: OPERATIONS RESEARCH

Enables the students to understand various techniques used in operation management decisions.

#### CO 11: MANAGEMENT ACCOUNTING

· Accounting methods and techniques used for decision making are explained to the learners.

#### CO 12: DIRECT TAXES- LAW AND PRACTICE

To familiarise the students with the direct tax law of the country and to give advanced level of knowledge on direct tax laws and computation and assessment.

#### CO 13: INTERNATIONAL BUSINESS

Clarifies the concept of different aspects of international business to the learners.

#### CO 14: CORPORATE GOVERNANCE

The student learns to understand the importance of corporate governance

# CO 15: INTERNATIONAL FINANCE

The subject gives a detailed idea about macro environment on which financial transactions are carried out and also gives a comprehensive knowledge about ways and means of raising of finance by MNCs'.

#### CO 16: BUSINESS ENVIRONMENT

Understands the impact of environment in business

## CO 17: ADVANCED COST ACCOUNTING

The student learns about the higher application of cost accounting techniques and methods and also know the application of cost control techniques.

#### CO 18: DIRECT TAXES-ASSESSMENT & PROCEDURES

The subject make the students familiar with the assessment and procedures of direct taxes in the country.

## CO 19: FINANCIAL MARKETS & DERIVATIVES

Makes the students familiar with the financial system of the country in general and capital market operations in particular. The course also intends to give good understanding of commodity trading through multi commodity exchanges.

#### CO 20: SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

Gives a detailed idea about techniques of Security analysis

# Programme Specific Outcome

The programme concentrates on finance side of subject commerce. Hence, the student specializes in the various aspects of financial aspects of an enterprise. The student becomes adverse in the theory and management principles of Financial Management, Income Tax computation of various assesses, Strategic management and organisational behaviour .Also, because of importance given to project and accompanying comprehensive viva, a student becomes confident enough to face interviews.

# Programme Outcome

The programme offered specialising in finance is considered equivalent to many other professional courses like CA,CMA,CS etc while job placement. The programme covers all the prominent areas related to managing an enterprise with main thrust given to finance.

#### **DEPARTMENT OF BUSINESS ADMINISTRATION**

#### PROGRAMME OUTCOME- BBA

The Bachelor of Business Administration course is a judicious mix of all functional elements of Business studies which provide participants with foundational knowledge on different aspects of the administration of a business concern. It include at one end the need to realize why an organization exist to the other were it shows the new frontiers to which it can be developed.

This course is designed to develop knowledge on the functional parkour of business administration. The disciplines it cover include, management, commerce, banking, economics, industrial psychology, law, mathematics, statistics, accounting, communication, computer application and accounting software.

At the under graduate level no other course provide the student a feel and basic understanding on such a variety of disciplines. These disciplines are not merely touched upon but are dealt taking the serious contributions it can provide to running business enterprises.

The course is designed in such a fashion to provide ample scope for practical exposure to the problems and opportunities of real business. The two project studies one theoretical (Minor) and other practical (Major) as well as the mandatory requirements of three industrial visit and resultant report. presentation will provide a cutting edge to this under graduate programme over the other similar ones.

#### **AIM AND OBJECTIVES**

- 1. To train the students to be competent entry level management professionals.
- 2. To impart basic and operational knowledge on all functional areas of management.
- 3. To encourage young BBA'S to turn in to entrepreneurs.
- 4. To make young BBA'S a change agents in the society by fostering values which self-proclaim that "Turn to enterprising serve the society and the nation"

#### **COURSE OUTCOME**

- BA1CRT01. PRINCIPLES AND METHODOLOGY OF MANAGEMENT: Principles and Methodology of Management are the basic foundation for management studies. This course offers a methodological perspective about this subject.
- 2. BA1CRT02: BUSINESS ACCOUNTING: To impart basic knowledge about the system of accounting
- 3. BA1CMT03 FUNDAMENTALS OF BUSINESS MATHEMATICS: To develop analytical and critical thinking skills in students to prepare them to logically analyse and critically evaluate problem situation through basic mathematics.
- 4. BA1CMT04 FUNDAMENTALS OF BUSINESS STATISTICS: To provide a reasonable idea of basic statistical methods needed for a statistical investigation and forecasting.
- 5. BA2CRT06. COST AND MANAGEMENT ACCOUNTING: To impart basic knowledge about the system of cost accounting

- 6. BA2CRT07 BUSINESS COMMUNICATION: To understand the nuances of business communication This course should be taught by providing group discussion and seminars.
- BA2CMT08 MATHEMATICS FOR MANAGEMENT: To develop analytical and critical thinking skills and to analyse managerial problems in the light of mathematics and solving in such situations
- 8. BA2CMT09 STATISTICS FOR MANAGEMENT: To provide a general outlook of certain statistical test which are useful to researchers in various fields.
- 9. BA3CRT11 HUMAN RESOURCE MANAGEMENT: To provide a knowledge about human resources.
- 10. BA3CRT12 MARKETING MANAGEMENT: The aim of this course is to provide the students with a conceptual base on marketing management and also to equip them with the necessary skills for employment in the middle level cadre.
- 11. BA3CRT13 RESEARCH METHODOLOGY" To provide the students about the research methodology,
- 12. BA3CMT14 BUSINESS LAWS: To build a general awareness about the principles behind contract law and to introduce various types of special contract
- 13. BA3PRP15 PERSONALITY DEVELOPMENT AND MANAGEMENT SKILLS (Minor Project): The students will have the opportunity to explore current management literature so as to develop an individual style and sharpen his skills in the area of leadership, communication, decision making, motivation and conflict management.
- 14. BA4CRT16 FINANCIAL MANAGEMENT: The course should be taught in a participate style. Lecture sessions should be supplemented by seminars and group discussions. After each module surprise tests and quizzes should be administered to ensure the participants' clarity in core concepts
- 15. BA4CRT17 MANAGERIAL ECONOMICS: This course taught students about uses of managerial economics.
- 16. BA4CRT18 ENTREPRENEURSHIP: To make the students understand about entrepreneurs
- 17. BA4CMT19 BASIC INFORMATICS FORMANAGEMENT: To make a student competent to handle and scientifically analyse the various aspects of his business while he commence a business
- 18. BA4CMT20 CORPORATE LAWS: To build a general awareness about the principles behind, companies and partnerships.
- 19. BA5CRT21 ORGANISATIONAL BEHAVIOUR: M:anage conflict amongst groups in business environment ¬ Comprehend and apply motivational theories in the workplace ¬ Identify changes within organisations and power and politics in organisations
- 20. BA5CRT23 ENVIRONMENT SCIENCE AND HUMAN RIGHTS: Fundamental rights and Indian Constitution, Rights for children and women, Scheduled Castes, Scheduled Tribes, Other Backward Castes and Minorities Environment and Human Rights Right to Clean Environment and Public Safety: Issues of Industrial Pollution, Prevention, Rehabilitation and Safety Aspect of New Technologies such as Chemical and Nuclear Technologies, Issues of Waste Disposal, Protection of Environment
- 21. BA5CMT24 INTELLECTUAL PROPERTY RIGHTS AND INDUSTRIAL LAWS: To appreciate the concepts of patent and trademark protection. To specify the various legal provisions in the Factories Act and Industrial Disputes Act. To identify the benefits offered by ESI Act.
- 22. BA5CRT25 OPERATION MANAGEMENT: to have thorough knowledge of operation management.
- 23. BA5CRT26 INDUSTRIAL RELATIONS: To make an awareness about relations between labour and management in an industry.

- 24. BA6CRT29 STRATEGIC MANAGEMENT: To make awareness of strategic management.
- 25. BA6CRT30 COMMUNICATION SKILLS AND PERSONALITY DEVELOPMENT:
- 26. BASOPT22 (A). BRAND MANAGEMENT: To develop and implement strategies for successful brand portfolio management.
- 27. BA6OCT27. (c). INVESTMENT & INSURANCE MANAGEMENT:
- 28. BA6OCT28. (a) ADVERTISING AND SALESMANSHIP: To orient students in Marketing Management. To encourage entrepreneurial skills. To meet the demand of the various industrial sectors.
- 29. 4.INDUSTRIAL VISIT The programme makes it mandatory in three semesters namely third, fourth and fifth to organise an industrial visit each. Preferably one to a manufacturing unit, another to a service sector and still another to a start-up village. Individual reports including photographs and illustration of the visit certified by the faculty in charge need to be prepared and submitted. These three reports are submitted to the external examiner for the sixth semester project viva-voce for the successful completion of the programme. The student who fail to submit satisfactory report will be consider as not completed the programme successfully

# **Program Outcome**

- 1. Understand, demonstrate and solve major concepts in all disciplines of chemistry.
- 2. Employ critical thinking and scientific knowledge to design, carry out, record and analyze the results of chemical reactions.
- 3. Solve the problem and also think methodically, independently and draw a logical conclusion.
- 4. Create an awareness of the impact of chemistry on the environment and society.
- 5. To inculcate scientific temperament in the students.
- 6. Find out green route for chemical reaction for sustainable development.
- 7. Develops analytical skills and problem-solving skills requiring application of chemical principles.
- 8. Enable the students to execute critical thinking and scientific inquiry in the performance, design, interpretation and documentation of laboratory experiments at a level suitable to succeed at an entry level position in chemical industry or a chemical post graduate program.

# Program specific outcome

- 1. To develop the ability to apply the principles of chemistry.
- 2. To understand the basic facts and concepts in chemistry.
- 3. To develop skills in proper handling of apparatus and chemicals
- 4. To know the role of chemistry in nature and in society.
- 5. To be familiar with the different branches of chemistry like analytical, organic, inorganic, physical, environmental and polymer chemistry.
- 6. Helps in understanding the causes of environmental pollution and can open up new methods for environmental pollution control.
- 7. Help to acquire the ability to synthesise, separate and characterize compounds using laboratory and instrumentation techniques.
- 8. To apply appropriate techniques for the qualitative and quantitative analysis of chemicals in laboratories and in industries.
- 9. To develop analytical skills and problem solving skills requiring application of chemical principles.
- 10. The student will be capable of using of advanced instruments and related soft-wares for in-depth characterization of materials/chemical analysis and separation technology.

# **Course Outcome**

- 1. Student will be able to apply the fundamental principles of atomic theory, chemical periodicity, chemical bonding, solution chemistry to subsequent courses.
- 2. Student would have good command of experimental methodology in chemical and industrial field.
- 3. Student will know and recall the fundamental principles for chemical bonding, nomenclature, structural isolation, stereo chemistry, chemical reaction and mechanism.
- 4. Student will be able to know basic principles of various spectroscopic methods used for characterisation of organic compounds and also interpret the spectroscopic data.
- 5. Systematic and coherent understanding of the fundamental concepts in Physical chemistry, Organic Chemistry, Inorganic Chemistry, Analytical Chemistry and all other related allied chemistry subjects.
- 6. Students will be able to demonstrate the experimental techniques and methods of their area of specialization in Chemistry.
- 7. Disciplinary knowledge and skill: A graduate student is expected to be capable of demonstrating comprehensive knowledge and understanding of both theoretical and experimental/applied chemistry knowledge in various fields of interest.
- 8. The student will be capable of using of advanced instruments and related soft-wares for in-depth characterization of materials/chemical analysis and separation technology.
- 9. The course curriculum incorporates basics and advanced training in order to make a graduate student capable of expressing the subject through technical writing as well as through oral presentation.

#### **Programme Outcomes:**

- M. Sc Chemistry Department of Chemistry After successful completion of two year degree program in chemistry a student should be able to;
- Programme Outcomes .
- Determine molecular structure by using UV, IR and NMR.
- Study of medicinal chemistry for lead compound.
- Improve the Skill of student in organic research area. Synthesis of Natural products and drugs by using proper mechanisms.
- Study of Asymmetric synthesis.
- Solve the reaction mechanisms and assign the final product.

# **Programme Specific Outcomes**

- Know the structure and bonding in molecules/ ions and predict the Structure of molecule/ions.
- Understand the various type of aliphatic, aromatic, nucleophilic substitution reaction.
- Understand and apply principles of Organic Chemistry for understanding the scientific phenomenon in Reaction mechanisms.
- Learn the Familiar name reactions and their reaction mechanisms.
- Understand good laboratory practices and safety

#### **Course Outcomes**

After completion of these courses students should be able to;

- Realize the terms ionic strength, activity coefficient, DHO equation
- Know the Eigen function, Eigen value, operator and postulates of quantum mechanics.
- Learn two and three dimensional box, mechanics of particle.
- Understand the adsorption of gases by solid type of isotherms
- Recognized the Fricke and cerric sulphate Dosimeter.
- Determine and Learn about Dipole moment and bond order of inorganic molecule.
- Learn about geometry and shape of the molecule.
- Known the preparation and properties of transition metal carbonyls
- Distinguish between type of addition, elimination and substitution reaction.
- Study the importance of safety and security, responsibility types of hazards and risk in chemical laboratory.

## ADDITIONAL LANGUAGE- MALAYALAM

# COURSE OUT COME

- 1. To develop keen interest in Malayalam literature and its cultural background.
- 2. To identify the multifarious possibilities of the culture of Kerala.
- 3. To appreciate the principles of aesthetics.
- 4. To familiarise the basic tenets of modern language theories.
- 5. To create awareness on the past and present of Malayalam literary criticism.
- 6. To delineate the nuances of audio, visual and print media.
- 7. To evaluate the socio- cultural growth and development of the art forms of Kerala.
- 8. To discern the theoretical premises of historiography.

#### **OUTCOMES OF BIOCHEMISTRY**

- Biochemistry has broadened our understanding of how biochemical changes relate to physiological alteration in the body.
- To learn regulation of chemical reactions in living cells.
- To understand metabolism well enough to predict and control changes that occur in cells.
- To learn the structure of biomolecules, and how they interact in essential processes and pathways in our cells.
- To study the actions of enzymes, and how they can be inhibited by drugs, as well as genetic engineering and molecular biology.
- To know the applications of biochemistry in various areas, including medicine, dentistry, industry, and agriculture and food science

#### COURSE OUTCOME (ADDITIONAL LANGUAGE -FRENCH)

- 1. The course aims at providing the students a basic understanding of the French language and to develop their verbal and written skills for effective communication.
- 2. To strengthen the student's competency in the four skills: listening, speaking, reading and writing, focusing on written comprehension and expression which would eventually enable them to take the DELF/DALF tests.
- 3.To create an awareness of similarities and differences between the home and French culture.
- 4. Familiarize them to the social and cultural environment of Europe, France and other French speaking countries.
- 5. Acquire basic skills in verbal and written French which will serve to improve job perspectives.

# REPORT OF THE EXPERT COMMITTEE FOR FRENCH (UG)

Choice based course – Credit- semester System and Grading 2017 admissions onwards

for
COMMON COURSE
for
BA, B.Sc & B.Com

### in FRENCH

## Mahatma Gandhi University KOTTAYAM

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#### **BOARD OF STUDIES IN FRENCH**

### Chairperson

Mrs Sabeena Bhaskar Associate Professor in French, St Teresa's College, Ernakulam.

#### **Board Members**

- Ms.Shoba Liza John, Assistant Professor in French, Sacred Heart College, Thevara.
- Ms.Janu.V.Kumar, Assistant Professor in French, The Cochin College, Cochin

I acknowledge that without the valuable help, guidance and co-operation I have received from various quarters, I would not have been able to function smoothly.

The guidance of Dr. Ansy Sebastian, Associate Professor in French, Retired from The Cochin College helpedto give shape to the overall structure. I wish to express my sincere thanks to my board of studies members Ms.Shoba Liza John, Assistant Professor, Department of Janu. V. Kumar, Assistant French, Sacred Heart College, Thevara and Ms. Professor, Department of French, The Cochin College, Cochin for their selfless and timely service and for giving me all the help and guidance needed. I also acknowledge my thanks to Ms. Adila Alfred, and Ms. Jennifer D'silva, Assistant Professor, Department of French, St.Teresa's College, Ernakulam for their valuable suggestions in designing the syllabus. I express my gratitude to everyone who has helped me in this venture and making it fruitful.

Sabeena Bhaskar
Associate Professor & Head,
Department of French
St.Teresa's College,
Ernakulam.

#### INTRODUCTION

French is one of the leading languages of Europe and the world. More than 200 million people speak

French in five continents. It is an official language of many of the world's organizations such as the United Nations, NATO, UNESCO, the International Red Cross Association, and numerous other international committees and organizations. French is a great step towards building a world-class education that can open many doors in employment in a variety of occupations such as Teaching, Interpreting and Translation, the Travel industry, and many more. Learning the importance of French can even help you understand your own language better!

French is the language of culture opening your door to art, music, dance, fashion, cuisine, and cinema. Learning French is the pleasure of learning a beautiful, rich, melodious language, often called the language of love. French is also an analytical language that structures thought and develops critical thinking, which is a valuable skill for discussions and negotiations.

The French Department's overarching learning goal is to give students the linguistic competency, cultural literacy, writing and speaking skills, and thereby providing them an additional advantage of learning a foreign language in a variety of situations both here and abroad. The course also gives an exposure to French language and culture.

**Aim of the Course**: The course aims at strengthening the student's competency in the four skills, listening, speaking, reading and writing, already acquired focusing on written comprehension and expression.

#### **Course Objectives:**

- Develop the language skills through audio-visual aids and language lab.
- Develop the reading and writing skills by introducing them to the world of books.
- Insisting the students to watch French channel TV5 and French films and thereby develop the listening skills.
- Create an awareness of similarities and differences between the home and French culture.
- Familiarise them to the social and cultural environment of Europe, France and other French speaking countries.
- Acquire basic skills in verbal and written French which will serve to improve job perspectives.

#### CONSOLIDATED SCHEME

Scheme of distribution of Instructional hours for Common courses – BA, B.Sc & B.Com – Additional Language - French (Model -1)

Semest er	Code	Title of the Course	Instruc tional	Credits	Total Hrs
			Hours		
1	FR1CCT01	French Language & Communicative Skills - I	4	4	72
2	FR2CCT02	French Language & Communicative Skills - II	4	4	72
3	FR3CCT03	An Advanced Course in French – I	5	4	90
4	FR4CCT04	An Advanced Course in French – II	5	4	90
1	FR1CCT05	French for Business Communication – I	4	4	72
2	FR2CCT06	French for Business Communication – II	4	4	72

## Scheme of distribution of Instructional hours for Common courses – BA, B.Sc & B.Com – Additional Language - French (Model – 2)

Semest	Code	Title of the Course	Instruc	Credits	Total
er			tional		Hrs
			Hours		
1	FR1CCT07	BA: Communicative Skills in French for Arts -	5	4	90
		I			
2	FR2CCT08	BA: Communicative Skills in French for Arts -	5	4	90
		II			
1	FR1CCT09	B.Sc.: Communicative Skills in French for	5	4	90
		Science - I			
2	FR2CCT10	B.Sc.: Communicative Skills in French for	5	4	90
		Science - II			
1	FR1CCT11	B.Com: Business Communicative Skills in	5	4	90
		French - I			

2	FR2CCT12	B.Com: Business Communicative Skills in	5	4	90
		French - II			

#### **EVALUATION**

The evaluation of each course shall contain two parts – Internal Assessment and External Assessment. The Internal and External Assessments shall be made using a Mark- based Grading system based on a 10 point scale. Overall Internal: External ratio will be maintained as 20:80.

#### INTERNAL ASSESSMENT

The Internal evaluation is to be done by continuous assessment of the following components. The components of the evaluation for theory and their marks are as below.

#### I. Distribution of internal marks:

- ➤ Attendance- 5 marks
- > Assignment- 5 marks
- > Test paper- 10 marks

**Total -20marks** 

#### II. Attendance Evaluation

A student should have a minimum of 75% attendance. Those who do not have the minimum requirement for attendance will not be allowed to appear for the Final Examinations.

#### EXTERNAL ASSESSMENT

The final examination of all semesters shall be conducted by the close of each semester. For reappearance/improvement, students may appear along with the next batch.

### **Pattern of Questions**

The pattern of questions are listed below.

- 1. The duration of examination is 3 hours.
- 2. Each question paper has four parts A, B, C & D.
- 3. Part A contains 12 short answer type questions of which the candidate has to answer 9 questions. Each question carries 2 marks.
- 4. Part B contains 9 paragraph type questions of which the student has to answer 6 questions. Each question carries 4 marks.
- 5. Part C contains 5 problem type questions / short essays spanning the entire syllabus and the candidate has to answer 3 questions. Each question carries 6 marks.
- 6. Part D contains 4 essay type questions spanning the entire syllabus and the candidate has to answer 2 questions. Each question carries 10 marks.
- 7. The total marks for external examination are 80.

# Model I 2017 Admissions BA, B.Sc/B.Com

#### **SYLLABUS**

Syllabi – Additional Language (B.A./B.Sc & B.Com) Model -1

#### Semester 1

COURSE 1: FRENCH LANGUAGE AND COMMUNICATIVE SKILLS -I

**Course Code** : FR1CCT01

Name of the Course: French Language and Communicative Skills - I

**Duration**: One Semester

**Total Lecture Hours: 72** 

**Aim of the course**: This course aims at introducing the basics of French language and grammar to the students.

**Course Objectives:** This course helps the students to develop the four language skills at the initial level. It covers the fundamentals of French language, such as French alphabets and phonetics, essential grammar and simple vocabulary.

#### **Syllabus Content:**

Module 1 Basics of pronunciation, grammar, lexical items, discourse, models – oral and written.

Module 2 Communication skills in everyday situations.

Module 3 Competency in dealing with specific situations.

Module 4 Training in creative writing.

#### Syllabus:

Text- Champion 1 by Annie Monnerie – Goarin, Evelyne Sirejole.

Publishers: CLE International. Copies available at Goyal Publishers, Delhi.

Note: Use of the audio cassettes is strongly recommended.

#### First Semester BA/B.Sc French Examination 2017

French language and Communicative Skills-I

Text: 1. Champion: Units 1-4 (Pages 3 – 43) – Annie Monnerie – Goarin, Evelyne Sirejols, CLE International 2001, Paris.

2. Two audio cassettes, CLE International

#### Semester 2

#### COURSE 2: FRENCH LANGUAGE AND COMMUNICATIVE SKILLS -II

**Course Code** : FR2CCT02

Name of the Course: French Language and Communicative Skills - II

**Duration** : One Semester

**Total Lecture Hours: 72** 

**Aim of the course**: This course aims at introducing the basics of French language and grammar to the students.

**Course Objectives:** This course helps the students to develop the four language skills at the initial level. It covers the fundamentals of French language, such as French alphabets and phonetics, essential grammar and simple vocabulary.

#### **Syllabus Content:**

Module 1 On va au cinéma

**Module 2 Partir** 

**Module 3 Achats** 

Module 4 Au restaurant

#### Syllabus:

Text- Champion 1 by Annie Monnerie – Goarin, Evelyne Sirejole.

Publishers: CLE International. Copies available at Goyal Publishers, Delhi.

Note: Use of the audio cassettes is strongly recommended.

#### Second Semester BA/B.Sc French Examination 2018

French language and Communicative Skills-II

Text: 1. Champion: Units 5-8 (Pages 44 – 73) – Annie Monnerie – Goarin, Evelyne Sirejols, CLE International 2001, Paris.

2. Two audio cassettes, CLE International

#### Semester 3

#### COURSE 1: AN ADVANCED COURSE IN FRENCH - I

**Course Code** : FR3CCT03

Name of the Course: An Advanced Course in French - I

**Duration** : One Semester

**Total Lecture Hours: 90** 

**Aim of the course**: This course aims at developing the student's language proficiency at a higher level by building on the skills acquired at the previous level.

**Course Objectives:** This course is comprised of important grammatical topics such as syntax and morphology to facilitate oral and written expression and comprehension of the French language.

#### **Syllabus Content:**

Module 1 J'ai oublié mon sac

Module 2 Visite guidée à Paris

Module 3 Louer une voiture

#### Module 4 Quelles vacances!

#### Syllabus:

Text- Champion 1 by Annie Monnerie – Goarin, Evelyne Sirejole.

Publishers: CLE International. Copies available at Goyal Publishers, Delhi.

Note: Use of the audio cassettes is strongly recommended.

#### Third Semester BA/B.Sc French Examination 2018

An Advanced Course in French - I

Text: 1. Champion: Units 9-12(Pages 74 – 101) – Annie Monnerie – Goarin, Evelyne Sirejols, CLE International 2001, Paris.

2. Two audio cassettes, CLE International

#### Semester 4

#### **COURSE 2: AN ADVANCED COURSE IN FRENCH - II**

**Course Code** : FR4CCT04

Name of the Course: An Advanced Course in French - II

**Duration** : One Semester

**Total Lecture Hours:** 90

**Aim of the course**: It aims at strengthening the student's competency in the four skills already acquired, focusing on written comprehension and expression.

**Course Objectives:** This course is comprised of important grammatical topics such as syntax and morphology to facilitate oral and written expression and comprehension of the French language.

#### **Syllabus Content:**

Module 1 Au club de gymnastique

Module 2 Chez le médecin

Module 3 Trouver un emploi

Module 4 Discussion au café

#### Syllabus:

Text- Champion 1 by Annie Monnerie – Goarin, Evelyne Sirejole.

Publishers: CLE International. Copies available at Goyal Publishers, Delhi.

Note: Use of the audio cassettes is strongly recommended.

#### Fourth Semester BA/B.Sc French Examination 2019

#### An Advanced Course in French - II

Text: 1. Champion: Units 13-16 (Pages 104 –129) – Annie Monnerie – Goarin, Evelyne Sirejols, CLE International 2001, Paris.

2. Two audio cassettes, CLE International

#### **Syllabus for B.Com**

#### Semester 1

#### **COURSE 1: FRENCH FOR BUSINESS COMMUNICATION -I**

**Course Code** : FR1CCT05

Name of the Course: French For Business Communication -I

**Duration** : One Semester

**Total Lecture Hours: 72** 

**Aim of the course**: The aim of the course is to sensitise the students to the French commercial vocabulary.

**Course Objectives:** It is centred on business contacts, business etiquette, office environment, preparation of CV, official letters.

#### **Syllabus Content:**

Module 1 Premiers mots, Bonjour, je m'appelle..., Ca va, et vous?

Module 2 Vous travaillez où?, Adresse, telephone, e-mail, Objets utiles

Module 3 Avoir ou ne pas avoir, Objets ici et là

Module 4 Objets comme ça, Qu'est-ce que vous préférez?

#### **Syllabus:**

Text: 1. Français.com – by Jean – Luc Penfornis

Publisher: CLE International, 2007, Paris, Copies available at Goyal Publishers, Delhi.

2.Two audio cassettes, CLE International

#### First semester B. Com French examination 2017

French for business Communication – I

**Text:** Français.com by Jean-Luc Penfornis, Units 1&2 (Pages 3 – 40) CLE International 2007, Paris

#### Semester 2

#### **COURSE 2: FRENCH FOR BUSINESS COMMUNICATION -II**

**Course Code** : FR2CCT06

Name of the Course: French for Business Communication -II

**Duration** : One Semester

**Total Lecture Hours: 72** 

**Aim of the course**: The aim of the course is to sensitise the students to the French commercial vocabulary.

**Course Objectives:** It is centred on business contacts, business etiquette, office environment, preparation of CV, official letters.

#### **Syllabus Content:**

Module 1 Quelle heure est-il ?, Journée de travail, Habitudes

Module 2 Mois et saisons, Rendez-vous, A l'hôtel

Module 3 Itinéraires, Déplacements professionnels

Module 4 Conseils au voyageur, Prendre le train

#### **Syllabus:**

Text: 1. Française.com – by Jean – Luc Penfornis

Publisher: CLE International, 2007, Paris, Copies available at Goyal Publishers, Delhi.

2.Two audio cassettes, CLE International

#### Second semester B. Com French examination 2018

French for Business Communication - II

Text: Français.com by Jean-Luc Penfornis, Units 3&4 (Pages 41 - 72) CLE

International 2007, Paris

### **Model II 2017 Admissions**

#### BA, B.Sc/B.Com

French syllabus and scheme for 2017 admissions- Model –II COMMON COURSE – 06

## SEMESTER 1 COMMUNICATIVE SKILLS IN FRENCH FOR SCIENCE I

**Course Code** : FR1CCT09

Name of the Course: COMMUNICATIVE SKILLS IN FRENCH FOR SCIENCE I

**Duration** : One Semester

**Total Lecture Hours: 90** 

Aim of the Course

To give the students a basic understanding of the French Language, and to develop their verbal and written skills for effective communication.

Course Objective

- 1. To enable the student to study a modern foreign language, right from the basics.
- 2. To provide basic communicative skills to the student to cope with everyday situations.
- 3. To enable the student to write simple structures in French.
- 4. To develop systematically, oral, written and comprehensive skills so as to enable the student to take eventually the DELF/DALF examinations.

Course Outline – 2 Modules

(Credits-4)

- 1. Module 1 Basics of pronunciation, grammar, lexical items, discourse models-oral and written.
- 2. Module 2- Communicative skills in everyday situations.

Syllabus: Text- 1. Le Nouveau Sans Frontières

Publishers: CLE International, 2003Paris. Copies available at Goyal Publishers, Delhi.

#### First semester B.Sc French examination 2017

Communicative Skills In French For Science-I

Text: 1. Le Nouveau Sans Frontière: Unit 1 (Lessons 1 to 5 and Bilan) – CLE International 2003, Paris.

#### **SEMESTER II**

#### COMMUNICATIVE SKILLS IN FRENCH FOR SCIENCE II

**Course Code** : FR2CCT10

Name of the Course: COMMUNICATIVE SKILLS IN FRENCH FOR SCIENCE II

**Duration** : One Semester

**Total Lecture Hours: 90** 

Aim of the Course

To give the students a basic understanding of the French Language, and to develop their verbal and written skills for effective communication

Course Objective

- 1. To enable the student to study a modern foreign language, right from the basics.
- 2. To provide basic communicative skills to the student to cope with everyday situations.
- 3. To enable the student to write simple structures in French.

To develop systematically, oral, written and comprehensive skills so as to enable the student to take eventually the DELF/DALF examinations

Course Outline – 2 Modules

(Credits-4)

- 1. Module 1 Basics of pronunciation, grammar, lexical items, discourse models-oral and written.
- 2. Module 2- Communicative skills in everyday situations.

Syllabus:

Text- 1. Le Nouveau Sans Frontières

Publishers: CLE International, 2003Paris. Copies available at Goyal Publishers, Delhi.

#### Second semester B.Sc French examination 2018

Communicative Skills In French For Science-II

Text: 1. Le Nouveau Sans Frontière: Unit 2 (Lessons 1 to 5 and Bilan ) – CLE International 2003, Paris.

#### **B.COM -FRENCH**

#### **SEMESTER I**

#### **BUSINESS COMMUNICATIVE SKILLS IN FRENCH - I**

Course Code : FR1CCT11

Name of the Course: Business Communicative Skills in French - I

**Duration** : One Semester

**Total Lecture Hours: 90** 

**Aim:** To provide the student with the basics or a modern foreign language having great relevance in the commercial, hospitality and tourism sectors. In the context, the acquisition of basic skills in verbal and written French will serve to improve job perspectives for the keen and ambitious student, while earning for himself international acceptance.

Objectives:

- 1. To enable the student to acquire basic communicative skills in French to be of use to him in the business sphere.
- 2. To equip the student to meet the challenges of the international market.

#### **Course Outline – 2 Modules**

Module 1: French pronunciation, grammar, lexical items, discourse models-oral and written

Module 2: Communication skills for everyday situations as well as for business purposes.

#### **Syllabus:**

Text: 1. LE FRANÇAIS À GRANDE VITESSE –

Publisher: Hachette Livre, 1994, Paris, Copies available at Goyal Publishers, Delhi.

2. Audio cassettes

#### First semester B. Com French examination 2017

Business communicative skills in French – I

**Text:** A Grande Vitesse, Units 1 to 7 (Pages 9-76) Hachette livre, 1994, Paris

## SECOND SEMESTER BUSINESS COMMUNICATIVE SKILLS IN FRENCH - II

Course Code : FR2CCT12

Name of the Course: Business Communicative Skills in French - II

**Duration** : One Semester

**Total Lecture Hours: 90** 

**Aim:** To provide the student with the basics or a modern foreign language having great relevance in the commercial, hospitality and tourism sectors. In the context, the acquisition of basic skills in verbal and written French will serve to improve job perspectives for the keen and ambitious student, while earning for himself international acceptance.

#### Objectives:

- 1. To enable the student to acquire basic communicative skills in French to be of use to him in the business sphere.
- 2. To equip the student to meet the challenges of the international market.

#### **Course Outline – 2 Modules**

Module 1: French pronunciation, grammar, lexical items, discourse models-oral and written.

Module 2: Communication skills for everyday situations as well as for business purposes.

#### **Syllabus:**

Text: 1. LE FRANÇAIS À GRANDE VITESSE –

Publisher: Hachette Livre, 1994, Paris, Copies available at Goyal Publishers, Delhi. 2.Audio cassettes

### Second semester B. Com French examination 2018

Business communicative skills in French - II

**Text:** A Grande Vitesse, Units 8 to 14 (Pages 77 – 141) Hachette livre, 1994, Paris

#### **COURSE OUTCOMES**

### Vocational Course – Plant Biotechnology

#### **SEMESTER I**

Course Name: Vocational Course-1 Introduction to Biotechnology

Course Code : BO1VO4T01

Sl.No	Course Outcome
1	Students should describe the field of biotechnology.
2	Learners should explain various principles and practices in biotechnology.
3	Students will Identify various fields of Biotechnology
4	Students will Illustrate different applications of Biotechnology

**Course Name: Vocational Course-2 Microbiology** 

Course Code: BO1VO4T02

SI.No	Course Outcome
1	Learners should give a definition on Microbiology
2	Students will recall various contributions by famous scientists in the field of Microbiology
3	Students will be able to compare different groups of microorganisms
4	Students will be able to explain cellular structure and reproduction in various microorganisms
5	Students should identify and explain the working principle and uses of common instruments used in a microbiology laboratory
6	Learners should be able to explain various laboratory operations in the field of microbiology

#### **SEMESTER II**

**Course Name: Vocational Course-3 Molecular Biology** 

Course Code: BO1VO4T03

SI.No	Course Outcome
1	Learners should be able to explain the structure and function of DNA molecule inside a cell
2	Students will demonstrate basic concepts of gene, genome and chromosome
3	Learners will Illustrate various aspects of gene expression
4	Students should explain molecular biology of cancer

**Course Name: Vocational Course-4 Fundamentals of Enzymology and Radiobiology** 

Course Code: BO1VO4T04

SI.No	Course Outcome
1	Students should explain concepts of properties of water, pH and solutions
2	Learners will be able to discuss various methods of measuring pH and pH meters
3	Students need to compare and explain various groups of enzymes and their properties
4	Students should be able to explain basic aspects on enzyme kinetics and enzyme inhibition, as well as their applications in genetic engineering, molecular biology and medicine.
5	Learners should discuss various applications of common radioactive isotopes used in Biology and medicine
6	Learners should be able to explain various laboratory operations in the field of Biochemistry and Enzymology

#### **SEMESTER III**

**Course Name : Vocational Course-5 Biotechniques and Instrumentation** 

Course Code: BO1VO4T05

SI.No	Course Outcome
1	Students will be able to identify and describe various techniques used in the field of Biotechnology
2	Learners should explain the principles of various techniques used in Biotechnology
3	Students are able to discuss the applications of different techniques
4	Students will be able to demonstrate various techniques in the field of biotechnology

**Course Name: Vocational Course-6 Basics of Molecular Cloning Techniques** 

Course Code: BO1VO4T06

SI.No	Course Outcome
1	Learners will be able to identify and list out various tools used for molecular cloning
2	Students need to explain different types of vectors and modifying enzymes used in genetic engineering and molecular cloning
2	Students will be able to discuss various molecular probes and nucleic acid hybridization assays used for identifying a cloned gene
3	Learners should explain various methods of DNA sequencing and their significance
4	Students will be able to explain and discuss principle, methodology, types and applications of Polymerase Chain Reaction (PCR)

#### **SEMESTER IV**

Course Name: Vocational Course-7 Genetic Engineering

Course Code: BO1VO4T07

SI.No	Course Outcome
1	Students need to outline various aspects of genetic engineering
2	Students will be able to explain various gene cloning strategies
3	Students should discuss the methods and applications of genetic transformation in plants
4	Learners will be able to explain genetically modified crops and their applications
5	Students will be able to illustrate various aspects of gene libraries
6	Learners should identify and discuss drawbacks of recombinant DNA technology

**Course Name: Vocational Course-8 Plant Tissue Culture** 

Course Code : BO1VO4T08

Sl.No	Course Outcome
1	Students should describe basic concepts of plant tissue culture along with brief history of its development as a branch of biotechnology.
2	Learners will be able to list out various facilities required for plant tissue culture and explain various methods of sterilization and culture media.
3	Students will be able to explain various methods used for sterilization and different growth regulators used in plant tissue culture
4	Learners should explain the importance and significance of various culture techniques in plant tissue culture
5	Students will be able to discuss application of plant tissue culture in various fields and role in the industrial production of secondary metabolites
6	Students will be able to demonstrate various tissue culture techniques

- 1) Students can aware of basic concepts of Mathematics
- 2) Students can familiarise with foreign text books
- 3) Students can correlate mathematical technique to other subjects
- 4) Through mathematical class rooms students can actively participate in the class room learning
- 5) It covers almost all the areas of basic mathematics
- 6) Students can aware of different branches of mathematics

#### **Under Graduate CBCS**

#### B.A. English Language and Literature Model I

#### Programme Outcome

The course is intended to introduce the students to the basics of grammar, usage and effective communication. On completion of the course, the student should be able to: 1. confidently use English in both written and spoken forms. 2. Use English for formal communication effectively.

To introduce students to the different genres of literature and to the niceties of literary expression. On completion of the course, the student should be able to: 1. appreciate and enjoy works of literature. 2. appreciate the aesthetic and structural elements of literature.

To sensitize the learners to contemporary issues of concern. By the end of the course, the learner should be able to: 1. Identify the major issues of contemporary significance 2. Respond rationally and positively to the issues raised 3. Internalise the values imparted through the selections.

To introduce the students to the taste of time tested world classics. On completion of the course, the student should: 1. become familiar with the classics from various lands. 2. Understand the features that go into the making of a classic.

7 The course is intended to sensitive students to the various ways in which literature serves as a platform for forming, consolidating, critiquing and re-working the issue of identity at various levels. On completion of the course, the student should be aware of the following: 1. The subtle negotiations of Indigenous and Diasporic identities with-in Literature. 2. The fissures, the tensions and the interstices present in South Asian regional identities. 3. The emergence of Life Writing and alternate/alternative/marginal identities.

To acquaint the learners with different forms of inspiring and motivating literature. At the end of the course, the student shall be able to: 1. maintain a positive attitude to life. 2. evaluate and overcome setbacks based on the insights that these texts provide.

The course seeks to introduce the student to the major signposts in the historical evolution of literary studies from its inception to the current postcolonial realm. OBJECTIVES OF THE COURSE On completion of the course, the student should be able to discern the following: 1. The emergence of literature as a specific discipline within the humanities. 2. The tenets of what is now known as \_traditional' approaches and also that of \_formalism.' 3. The shift towards contextual-political critiques of literary studies. 4. The questions raised by Cultural Studies and Feminism(s) 5. The issues of sublaternity and regionality in the literary domain.

The course seeks to introduce the student to the basics of English language and literature. OBJECTIVES OF THE COURSE On completion of the course, the student should be able to

discern the following: 1. The evolution and the differential traits of the English language till the present time. 2. The evolution of literature from antiquity to postmodern times. 3. The diversity of genres and techniques of representation and narration 4. The links between literature and film as narrative expressions. 5. The emergence of British and American Literature through diverse periods

AIM OF THE COURSE The student is given space to mature in the presence of glorious essays, both Western and Non-Western. OBJECTIVES OF THE COURSE On completion of the course, the student shall be: 1. familiar with varied prose styles of expression. 2. aware of eloquent expressions, brevity and aptness of voicing ideas in stylish language.

AIM OF THE COURSE To acquaint the student with the rich texture of poetry in English. OBJECTIVES OF THE COURSE On completion of the course the students shall have: 1. an understanding of the representation of poetry in various periods of the English tradition. 2. an awareness of the emerging cultural and aesthetic expressions that poetry makes possible.

AIM OF THE COURSE This course is an introduction to the science of linguistics. It seeks to give an overview of the basic concepts of linguistics and linguistic analysis to the students. OBJECTIVES OF THE COURSE This course seeks to achieve the following: 1. To show the various organs and processes involved in the production of speech, the types and typology of speech sounds, segmental & suprasegmental features of the English language, and transcription using IPA. 2. To describe and explain morphological processes and phenomena. 3. To show the various processes involved in the generation of meaning. 4. To enhance students' awareness that natural language is structure dependent and generative and to develop their ability to observe, describe and explain grammatical processes and phenomena.

The course seeks to introduce the student to select theatre texts that form the canon of English drama. OBJECTIVES OF THE COURSE On completion of the course, the student shall be: 1. familiar with the works of the playwrights included in the course. 2. informed about the broad genre-based nuances in the realm of drama. 3. able to appreciate and critique drama as an art form.

VISION The importance of environmental science and environmental studies cannot be disputed. The need for sustainable development is a key to the future of mankind. Continuing problems of pollution, solid waste disposal, degradation of environment, issues like economic productivity and national security, Global warming, the depletion of ozone layer and loss of biodiversity have made everyone aware of environmental issues. The United Nations Conference on Environment and Development held in Rio de Janerio in 1992 and World Summit on Sustainable Development at Johannesburg in 2002 have drawn the attention of people around the globe to the deteriorating condition of our environment. It is clear that no citizen of the earth can afford to be ignorant of environment issues. India is rich in biodiversity which provides various resources for people. Only about 1.7 million living organisms have been described and named globally. Still

many more remain to be identified and described. Attempts are made to conserve them in ex-situ and in-situ situations. Intellectual property rights (IPRs) have become important in a biodiversity-rich country like India to protect microbes, plants and animals that have useful genetic properties. Destruction of habitats, over-use of energy resource and environmental pollution has been found to be responsible for the loss of a large number of life-forms. It is feared that a large proportion of life on earth may get wiped out in the near future. In spite of the deteriorating status of the environment, study of environment has so far not received adequate attention in our academic programme. Recognizing this, the Hon'ble Supreme Court directed the UGC to introduce a basic course on environment at every level in college education. Accordingly, the matter was considered by UGC and it was decided that a six months compulsory core module course in environmental studies may be prepared and compulsorily implemented in all the University/Colleges of India. The syllabus of environmental studies includes five modules including human rights. The first two modules are purely environmental studies according to the UGC directions. The second two modules are strictly related with the core subject and fifth module is for human rights. OBJECTIVES Environmental Education encourages students to research, investigate how and why things happen, and make their own decisions about complex environmental issues by developing and enhancing critical and creative thinking skills. It helps to foster a new generation of informed consumers, workers, as well as policy or decision makers. Environmental Education helps students to understand how their decisions and actions affect the environment, builds knowledge and skills necessary to address complex environmental issues, as well as ways we can take action to keep our environment healthy and sustainable for the future. It encourages character building, and develops positive attitudes and values. To develop the sense of awareness among the students about the environment and its various problems and to help the students in realizing the inter-relationship between man and environment and helps to protect the nature and natural resources. To help the students in acquiring the basic knowledge about environment and the social norms that provides unity with environmental characteristics and create positive attitude about the environment.

- 1. AIM OF THE COURSE To make the learner aware of the way in which history shapes the life and literature of a people 2. OBJECTIVES OF THE COURSE To give the learner a comprehensive overview of the history of Britain and its• impact upon the rest of the world To enable him to understand English literature in the light of historical events• To analyse the manner in which a person is moulded by the historical events of his• personal and communal life
- 2. To enable students to have a notion of the evolution of literature and to help them perceive the interplay of social processes and literature OBJECTIVES OF THE COURSE By the end of the course it is hoped that: 1. students will be competent to understand literature against the backdrop of history. 2. students will be inspired to contribute dynamically to historical and literary processes.
- 3. AIM OF THE COURSE To make the students competent in their job-seeking, jobgetting, and job-holding needs. The course shall cater to equipping the students in

- Comprehensive Language Enhancement. . OBJECTIVES OF THE COURSE On completion of the course, the students should be able: 1. To develop communicative skills, which will enable them to prepare for a career and function effectively in it. 2. To equip themselves in oral and written communication to enhance their academic and professional use of language. 3. To train themselves in making effective presentations.
- 4. AIM OF THE COURSE The students will be introduced to a selection of regional literatures translated into English. OBJECTIVES OF THE COURSE On completion of the course, the student should be able to comprehend the following: 1. An understanding of much discussed writers/literary pieces in the vernaculars. 2. The modern trends in regional literatures.

#### MA English-PG CSS

#### General:

- 1. M A (English) is a two-year post-graduate programme of four semesters.
- 2. There are five courses in each semester, one dissertation during the entire programme, and a comprehensive viva voce at the end of the fourth semester.
- 3. All the courses taught in the first three semesters in addition to one course in semester four constitute the core courses, while the remaining four courses in semester four will be elective courses. While the core courses are compulsory for all the students, the electives can vary from college to college.
- Grading
- 5. Evaluation of core elective components and the dissertation will be done in two parts, that is, through continuous internal assessment and end semester external examination.
- 6. All courses have been divided into five modules based on certain thematic commonalities. One text/section in each module is in the seminar mode.
- 7. Seminar texts/topics have been incorporated into the syllabus as an integral part of it. They are meant not merely for purposes of internal assessment, but are envisaged as a major pedagogical component of the curriculum for the PG programme. Ina one-hour seminar the student is expected to introduce the text/topic and provide as much detail as possible within the time limit. The teacher in charge of the particular module has to act as the facilitator for the seminar presenter. After the seminar the teacher may provide the student with further information or tips for further studies on the topic. There will not be any gradation among the texts at the end- semester examination. Questions can be asked from any part or text prescribed under each module including seminar texts. The first module of every course is intended to provide background historical, critical, or theoretical information regarding the course. This module does not have seminar topics. The other four modules will have one seminar topic/text each. There willbe twenty seminar fields in each semester. Depending on the number of students in each class, theteacher may give more seminar topics or ask some students (preferably those who volunteer) to do an extra seminar in a semester.

#### 8. Dissertation (Semester 4)

The length of the dissertation to be submitted at the end of Semester 4 shall be between 10,000words and 15,000 words. It should be the outcome of a systematic study written in a lucid language. The Bibliography of the dissertation should reflect the current status of scholarship in the area. The dissertation could be on a topic related to either the core or elective courses. The dissertation should conform to the seventh edition of *MLA Handbook*.

#### **Detailed Syllabus**

- 1. In the end-semester examination, questions will be asked from all texts **including** those prescribed for seminar.
- 2. Familiarity with titles in the Background reading section will enable the student to gain a wider and richer perspective on the broad area. It will also enable the student to explore frontier areas within the course. Though no question will be asked from these texts in the end-semester examinations, they can be used to make internal assessment.
- 3. It is the responsibility of the faculty to make the student familiar with the latest

background/critical material in the area. The teacher can as well prepare a list of background reading materials even where a list has been attached. Different series like New Accents, Criticalidioms, Critical Heritage, Modern Masters, Past Masters can be introduced to the student. Majorinternational journals with focus on their specialisation should also be introduced to them. Resources like the internet can be used for obtaining information in these areas.

4. While care has been taken to ensure that no major area/author in the British tradition has been left out, an attempt has been made to introduce frontier areas of study and methodologies like gender and the postcolonial as core courses. This should broaden the perspective and range of the student.

#### **MA English**

#### Semester 1

### Core Course 1: PC 1—Chaucer and the Roots of English Objectives:

The course seeks to provide the student with knowledge of the growth of English language and literature up to the age of Chaucer. It also introduces the student to the social cultural and intellectual background of thelate Medieval period in English Literature and to sensitize him/her to the major literary works of the period.

#### **Course description:**

The socio-cultural situations during the centuries preceding Chaucer should provide a solid footing for the study of Chaucer and the English literature that came after him. The evolution of English from Old English to Middle English must gain focus here. The development of English into the language used by Chaucerand his contemporaries—both the literary men and the general public—from Indo-European has to be discussed with special emphasis on the Germanic sub-family to which English belongs. How Celtic Britain changed into Anglo-Saxon and later Norman England and how the English triumphed over the French by the time of Chaucer form the backdrop to this course. In other words, the history of England has to be seen as a history of power struggles. The Celts who were suppressed by the Anglo Saxons, resurface in the Arthurian legends, Scottish and Irish literatures and in the Irish literary renewal centuries later. Danish and Norman invasions also find linguistic and literary repercussions in English history.

### Core Course 2: PC 2—Writings of the Renaissance Objectives:

The course is designed primarily as an introduction to the English Renaissance and the texts that shaped it/were shaped by it. At the same time, it is also designed as a theoretical/critical reading of the era and the texts in the light of recent theoretical interventions like New Historicism which had a special interest in Renaissance texts.

#### **Course description:**

The Course covers the period up to the end of the Caroline age. Major genres like tragedy, tragicomedy, epic, romance, ballad, farces etc., concepts like humanism, the new world need to be introduced. The major authors in the course include Shakespeare, Jonson and Marlowe. At the same time care has been taken to place the authors and the texts in the proper historical perspective. To say that renaissance meant the flowering of an entire range of literary artistic and intellectual activity would be to state the obvious. For that reason the true spirit of renaissance is expected to be imparted to the pupil.

### Core Course 3: PC 3—Revolution and the Enlightenment Objectives:

To familiarize the student with the English literature of the Seventeenth Century and to provide him/herwith analytical/critical perspectives on the social, cultural and intellectual climate of the period

#### **Course Description:**

The Puritan England was a period of major social and political upheavals including the Civil War. Theage witnessed the struggle between the king and the parliament for domination. Eventually, Oliver Cromwell, the leader of the puritans, could form the Commonwealth and Charles I was executed in 1649. The puritan movement based on honesty, righteousness, intellectuality and freedom proved too severe for the people and this led to the restoration of Monarchy. Meanwhile the rash acts such as the closure of the theatres had done enough damage to literature. The political turmoil notwithstanding, the age could heralda scientific outlook and temperament. This led to the formation of a number of intellectual institutions including the Royal Society. In the society too, the considerable increase in production resulted in the formation of a number of economic institutions. In the field of literature, the era also witnessed the emergence of number of genres. Scientific

revolutions, the evolution of new religious concepts, and the new philosophical streams of thought need to be introduced. Rationalism and the consequent

establishment of the autonomous human subject (cogito) are to be presented as instrumental in the progress of the Enlightenment.

### Core Course 4: PC 4—Literary Criticism and Academic Writing Objectives:

To familiarize the students with the key concepts and texts of literary criticism ever since its emergence, and to provide practical and theoretical familiarity with the range, approaches, and mechanics of academic writing

#### **Course Description:**

The course should help the student to recognize the historical, political and aesthetic dimensions of the growth of literary criticism. Issues like canon formation, evolution of the genres, methods of literary analysis will all be discussed in the different modules. Concepts being discussed include classical westerncriticism from Aristotle Horace and Longinus, English Renaissance and neoclassical criticism, the 18<sup>th</sup> century trends, the romantic revolt, the Victorian tradition, the new critics, Chicago school and the modernist movements, Eliot's critical positions, Psychoanalysis, myth criticism, Russian Formalism, Marxist criticism and Reader response theories. One module has been set apart for the study of academic writing which is expected to enhance the ability of the student to attempt critical appreciation, literary criticism, reviews, and other modes of academic writing. A review article has been included to provide a sampling of the work being done and the debates that inform *Interpretation*. Students are expected to keep track of other forms of scholarship that inform the discipline. David G. Nichols (Ed): Introduction to Scholarship in Modern languages and Literatures (See Background Reading) contain essays that review and describe several approaches to scholarship. Theselection from the MLA Handbook discusses the tasks and methodology of identifying a topic, developing it through research, working with sources, the mechanics of academic prose, and documentation style. The module introduces the student to the scholarly expectations of semester assignments and the final dissertation.

### Core Course 5: PC 5— Indian English Literature Objectives:

The course is designed to familiarise the students with one of the most significant literatures produced in the English language from the non English speaking cultures. Questions of language, nation, and aesthetics figure prominently among the objectives of this course.

#### **Course Description:**

The student has to be made conscious of the colonial context in which Indian English developed as a language and literature. Nineteenth century attempts at poetry, the emergence of Indian English fictionand drama, the differences in the thematic and stylistic aspects between the pre independence and post independence periods, the impact of historical situations like the Emergency, and the influence of westernmodernism and postmodernism on Indian writing are to receive central focus. Issues relating to the use of the coloniser's language, the diverse ramifications of power in the Indian subcontinent, features of Diaspora writing, the nature of the Indian reality reflected in a non Indian tongue, the socio-cultural economic, and gender concerns addressed in these texts etc. Have to be broached in the pedagogical context. Some major works of Indian literature translated into English also are to be introduced to give a smack of Indianness.

### **Core Course 6: PC 6 -- Literature of the Nineteenth Century Objectives:**

To familiarize the students with two prominent eras in English literature, namely the latter half of the 18<sup>th</sup> century, first half of the 19th century and the latter half of the 19<sup>th</sup> century. The romanticsensibility that reigned supreme for more than half a century needs to be driven home to the students. Similarly the changed outlook of the writers in the wake of industrialism is also to be imparted well.

Only English authors have been included in the paper.

#### **Course description:**

Begin with the precursors to Romanticism -- Gray, Blake. The Romantic movement-significance of 1798. The American revolution 1776 and the French revolution1789. Age of upheavals in political, economic and social traditions. Imagination, nature, symbolism and myth, emotion, lyric and the self. Contrast with neo classicism, individualism. The everyday and the exotic - spread of the Romantic spirit, exoticism, etc.

Victorian period (1837-1901). The continuance and decline of the romantic sensibility. The emergence of

machines and industries. Ascent of materialism. Utilitarian philosophy. Loss of faith. Dominance of scientific temperament. Pre-Raphaelite poetry specimen. The tradition of realism in novel writing. All writers from England.

#### Core Course 7: PC 7 – Modernism in Context

#### **Objectives:**

To familiarize the students with the literary trends of the early twentieth century in the context of thesensibility of literary modernism in the wake of the World War.

#### **Course description:**

The course includes an introduction to the changed literary perspectives in the twentieth century, along with the social, economic and political background. Imperial expansion which had reached a boiling point, the onset of the World War I coupled with the attempts at creating a new world order remained some of the key issues. The impact of the Soviet experiment at the global level that needs tobe read against the backdrop of the spread and influence of Marxism on a global scale calls for a radical review of world politics. This was followed by the rise of Fascism and Nazism, followed curiously by the shadow of doubt cast over communism. In the literary field reaction against Romanticism and Victorianism led to experimentation in writing in all genres. Starting from the

poetry of World War I the movement traverses a wide range of concerns topics and forms of writing. The discussion also includes movements like the avant garde, the Pink Decade and so forth.

#### **Core Course 8: PC 8 -- Dimensions of the Postmodern**

#### **Objectives:**

To introduce the student to the developments in literature written in English since the 1960s. Representative works from experimental and metropolitan literature are included.

#### **Course Description:**

This course involves a discussion of the Postmodernism/post-modernism debate and the problematics of definition. It subjects to analysis poetry which was anti-skeptical and sensitive to the realities of religion and metaphysics. The selected texts create an awareness of the suspect nature of language, the manipulative power of art, the fragility of character, the relativity of value and perception and the collapse of the absolute. Irish voices, female perspectives and public engagement of poetry also come in for discussion.

In the field of fiction too typical postmodern features and devices like self-reflexivity and multiculturalismneed to be focused.

Drama: theatre of the absurd, Psychodrama and experimental theatre will be some of the features calling for discussion.

#### Core Course 9: PC 9— Language and Linguistics

#### **Objectives:**

To inculcate in the pupils awareness about the basic concepts of linguistics, the scientific study of language.

#### **Course Description:**

The course, divided into five modules covers the important areas in linguistics and updates the pupil on the most recent advances in the theory of language study. This should ideally prepare the student at one level with modern notions and concerns in the field of linguistics.

#### Core Course 10: PC 10— Theories of Knowledge

#### **Objectives:**

This course aims at introducing literary theory and its latest developments to students.

#### **Course Description:**

Module 1 examines the major conceptual frameworks of literary theory from structuralism to spectral theory. This unit is intended to familiarize students with the major developments in theory from 1960s to the present. Module 2 begins with an excerpt from Ferdinand de' Saussure's *Course in General Linguistics* and introduces students to the major linguistic principles which revolutionized 20<sup>th</sup> century philosophical and literary thinking. This section also includes Roland Barthes' essay "The Death of the Author" which marks a transition from structuralism to poststructuralism. Homi K Bhabha's essay "The commitment to Theory" is a defense of theory and is included for seminar. Module 3 begins with Derrida's essay and it is important in two ways: one, for its epistemological break with structuralism and two, for its inauguration of the poststructuralist thought in philosophy and criticism. This section also introduces J. Hillis Miller and M.H. Abrams engaged in what may be described as a dialogue and debate on deconstruction. Module 4 introduces the Foucauldian notions of archaeology and genealogy through his essay "Nietzsche, History and Genealogy." The notions of truth, power, biopolitics, biopower etc suggested by Foucault's essay are further developed in Georgio Agamban's book

Homo Sacer (represented by the Introduction to the volume). Agamban's book points to theory's engagement after poststructuralism and Nicholas Royle's introduction to his book *The Uncanny* further suggests the contemporary post-theoretical engagements. Module 5 continues the postmodern turn with a selection from Lyotard's seminal work. Edward Said's "Traveling Theory" discusses the nature theory takes, once it is "worlded". The selection from Terry Eagleton makes a critical audit of theory laying bare the underlying political directions.

#### Core Course 11: PC 11 – American Literature

#### **Objectives:**

The objectives of the course include an introduction to the most important branch of English literature of the non British tradition. It seeks to provide an overview of the processes and texts that led to the evolution of American literature as an independent branch or school of literature.

#### **Course Description:**

The course covers the entire period from the time of early settlers, through the westwardmovement to the contemporary period. American literature is integrally connected with the experiences of a people struggling to establish themselves as a nation. Questions of individualism, quest for identity, political freedom from Britain and cultural freedom from the European tradition have marked American literature from time to time. The emergence of black literature and other ethnic traditions is another major hallmark of American writing. All these will form the basic analytical component of this course. American Renaissance, American War of Independence, Transcendentalism, American Romanticism, Dark Romanticism, Frontier Experiences, the Civil War, Modernism, Feminism, Regional patterns—Southern Writers—New England Writers—Western Writers—Mid-Western Writers, Ethnicity—Jewish, Native, Mountain Literature, Great Depression and the Great Dust-bowl disaster would be some of the thematic concerns of the course.

#### **Core Course 12: PC 12 - Cultural Studies**

#### **Objectives:**

To introduce students to the terms, analytical techniques, and interpretive strategies commonlyemployed in Cultural Studies. Emphasis is on overt interdisciplinary approaches to exploring how cultural processes and artefacts are produced, shaped, distributed, consumed, and responded to indiverse ways.

#### **Course Description:**

The field of Cultural Studies has been described as a —simmering stew of ideas, voices and lives of people all over the world. "It is —a tendency across disciplines rather than a discipline itself." By transgressing disciplinary boundaries, Cultural Studies suggests a "remapping of the humanities." The content, focus and approach determine the methodology of the field.

The first module charts out the terrain of Cultural studies through two seminal articles from the founding figures Raymond Williams and Stuart Hall; and a discussion of the nature of culture, and high and low culture by Simon During. The second module focuses on issues of what constitutes culture, as it is discussed in the academia. The focus is on how different versions and formulations as to what culture is get accommodated in Cultural Studies. The third module frames the ways in which the tools that Cultural Studies provides are specifically deployed to analyse specific 'artefacts' that circulate in society. The fourth module offers samples that reveal how Cultural Studies has been adapted into the broad Indian context. The final module attempts a localisation of the insights gained in the preceding modules. It situates Cultural Studies in the context of Kerala, to show how such analyses can broaden our insight into our immediate life-world.

#### Core Course 13: PC 13 – Gender Studies

#### **Objectives:**

The objectives of this course include making the student familiar with the emergence and growth of the notion of gender as a concept central to the reading of literature. It introduces a wide variety of theoretical, critical and creative works that define and redefine the concept as it is understood in contemporary society. At the completion of the course, students should be able to understand gender as a complex concept that is influenced and (re) shaped by history, the current moment, culture, and society; and engage with gender as a concept that is not fixed but fluid.

Students should also be able to cite and use important theories and methodologies to analyzetexts.

#### **Course Description:**

This course introduces students to modes of literary criticism and interpretation that focus on the representations of women and men, constructions of femininity and masculinity, and sexual politics. Feminist theorists identified the distinction between sex and gender and defined gender as a social rather than a biological construct. Gender theory came initially as part of feminist theory but now includes the investigation of all gender and sexual categories and identities. A primary concern in gender studies is the manner in which gender and sexuality are discussed. Gender theory is postmodern in thatit challenges the paradigms and intellectual premises of inherited norms. It also takes an activist stance through interventions and alternative epistemological positions meant to change the social order. Gender studies and queer theory explore issues of sexuality, power, and marginalized populations in literature and culture. Much of the work in gender studies and queer theory, while influenced by feminist criticism, emerges from post-structural interest in fragmented, de-centered identities, deconstruction of meaning and psychoanalysis.

### Core Course 14: PC 14 – Modes of Fiction Objectives:

The main objective of this course is to familiarise the student with the various modes of narrative fiction attempted across centuries, continents and languages. It is expected that the pupil will be introduced to the various schools, influences and narrative devices that shaped narrative fiction in its present form.

#### **Course Description:**

The course includes a reading of some of the major theoretical interpretations of the narrative, alongside a thorough reading of some of the most significant and path breaking works of creative literature. Narrative fiction had its origins in the folk story telling tradition, even as in the present form the novel in all its varied aspects to this day remains the most popular and widely read literary form, thanks perhaps to the use of the medium of prose, the medium of everyday conversation. This apparently simplistic explanation need not deter us from taking note of the more complex and ideological issues relating to form and the political import of the extraordinary flexibility the novel shows at the thematic level. In other words the course should teach the student why Lennard Davis described novel as a compulsory addiction.

The course offers a sampling of short fiction; the folk story-telling tradition; and Asian, African, Latin American, European, British, and American fiction. One module comprises exclusively of fiction authored by women writers

#### **Core Course 15: PC 15 – Texts and Performance**

#### **Objectives:**

The objectives of the course include facilitating an understanding of the basic structural and thematic patterns that govern the poetic process, especially in its relation to the performative or the theatrical.

#### **Course Description:**

The interface between the verbal and the visual is the area under discussion here. Drama, Theatre, Performance and performativity need to undergo close scrutiny here. One cannot disregard the cinematic medium in a study of performance. Marginalized theatres, dealing with issues like gender, ethnicity, etc. need to be introduced. The development of theatre from classical times, Anti-Aristotelian notions like Alienation Effect, the Indian notion of Rasa etc. are to be discussed in connection with the texts. Though seemingly different, Expressionism and similar modes of theatrical performance should be made part of classroom discussion.

### Core Course 16: PC 16 – Literature and the Empire Objectives:

To introduce the students to the discursive nature of colonialism, and the counter-discursive impulses of postcolonial theory, narratives and performance texts.

#### **Course Description:**

The course attempts to cover through representative texts the writing, reading and critical-theoretical practices based on the colonial experience. While a major segment of the course addresses the consequences of European expansion and the creation and exploitation of the "other" worlds, the course also addresses "internal colonisations" of diverse kinds, including the double colonization of women of colour.

Some of the studies require the students to revisit texts they have encountered in previous semesters (*The Tempest, Heart of Darkness, A Passage to India*)

The students are expected to acquire familiarity with -- and the ability to define and use -- the terminology specific to colonial and postcolonial discourses. The introductory and reference volumes in the reading list will be helpful in this respect (*Key Concepts in Postcolonial Studies, Beginning Postcolonialism*).

An extract from Gayatri Spivak's "Can the Subaltern Speak?" has been included, in spite of the density of the essay. The text is of seminal significance to the field. It has been elucidated by different scholars. Spivak clarifies her arguments in several of her interviews (*The Spivak Reader* 

carries an excellent interview). Reference to the full version of the essay would be profitable.

#### **Elective : PE 01 – Modern European Drama**

#### **Objectives:**

To familiarize the student with modern European Drama in terms of topics, perspectives, and dramatic literature.

#### **Course Description:**

This paper contains representative works to acquaint the student with the social and cultural contexts that inform modern European Drama. Beginning with the decline of romanticism and the rise of realism, the paper discusses how realism which, was a reaction against the illusionistic romantic stage, was critiqued by the later practitioners as illusionistic in itself. The paper contains representative plays of the Realistic and Naturalistic traditions including problem plays. It also familiarizes the student with the relationship between realism and social revolution as well as realism and anti-illusionism.

The rise of modernism in theatre, and the rise of the director and stage designer are addressed. The selection contains representative works of epic theatre, absurd theatre, theatre of cruelty and poor theatre. The paper also traces the rise of theories like Marxism, Psychoanalysis as well as developments in Sociology and the Physical Sciences, and how they shaped the modernist sensibility. The student is also encouraged to revisit the ideological foundations of modernism.

The student is to be acquainted with how the diversified movements in post-modernist theatre are informed by the theatre's increasing propensity to self-consciousness besides discussing poststructuralist theories and feminist theatre, environmental theatre, multicultural theatre, performance theories, threat from the cinema and the future of theatre.

### Elective: PE 02 – Shakespeare across Cultures Objectives:

The course is designed as one that situates the timeless genius of Shakespeare across cultures, literatures and authors. Indeed, Shakespeare has inspired more authors than any other writer. This is reflected in the number of rereading of his plays down the centuries in various genres including

theatre and film. This course addresses the impact of Shakespeare at the theoretical and textual levels.

#### **Course Description:**

The course outlines the transfigurations of Shakespeare's plays as they were received in diverse cultures and the resonances and responses they evoked. It explores Shakespeare from a variety of critical positions ranging from discourses of race, gender, nation and geopolitics. The course focuses on the theoretical and creative reworking of Shakespearean plays, especially *The Tempest*, *Hamlet*, King *Lear* and *Othello*. These plays have been adapted/re-written from the postcolonial, feminist, postmodern and queer perspectives in diverse media from theatre to the celluloid, from manga to pop art. Thus, it brings in theoretical analyses and creative interrogations of the conspicuous absences, racial prejudices, and ethnic intolerances in Shakespearean drama revealing the power structures, and delineates the modes in which diverse cultures reacted to the Eurocentric representations and imperial overtones in Shakespearean drama

### Elective: PE 03 – Studying Translations: Aspects and Contexts Objectives:

To familiarize the student to the contextual diversity of Translations, and to introduce thetheoretical/political positions related to the field

#### **Course Description:**

This paper conceives the terrain of Translation Studies both as a global phenomenon and as a culturally loaded region/subject-specific activity. Even while using extant readings that discuss the global issues at stake in this

emergent field, the main thrust of the paper will be a postcoloniality that will locate its concerns broadly in the Indian sub-continent and then move on to capture the nuancesof the lived reality of a reader from Kerala. The first module surveys the overarching issues that constitute the very notion of Translation Studies. The second module zeroes down on the issue of postcoloniality as it is felt in the discussions on translation, with a specific focus on the Indian realities. The third module offers translation samples from the fictional terrain. In a similar vein the fourth module offers translation samples from the poetic terrain. Both these modules have to be discussed keeping in mind the way in which prose and poetry veer into different orbits in the act of translation. The fifth module moves on to writings for the stage.

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#### **Elective: PE 04 – Canadian Literature**

#### **Objectives:**

The main objective of the course is to introduce Canadian literature to the student. It provides an entry point to this relatively young literature and opens up the diverse cultural experience it celebrates distinguishing it from its American neighbour.

#### **Course Description:**

The course introduces some of the major impulses that continue to shape Canadian Literature. To understand this, a sense of Canada's history is essential. What has marked Canadian literature largely is the idea of identity. This is complicated with the significant presence of migrants from all over the world. Canada is now a Multicultural nation. There has been a Canadian way in which the dominant British and American narratives have been addressed in this cultural mosaic. All these will form the basic analytical component of this course. First Nations People, Questions of identity, Survival,

Modernism, Canadian Postmodernism, Canadian humour, Diasporic experience, Multiculturalism, Landscape, and History would be some of the thematic concerns of the course.

#### Elective: PE 05 – Understanding Cinema: Film Theory

#### **Objectives:**

This paper seeks to familiarise the student with the broad contours of the way films have been the object of academic scrutiny. Here, both the aspects – the making and the reception – of the film process will be represented.

#### **Course Description:**

The first module is a 'primer' of how writings on cinema have evolved historically down the ages. The second module contextualises the formalist-realist bifurcation that informed the classical age of film/theory. The third module offers a close look at how one can discern ideological processes at workin the 'cultural product' that is cinema. The fourth module is an exclusive take on the encounter between film studies and feminism. The fifth module gives a purview of the diverse range of interactions that cinema has had with literature.

Do note that the 'texts' assigned for seminar work in the various modules are to be discussed in the light of the theoretical readings specific to that very module. It is the task of the tutor to ensure that they are treated as an integral part of the course. All screenings are to be treated as a 'prior requirement.' The specific credit hours are not to be assigned for them.

#### Elective: PE 06 - Dalit Studies

#### **Objectives:**

To familiarize the student with the development of Dalit writing in different regions of India.

#### **Course Description:**

Most of the selections are translations into English from regional languages. Hence, we have Dalit writings from Marathi, Punjabi, Gujarati, Telugu, Kannada, Tamil, and Malayalam. The writings span from the period of colonial modernity through nationalist movement, independence, liberal democracy, cultural nationalism and globalization. An interrogation of brahmanic culture, an assertion of equality and human rights, an impulse to transcend the centre-margin dichotomy, and an

aspiration for dignity and political power run through Dalit writings.

# Elective: PE 07 – The Public Sphere and Its Contemporary Context Objectives:

To introduce the student to the concept of the public sphere, and to enable him/her to reflect on critical issues related to everyday life, opinion and individual/social rights.

## **Course Description:**

The concept of the public sphere is introduced through a short article (encyclopaedia article) by Habermas. Habermas's later writings amplify and clarify the positions (*Structural Transformation of the Public Sphere*; "Further Reflections on the Public Sphere"). This is accompanied by two articles that provide glosses, and extend the concept. The texts included in different modules represent a sampling of issues (Censorship, Borders, Surveillance, Military aggression, the market, corporate control, patriarchy, and sexuality/gender). The selections examine neoliberal impulses, changing dynamics of democracy, the media, and new models of commerce. The writings need to be contextualized in terms of supplementary readings suggested in the reading list. The dynamic of the concepts need to be expanded to the areas of environmental sensitivity, law and justice and various

other fields.

# Elective: PE 08- The Indian Poetic Tradition Objectives:

The aim of the course is to familiarise the students with the major texts of the Indian tradition in the light of Indian poetic principles.

## **Course Description:**

The eight major schools of Indian Aesthetics are to be introduced. The two cardinal schools viz. *Rasa* and *dhwani* are to be discussed in detail. The students must be familiar with the strong geopolitics behind Tamil poetics. Texts have to be discussed in the light of the theories. Questions pertaining to the dominantaesthetic sentiment, the suggestive potential of the language of the text, and so on need to be raised.

Alternative readings have to be encouraged. Issues like the ideological ramifications of the erotic sentiment as a tool for the containment of women, the heroic sentiment as a mechanism for authenticating kingship and social stratification, the distinction of language into Sanskrit for noble men and Prakrit for menial characters and women, the division of space into domestic and exterior and its significance in the domestication of women, the significant absence of women (with the possible exception of Avvayyar) etc.are to be highlighted. Students may be encouraged to read Romila Thapar's analysis of *Shakuntalam* to

see the drastic difference in the portrayal of women in the epic and the play. How Sanskrit became anOrientalist imperial weapon also may be analysed.

# Elective: PE 09 – Modern European Fiction Objectives:

To introduce the student to a selection of European fiction spanning the second half of the nineteenth century and the twentieth century.

## **Course Description:**

The first modules constitute theoretical/descriptive writings that should prepare the student for an informed appreciation of modern European fiction. The novels that constitute the subsequent modules are drawn from France, Germany, Russia, Austria, Italy, Greece and Portugal. The focus ison the shades of realism and naturalism. The novels are also important for the philosophical (existentialism) and political positions they represent.

Elective: PE 10 – English Language Teaching (ELT)
Objectives:

Objectives:

The course aims to provide the techniques of teaching English as a language. This course deals with second language pedagogy, second-language acquisition and varieties of English. It will help the learner to develop expertise in key areas, such as second language learning theories, and teaching methodologies. It will discuss

methods of Evaluation and Assessment.

# **Course Description:**

The course, divided into five modules covers the important areas in ELTand provides information about the current theories about ELT. The course tries to give the learner practical experience in the teaching of English.

# THE COCHIN COLLEGE DEPARTMENT OF ENGLISH (SELF FINANCING)

Programme Outcome –Bcom CA,Bcom Tax,Bsc Maths,BBA,BCA

The programme introduces the students to the essence and aesthetics of English Literature and improves their language skills. The courses serve to familiarize the students with different forms of literatures. Discussion of diverse literary forms enables the students to become active readers of literature with well-defined perspectives. The course is framed to guide the students to develop social commitment and an inclusive world view. The study aims at introducing the student to the tremendous scope English language plays today with special emphasis on career opportunities. The learners are exposed to the concepts of nationalism, secularism, democracy and love of nature through literary works. The programme is designed keeping in mind the changing demands of the job market. It also helps the students to refine their communicative skills by providing special focus to improving their grammar, listening and writing skills.

## Programme Specific Outcome

- To enhance LSWR skills so that students may effectively communicate in the English language
- To sensitize the learners about contemporary issues of concern; to enhance their linguistic skills in English language.
- The course is intended to sensitize students to the various ways in which literature serves as a platform for forming, consolidating, critiquing and re-working the issue of identity at various levels.
- Introduce students to the different forms of inspiring and motivating literature.
- Introduce students to different genres of literature and the niceties of literary expression
- Introduce the students to the time tested world classics

## Course Outcome

- **Fine-tune Your English (EN1CCT01)** = The course aims at training students in the usage of English Language in various contexts and enabling them to communicate effectively in English . To re-introduce students to the basics of English grammar and to speak English confidently and effectively and to introduce basics of English grammar.
- **Issues that Matter (EN2CCT03)** = The course seeks to enable the students to grow into responsible citizens taking pride in the secular and democratic traditions

help them to fight against the of the country. This course would inculcate a cosmopolitan outlook in the students and will divisive forces in the society. Moreover, it will make the students aware of the consequences of the mindless exploitation of nature.

- Literature and/as Identity (EN3CCT05) = The course is an introduction to the patterns and negotiations of identity formation from diasporic to regional and alter identity and how identity is constructed in literature. Become familiar with the subtle negotiations of Indigenous and Diasporic identities with-in Literature. Understand the fissures, the tensions and the interstices present in South Asian regional identities. Learn about the emergence of Life Writing and alternate/alternative/marginal identities and to become familiar with the subtle negotiations of Indigenous and Diasporic identities with-in Literature. Understand the fissures, the tensions and the interstices present in South Asian regional identities.
- **Illuminations (EN4CCT06)** =It introduce students to various kinds of literature and to provide an understanding of world literature and to gain multiple perspectives of life from the viewpoint of great minds and the student shall be able to maintain a positive attitude to life and evaluate and overcome setbacks based on the insights that these texts provide.
- **Gems of Imagination (EN3CCT07)** = Discover the joy of reading literature and get exposed to different genres of literature . Appreciate the aesthetic value of literature . Sensitize learners to the cultural and social aspects of literature . Improve the learners' use of language as a means of subjective expression.
- **Revisiting the Classics (EN4CCT08)** = This paper presents the time-tested classics from diverse cultures, spread in four modules it portrays the 'universals' of human condition.

# Programme Outcome:

- 1. Read, understand and interpret physical information verbal, mathematical and graphical.
- 2. Impart skills required to gather information from resources and use them.
- 3. To give need based education in physics of the highest quality at the undergraduate level.
- 4. Offer courses to the choice of the students.
- 5. Perform experiments and interpret the results of observation, including making an assessment of experimental uncertainties.
- 6. Provide an intellectually stimulating environment to develop skills and enthusiasms of students to the best of their potential.
- 7. Use Information Communication Technology to gather knowledge at will.
- 8. Attract outstanding students from all backgrounds.

# Course Outcome:

- 1. To provide in depth knowledge of scientific and technological aspects of Electronics
- 2. To familiarize with current and recent technological developments
- 3. To enrich knowledge through programmes such as project lab and seminars
- 4. To train students in skills related to electronics industry and market.
- 5. To create foundation for research and development in Electronics
- 6. To develop analytical abilities towards real world problems
- 7. To help students build-up a progressive and successful career in Electronics
- 8. To produce electronic professionals who can be directly employed or start his/her own work as Electronic circuit Designer, Electronics consultant, testing professional, Service engineer and even an entrepreneur in electronic industry.
- 9. To train students to a level where they can readily compete for seats for advanced degree courses like MSc (Electronics) and other related disciplines.

#### **COURSE OUTCOME**

#### COMPLEMENTARY COURSE HISTORY

The meaning and purpose of an undergraduate history programme should be
To cultivate an appreciation and understanding among students for the various
Historical processes that have gone into the making of societies, cultures and
Civilizations. It should prod students to not take ideas, institutions and
Practices as given, but as aspects that have evolved over a period of time across
Different spatial contexts, and continue to be engaged in the process of
Becoming. Most importantly, an undergraduate history programme should take
Students beyond the mundane textbook oriented history that is so prevalent in
Our times, which reduces history to certain disembodied facts that need to be
Memorized and regurgitated, and introduce them to the exciting ways in which
A historian practices his/her craft using highly developed tools and skills, and
Produces history.

The course intends to give the students a general idea on the origins of the modern world and the Force and course of various developments in different parts of the world.

# ADDITIONAL LANGUAGE- HINDI

# COURSE OUT COME

- 1. To familiarize the students with various trends in Hindi literature.
- 2. To create an awareness of Indian culture.
- 3. Learn Hindi for effective communication in different fields like administration, media and business .
- 4. To create aesthetic vision in students through the study of poetry.
- 5. Understanding translation as a linguistic, cultural, economic and professional activity.
- 6. Awareness about eminent writers in Hindi literature and inculcate socio-cultural values.
- 7. Develop communicative and technical skills in applied Hindi and functional Hindi.

# PROGRAM OUTCOMES

- Students gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms.
- Learn how earth was formed and how started and develop on the plant through process of organic evolution.
- Understand the biological diversity and grades of complexity of various animal forms through their systematic classification and comparative structural studies.
- Understand the roles of plants, animals and microbes in the sustainability of the environment and their interaction among themselves and deterioration of the of the environment due to anthropogenic activities.
- Analyse complex interactions among the various animals of different phyla, their distribution and their relationship with the environment.
- Apply the knowledge of internal structure of cell, it's functions in control of various metabolic functions of an organism.
- Develop technical skills in biotechnology, bioinformatics and biostatistics.
- Understands the complex evolutionary process and behaviour of animals.
- Understand concepts and principles of biochemistry, genetics, developmental biology, cell biology, microbiology, physiology, biotechnology, immunology and molecular biology.
- Correlates the physiological processes of animals and relationship of organ systems.
- Understanding of environmental conservation process and its importance, pollution control and biodiversity and protection of endangered species.
- Gain knowledge of agrobased small scale industries like sericulture, fish farming, butterfly farming and vermicompost preparation.
- Understand about various concepts of genetics and its importance in human health.
- Apply ethical principles and commit to professional ethics and responsibilities in delivering his or her duties.
- Apply the knowledge and understanding of Zoology to one's own life and work.
- Develops empathy and love towards the animals.

## PROGRAM SPECIFIC OUTCOMES

- Understand the nature and basic concepts of cell biology, genetics, taxonomy, physiology, ecology and applied zoology.
- Analyse the relationships among animals, plants and microbes.
- Perform procedures as per laboratory standards in the areas of taxonomy, physiology, ecology, cell biology, genetics, applied zoology, clinical science tools and techniques of

- zoology, microbiology, biochemistry, biotechnology, immunology and research methodology.
- Understand the applications of biological sciences in apiculture, aquaculture, agriculture and medicine.
- Gains knowledge about research methodologies and effective communication and problem solving methods.
- Contribute the knowledge for nation building.

## **COURSE OUTCOMES**

## SEMESTER 1

## ZL010101- ANIMAL DIVERSITY: PHYLOGENETIC AND TAXONOMIC APPROACHES

At the end of this course the students will be able to:

- Understand the organisation and life: diversity and phylogeny of invertebrates and vertebrates.
- Understand the origin and development of animals and geological time scale.
- Understand the levels of structural organisation.
- Understand the outline classification of animals.
- To make the students aware for taxonomic status of of various invertebrate and vertebrate animal groups.

## ZL010102- EVOLUTIONARY BIOLOGY AND ETHOLOGY

- Understand the basic principles and theories of evolution.
- Analyse the evolutionary relationship of different animal taxa.
- Understand the complexity of animal behaviour and its relation to other biological sciences.
- Have research aptitude in the field of behaviour and evolutionary science.

#### ZL010103- BIOCHEMISTRY

- Demonstrate an understanding of chemical nature of life and life processes.
- Obtain an idea on structure and function of biologically important molecules.
- Understand the importance of metabolism of biomacromolecules in normal physiology of a man.
- Stay informed about the abnormal metabolism of biomolecules and the resultant diseases.
- Use current biochemical and molecular techniques to plan and carryout experiments.

# ZL010104- BIOSTATISTICS AND RESEARCH METHODOLOGY

- To understand the concepts of statistics and research methodology and create awareness of tools, gadgets and accessories of biological research.
- Help students to improve analytical and critical thinking skills through personal problem solving.
- To enable learners to effectively apply suitable statistical tests in research and equip them to prepare research papers and project proposals.
- To sensitise students about the ethics involved in research and enable them to come up with innovative research design.

#### SEMESTER 2

#### ZL010201-FIELD ECOLOGY

- Understanding on the basic theories and principles of ecology.
- Learning various natural resources and their management.
- Analysing the human influence on environment and current environmental issues.
- Understanding different types of animal adaptations of varying environment.

#### ZL010202-DEVELOPMENTAL BIOLOGY

- To understand the developmental processes that lead to establishment of vertebrates and the corresponding cellular and genetic mechanism.
- Attain a basic conceptual knowledge about the principal cellular mechanisms of development.
- To explain the clinical implications of development and the mechanisms intervent in the developmental alterations.
- To expose the learner to the new developments in embryology and its relevance to man.

# **ZL010203- GENETICS AND BIOINFORMATICS**

- To get an in-depth understanding on the principles and mechanisms of inheritance.
- To analyse the fine structure and molecular aspects of genetic material.
- To understand the importance of inheritance in man and congenital diseases.
- To get acquainted with the field of bioinformatics and able to take up bioinformatic studies.

## ZL010204- MICROBIOLOGY AND BIOTECHNOLOGY

- Getting an overview of the microbial world and its structure and function.
- Familiarising the applied aspects of microbiology.
- Understanding the modern biotechnology practices and approaches.
- Knowledge on public policies, biosafety, intellectual property rights issues related to biotechnology.

#### SEMESTER III

#### ZL010301- ANIMAL PHYSIOLOGY

- To study and compare the organ system across the animal world.
- Understand the comparative functioning of different systems of animals.
- To acquire deeper knowledge about the fundamental process and mechanisms that serve and control the various functions of the body.
- To enhance the knowledge and appreciation of mammalian physiology.

#### ZL010302- CELL AND MOLECULAR BIOLOGY

- Understand the structural and functional details of the basic unit of life at the molecular level.
- Understand and explain the basics of cell biology.
- Explain the new developments in molecular biology and its implications in human welfare
- To study the deeper knowledge about molecular biology principles.

# ZL010303- BIOPHYSICS, INSTRUMENTATION AND BIOLOGICAL TECHNIQUES

- Understand the biophysical properties and functioning of life processes.
- Have an idea of the different tools and techniques available for studying biochemical and biophysical nature of life.
- Use the tools and techniques for project work/ research in biology.

#### ZL010304- IMMUNOLOGY

- To process an in-depth knowledge and new developments in immunology.
- To describe the organisations and functions of the immune system.
- To give a detailed description of diagnostic tests for diseases.
- To understand different types of vaccines and the role in human health and wellbeing.

## SEMESTER IV

## ZL830401- GENERAL MICROBIOLOGY AND PSRASITOGY

- To introduce the world of microbial diversity.
- To learn various pathogens, parasites and related diseases in man.
- Understand history, scope, relevance and applications of microbiology.

## ZL830402- BACTERIOLOGY, VIROLOGY AND MYCOLOGY

- To give a detailed knowledge about bacteriology, Virology and Mycology
- Familiarising modern principles and practices in the world of microorganisms

• To familiarise with various tools and techniques in the study of microbes and to manage a microbial laboratory

# ZL830403 - CLINICAL MICROBIOLOGY

- To provide skills and competency in the field of clinical microbiology
- To familiarise with principles and practices in the study of microbes and to manage a medical microbiology laboratory
- Understand modern aspects in the field of clinical microbiology

# THE COCHIN COLLEGE

# **DEPARTMENT OF MATHEMATICS**

# PROGRAMME OUTCOME-B.Sc.MATHEMATICS MODEL II VOCATIONAL COMPUTER SCIENCE.

- Think in a critical manner.
- Know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.
- Formulate and develop mathematical arguments in a logical manner.
- ❖ Acquire good knowledge and understanding in advanced areas of mathematics and statistics, chosen by the student from the given courses.
- Understand, formulate and use quantitative models arising in social science, business and other contexts.

# **COURSE OUTCOME**

## **MM1CRT01: Foundation of Mathematics**

This course introduces the concepts of mathematical logic methods of proofs, sets, functions, relations and partial orderings. A brief introduction of the theory of Equations is also included. These topics are foundations of most areas of modern mathematics and are applied frequently in the succeeding semesters.

# MM2CRT01: Analytic Geometry, Trigonometry and Differential Calculus

- Define conics and draw the graph of conics.
- ❖ Analyse many problems related to a line and plane in space.

## MM3CRT01: Calculus

This course is the continuation of second semester mathematics .Dealing with differential calculus, Partial Differentiation ,integral calculus and multiple integrals.

MM4CRT01: VECTOR CALCULUS, THEORY OF NUMBERS AND LAPLACE TRANSFORM

The third semester deals with ordinary calculus but in the fourth- semester vector differentiation ,vector integration ,basic theory of numbers and Laplace Transforms and it is an applied mathematics area with spicy mathematics (Physics).

## MM5CRT01: MATHEMATICAL ANALYSIS

It is a pure branch of mathematics and begin with real numbers and properties, sequences and their properties including monotone sequences ,Bolzano-Weierstrass Theorem and Cauchy's Criterion for convergence of series. Series-absolute convergence and non absolute convergence and Limits.

## MM5CRT02: DIFFERENTIAL EQUATIONS

What is a differential equations-First order linear equations, Exact equations, Orthogonal trajectories and families of curves, Homogeneous equations. Second order linear equations ,power series solutions and special functions and partial differential equations including lagrangian's method.

## MM5CRT03: ABSTRACT ALGEBRA

- demonstrate insight into abstract algebra with focus on axiomatic theories
- apply algebraic ways of thinking
- demonstrate knowledge and understanding of fundamental concepts including groups, subgroups, normal subgroups, homomorphisms and isomorphism
- demonstrate knowledge and understanding of rings, fields and their properties
- understand and prove fundamental results and solve algebraic problems using appropriate techniques

# **HUMAN RIGHTS AND MATHEMATICS FOR ENVIRONMENTAL STUDIES**

Environmental Education encourages students to research, investigate how and why things happen, and make their own decisions about complex environmental issues. By developing and enhancing critical and creative thinking skills, It helps to foster a new generation of informed consumers, workers, as well as policy or decision makers.

- Environmental Education helps students to understand how their decisions and actions affect the environment, builds knowledge and skills necessary to address complex environmental issues, as well as ways we can take action to keep our environment healthy and sustainable for the future, encourage character building, and develop positive attitudes and values.
- ❖ To develop the sense of awareness among the students about the environment and its various problems and to help the students in realizing the inter-relationship between man and environment for protecting nature and natural resources.
- ❖ To help the students in acquiring the basic knowledge about the environment and to inform the students about the social norms that provide unity with environmental characteristics and create a positive attitude about the environment.

# MM6CRT01: REAL ANALYSIS

- Effectively write mathematical solutions in a clear and concise manner.
- Effectively locate and use the information needed to prove theorems and establish mathematical results.
- Effectively locate and use the information needed to prove theorems and establish mathematical results.
- Demonstrate the ability to integrate knowledge and ideas of differentiation, and integration in a coherent and meaningful manner and use appropriate techniques for solving related problems and for establishing theoretical results.
- Demonstrate ability to think critically by proving mathematical conjectures and establishing theorems from differential and integral calculus.
- Demonstrate an intuitive and computational understanding of set theory, continuity, differentiation, and integration through calculations and solving application problems

## MM6CRT02: GRAPH THEORY AND METRIC SPACES

In the domain of mathematics and computer science, *graph theory is the study of graphs that concerns the relationship among edges and vertices*. It is a popular subject having its applications in computer science, information technology, biosciences, mathematics, and linguistics to name a few.

The purpose of this course is to learn the foundations of General Topology. General Topology is the study of convergence and continuity. It is a foundational subject in almost every branch of Mathematics.

## MM6CRT03: COMPLEX ANALYSIS

Complex Analysis is a rich area of mathematics. Its applications are numerous and can be found in many other branches of mathematics, ranging from number theory, uid dynamics, electrodynamics, and computer science. The purpose of this course is to introduce the main ideas of complex analysis.

## MM6CRT04: LINEAR ALGEBRA

Linear algebra is absolutely essential in mathematics, engineering, physics, statistics, and most other mathematically related sciences. It is a bridge between algebra and geometry: on the one hand it allows you to describe lines, planes, and other geometric objects in terms of algebraic equations; on the other, given a set of equations, we can use linear algebra to trade in those equations for a collection of lines, planes, etc. and then use the geometry of those objects to reason about the original equations. It's an extraordinarily powerful tool and in this class we will learn how best to use it. Even without all of its usefulness, linear algebra is also fascinating because it allows us to understand, concretely, the concept of "dimension". The course will be a mixture of theory and practice. One of our goals will be to become familiar with how to use linear algebra to solve complicated systems of equations and to become familiar with the concepts of an abstract vector space, linear transformations, eigenvalues, eigenvectors.

## MM5GET02: APPLICABLE MATHEMATICS

The objective is to prepare students of all streams, particularly those with arts and commerce background for their higher studies and to approach competitive examinations. Detailed explanations and short cut methods for solving problems are to be introduced to students, so that they can acquire better understanding of concepts and problem solving skills.All questions asked to be of arts students' standard.

## **MM6CBT03: NUMERICAL ANALYSIS**

Numerical analysis is the story of how functions, derivatives, integrals, and differential equations are handled as strings of numbers in the computer. This course analyzed the basic techniques for the efficient numerical solution of problems in science, economics

and engineering. Topics spanned root finding, interpolation and approximation of functions, integration.

## PROGRAMME OUTCOME- M.Sc.MATHEMATICS

- ❖ To improve the perspective of students on mathematics as per modern requirement.
- To enhance the logical, reasoning, analytical and problem solving skills of students
- To orient students towards relating Mathematics to applications.
- ❖ To help the student build interest and confidence in learning the subject.
- To cultivate a research culture in young minds.
- ❖ To encourage students to pursue higher studies in mathematics.
- ❖ To ultimately see that the learning of mathematics becomes more alive, vibrant, relevant and meaningful; a program that paves the way to seek and understand the world around them.
- To motivate students to uphold scientific integrity and objectivity in professional endeavours.

# COURSE OUTCOME

# **Abstract Algebra & Advanced Abstract Algebra**

- Demonstrate knowledge of group homomorphism, isomorphism and automorphism
- Derive and apply the First Isomorphism Theorem
- ❖ Demonstrate knowledge of conjugates, the Class Equation and Sylow theorems
- Derive and apply Sylow Theorems
- Demonstrate knowledge of polynomial rings and associated properties
- Derive and apply Gauss Lemma, Eisenstein criterion for irreducibility of rationals
- Demonstrate the characteristic of a field and the prime subfield;
- ❖ Demonstrate Factorization and ideal theory in the polynomial ring; the structure of a primitive polynomials; Field extensions and characterization of finite normal extensions as splitting fields; The structure and construction of finite fields; Radical field extensions; Galois group and Galois theory

# **Linear Algebra**

The course will be a mixture of theory and practice. One of our goals will be to become familiar with how to use linear algebra to solve complicated systems of equations and to become familiar with the concepts of an abstract vector space, linear transformations, eigenvalues, eigenvectors.

# Real Analysis

- Identify sets with various properties such as finiteness, countability, infiniteness, uncountability etc.
- Demonstrate various properties of sequence and series of real numbers.
- Identify and construct functions of a real variable with many analytical properties.
- ❖ Differentiate and integrate functions of a real variable.
- Integrate functions a real variable in the sense of Riemann Stieltjes.
- Classify sequences of functions which are pointwise convergent, uniform convergent etc.

# **Measure Theory and Integration**

- Understand the fundamental concepts of Mathematical Analysis
- State some of the classical theorems in of Advanced Real Analysis
- Be familiar with measurable sets and functions
- Integrate a measurable function

# **Topology and Advanced Topology**

- Understand terms, definitions and theorems related to topology.
- Demonstrate knowledge and understanding of concepts such as open and closed sets, interior, closure and boundary.
- Create new topological spaces by using subspace, product and quotient topologies.

- Use continuous functions and homeomorphisms to understand structure of topological spaces.
- Demonstrate knowledge and understanding of metric spaces.
- Apply theoretical concepts in topology to understand real world applications

# **Graph Theory**

- Be familiar with the history and development of graph theory
- Write precise and accurate mathematical definitions of basics concepts in graph theory
- Provide appropriate examples and counterexamples to illustrate the basic concepts
- Understand and apply various proof techniques in proving theorems in graph theory.
- ❖ Acquire mastery in using graph drawing tools
- Understand the basic concepts and fundamental results in matching, domination, coloring and planarity.
- Construct examples and proofs pertaining to the basic theorems.

# **Algorithmic Graph Theory**

- Apply the theoretical knowledge and independent mathematical thinking in creative investigation of questions in graph theory.
- Reason from definitions to construct mathematical proofs.
- Write graph theoretic ideas in a coherent and technically accurate manner.
- Obtain a solid overview of the questions addressed by graph theory and will be exposed to emerging areas of research.

# **Complex Analysis and Advanced Complex Analysis**

- Apply the concept and consequences of analyticity and the Cauchy-Riemann equations and of results on harmonic and entire functions including the fundamental theorem of algebra.
- compute complex contour integrals in several ways: directly using parameterization, using the Cauchy-Goursat theorem Evaluate complex contour

- integrals directly and by the fundamental theorem, apply the Cauchy integral theorem in its various versions, and the Cauchy integral formula, and
- Represent functions as Taylor, power and Laurent series, classify singularities and poles, find residues and evaluate complex integrals using the residue theorem.
- Use conformal mappings and know about meromorphic functions.

# **Partial Differential Equations**

- Identify ordinary and singular points by Frobenius Method, Hypergeometric differential equation and its polynomial.
- Understand the basic concepts and definition of PDE and also mathematical models representing stretched string, vibrating membrane, heat conduction in rod.
- Demonstrate on the canonical form of second order PDE.
- Demonstrate initial value boundary problem for homogeneous and non-homogeneous PDE.
- Demonstrate boundary value problem by Dirichlet and Neumann problem.

# **Numerical Analysis with Python 3**

- Define mathematical symbols using python.
- Calculus approach of python.
- Methods of curve fitting.
- Numerical Integration correlating with python

# **Functional Analysis and Spectral Theory.**

- Explain the fundamental concepts of functional analysis.
- Understand the approximation of continuous functions.
- Understand concepts of Hilbert and Banach spaces with I2 and Ip spaces serving as examples.
- Understand the definitions of linear functional and prove the Hahn-Banach theorem, open mapping theorem, uniform boundedness theorem, etc.
- Define linear operators, self adjoint, isometric and unitary operators on Hilbert space.
- Introduction to Spectral theory and positive operators.

# **Optimization Techniques**

- Enumerate the fundamental knowledge of Linear Programming and Dynamic Programming problems.
- Learn classical optimization techniques and numerical methods of optimization. Know the basics of different evolutionary algorithms.
- Explain Integer programming techniques and apply different optimization techniques to solve various models.

# **Analytic Number Theory**

- Define arithmetic functions and Dirichelets problems.
- Some Elementary Theorems on the Distribution of Prime Numbers.
- Definitions and basic properties of congruences.
- Different types of congruences and euler-fermat's theorem, The Chinese remainder theorem.
- Quadratic Residue and primitive roots.

## **Combinatorics**

- Carry over an apply knowledge from Combinatorics proof based .
- present clear and detailed solutions to assigned problems.
- read and understand assigned sections of the textbook.
- Independently study a new combinatorial topic and present this topic to their peers.

# **Differential Geometry**

- Identify situations that require the use of vector calculus and differential geometry.
- Solve certain classes of problems related to vector calculus, differential geometry or topology.
- Understand and write mathematical proofs using formal mathematical reasoning.
- Present solutions on computer or in a written form.

DEPARTMENT OF COMPUTER APPLICATIONS

THE COCHIN COLLEGE

**Programme:BCA** 

Scope

The revised syllabus for Computer Applications provides a strong foundation

to pursue post graduation programme in computer science /applications. The

knowledge acquired by the students may also equip them to meet the

industrial need, and get placed.

**Programme Objective** 

The Programme in Computer Application is designed with the following

specific objectives.

(a) To attract young minds to the potentially rich & mp; employable field of

computer applications.

(b) To be a foundation graduate programme which will act as a feeder

course for higher studies in the area of Computer Science/Applications.

(c) To develop skills in software development so as to enable the graduates

to take up self-employment in Indian & amp; global software market.

(d) To Train & Train &

Industrial standards.

**Course Design** 

The UG programme in Computer Applications and Science includes Common

courses, Corecourses, Complementary courses, Open courses, Seminar,

Project and viva voce. No course shall carry more than four credits. The

student shall select any one open course in semester V offered by various departments of the College.

# **Duration of Course**

The programme shall normally extend over a period of three academic years consisting of six semesters.

## **Course Outcome**

Core 1:Computer Fundamentals and Digital Principles (CS1CRT01):To enable the students to understand the fundamentals of computers, operating systems, number conversions from one system to another. Students will get an idea about Boolean algebra , sequential and combinational circuits.

Core 2: Methodology of Programming and C Language(CS1CRT02): Students will be able to design and develop Computer programs, analyzes, and interprets the concept of pointers, declarations, initialization, operations on pointers and their usage. They will be able to define data types and use them in simple data processing applications also he/she must be able to use the concept of array of structures. Student must be able to define union and enumeration user defined data types.

**Core 3 Software Lab I (CS1CRP01):**Students will be able to write programs based on arrays,functions,structure,union and pointers

Core 4: Data Base Management Systems(CS2CRT04):To understand various database concepts and data models .To understand the E R model and relational model, To master the basics of SQL and construct queries using SQL .To familiarize with the concepts of normalization, transaction process.

**Core 5: Computer Organization and Architecture(CS2CRT05):**To understand the fundamental organisation of a computer system

and functional units of a processor. To understand the concepts of addressing modes, instruction formats, memory organization, parallel processing, pipelining and vector processing.

Core 6: Object oriented programming using C++( CS2CRT06): To understand the concepts of object-oriented programming. To understand the concepts of class, method, constructor, pointers, data abstraction, virtual functions, inheritance, overriding, overloading, and polymorphism.

**Core 7: Software Lab- II(CS2CRP02):** Students will be able to do SQL queries such as relational constraints, joins, set operations, aggregate functions, , views etc.Students will be able to do programmes based on OOPs concepts.

**Core 8: Computer Graphics (CS3CRT07):** To understand the basics of computer graphics, different graphics systems and applications of computer graphics. To understand various algorithms for scan conversion, use of geometric transformations on graphics objects, extraction of scene with different clipping methods.

**Core 9: Microprocessor and PC Hardware(CA3CRT01):** To understand the architecture, pin configuration , memory organization and addressing modes of 8085. To understand the various components of motherboard , harddisk and memory

**Core 10: Operating Systems (CA3CRT02):** To understand the basics of operating systems , types and views of operating systems .Students will be able to understand concepts like CPU scheduling algorithms, deadlocks, memory management, storage management.

**Core 11: Data Structure using C++( CS3CRT08):** To understand basic data structures such as arrays, linked lists, stacks and queues. To familiarize

with different sorting and searching techniques. To understand the concepts of trees , hash table etc,

- **Core 12: Software Lab III (CS3CRP03):**Students will be able to write programs based on linked list, sorting, searching, sparse matrix, trees etc.
- **Core 13: Design and Analysis of Algorithms(CS4CRT09):** To understand the basic concepts of algorithms and analyze the performance of algorithms. To understand various graph traversal , searching and sorting techniques , concepts like dynamic programming, greedy methods etc
- **Core 14: System Analysis and Software Engineering (CA4CRT03):**To familiarize with the concepts of business organization, software life cycle models, software requirement analysis, software design and testing.
- **Core 15: Linux Administration(CS4CRT10):**To understand the history of linux ,concepts like linux architecture,essential linux commands,shell programming,system administrator and various servers
- **Core 16: Web Programming using PHP (CS4CRT11):**To familiarize with HTML,CSS,javascript,PHP,MYSQL
- **Core 17: Software Lab IV (CS4CRP04):**To get familiar with various linux commands. Students will be able to write shell scripts. Students will be able to write programs based on HTML, javascript, PHP and MYSQL
- Core 18: Computer Networks(CS5CRT12):To Understand computer network basics, TCP/IP and OSI reference models. To identify and understand various techniques and modes of transmission. To understand data link protocols, multi-channel access protocols, IEEE 802 standards for LAN, protocols of transport layer. To understand network security and define various protocols such as FTP, HTTP, DNS.

**Core 19 : IT and Environment (CS5CRT13):** To make the students more conscious about our environment and Human rights. This helps students to learn the Universal science, life principles, value of earth and human rights.

Core 20: Java Programming using Linux(CS5CRT14):To gain knowledge about basic Java language syntax and semantics to write Java programs and use concepts such as variables, conditional and iterative execution methods etc. To understand the fundamentals of object-oriented programming in Java, including defining classes, objects, invoking methods etc and exception handling mechanisms. To understand the principles of inheritance, packages and interfaces. To understand the concepts of swing, applets, JDBC connectivity etc.

**Core 21: Software Lab V( CS5CRP05):**Students will be able to write java programs based on swing,applet,packages,interfaces etc.

**Core 22: Cloud Computing(CA6CRT04):**To understand the concepts, characteristics, delivery models and benefits of cloud computing. To analyze various cloud programming models and apply them to solve problems on the cloud

**Core 23: Mobile Application development- Android (CS6CRT15 ):** This new generation programming language helps students to be more professional, After graduation students can easily step into the Job industry without taking a short professional course

# Core 24: Data Mining (CS6CBT02):

To help the students to understand the basic concepts of Data Mining and take up their studies in the area of machine learning, artificial intelligence and data analytics.

**Core 25: Software Lab VI and Seminar(CA6SMP01):**To be able to develop apps in Android. Students will be able to learn about latest topics in the area of Computer Science/ Information Technology.

**Core 26:Software Development Lab II ( Main Project):**The student is able to projects using latest languages/packages in appropriate platforms so that they are trained to meet the requirements of the industry.

# **Projects**

# Software Development Lab I (Mini Project in PHP )

**CA5PRP01:**Students will be able to do a small complete application project. It will make the student confident in designing a system based on software engineering course.

**Software Development Lab II (Main Project):**The student is able to projects using latest languages/packages in appropriate platforms so that they are trained to meet the requirements of the industry.

# **Open Course**

Informatics and Cyber Ethics (CS5OPT01): To understand about the basics of internet and its various services. Students will be aware about various academic services. To acquire knowledge about Cyber Crime and the facilities for secure use of computers. To learn the causes, symptoms and prevention of cyber addiction.

#### **DEPARTMENT OF COMMERCE**

# PROGRAMME OUTCOME B.Com Model 1 Finance and Taxation (SF)

Taxation and revenue collection forms the core of the administrative and functional responsibilities of a state. A state is run on the resources collected from citizens in the form of taxes. Hence, it becomes essential that proper collection and utilisation of funds is ensured for public welfare.

Management of the collected finance is also important both at the public and private level so as to keep the engine of the economy going. This management and collection function requires effective and qualified professionals who are trained to tackle the situations in practical domain. Apart from that the expanding business and growth opportunities emerging out nowadays require a dedicated set of personnel who can handle finance related matters in an effective and efficient manner.

B.Com in Finance and Taxation course delivers to this demand of the economy by churning out qualified and skilled professionals out of graduate level students with a background in commerce. The course attains its aim through structured and organised curriculum and subject division.

## **AIM AND OBJECTIVES**

At the end of 3 year B.Com model 1 programme with specialisation in Finance and Taxation the Students will be able to:-

- Acquire knowledge in the field of accounting, business management & taxation subjects.
- Understand the application of commerce in both theoretical and practical aspects.
- Equip with skill and knowledge to excel in their future career.
- Gain knowledge, skill and attitude of financial management, environmental friendly business entrepreneurship and taxation procedure..

## **COURSE OUTCOME**

## **SEMESTER 1**

## Core Course

## CM01BAA02. Modern Banking

- ➤ To acquaint the students with the knowledge of Banking Practice.
- To familiarize the students with the changing scenario of Indian banking

## CM01CR001. Business Statistics

- > To provide basic knowledge of statistical techniques as are applicable to business.
- > To enable the students to apply statistical techniques for quantification of data in business

## CM01CR002. Business Regulatory Framework

- > To provide a brief idea about the framework of Indian Business Laws.
- > To enable the students to apply the provisions of business laws in business activities.

## Common Core Course

# CM01BA901. Perspectives and Methodology of Business Studies

To familiarise the students with the basic concepts and practice of banking and the principles of Insurance.

## Semester 2

## Core Course

## CM02BAA04. Corporate Regulation and Administration

➤ To provide an understanding regarding the administration and management of corporate form of business and to give a first-hand exposure to corporate laws especially Indian Companies Act 1956.

## CM02CR001. Quantitative Techniques for Business Research

- > To impart basic knowledge of research.
- > To enable the students to apply the simple statistical tools in business research

#### CM02CR002. Principles of Insurance

- To make the students explore with the fundamental principles of insurance.
- > To impart knowledge on practice of insurance business.

## Common Core Course

## CM02BA901. Business Communication and Management Information System

To familiarise the importance of communication in business and methods of communication relevant to various business situations and to build up communication skill among students.

#### Semester 3

#### Core Course

## CM03BAA01. Marketing Management

- ➤ To help students to understand the concept of marketing and its applications.
- To make the students aware of modern methods and techniques of marketing.

## CM03BAA02. Financial Accounting

To familiarize the students with the accounting principles and practices of various types of business other than companies.

## CM03BAA04. Business Management

To familiarise the students with concepts and principles of Management

## Common Core Course

## CM03BAA03. E-Commerce and General Informatics

The objective of this course is to make the students familiar with the mechanism of conducting business transactions through electronic media.

## **Optional Course**

# CM03BBA01. Financial Management

- > To build a thorough understanding of the central ideas and theories of modern finance.
- ➤ To relate theory to practice so that students learn the practical applications of Financial Management concepts.

#### Semester 4

## Core Course

## CM04BAA01. Capital Market

- > To give the students an overall idea about Capital market.
- > To familiarise the students with capital market operations in India.

## CM04BAA02. Corporate Accounting

To provide a thorough knowledge about the accounting of companies

## CM04BAA03. Financial Services

- To develop entrepreneurial spirit among students.
- > To empower students with sufficient knowledge to start up their venture with confidence.
- To mould young minds to take up challenges and become employer than seeking employment.
- > To make them aware of the opportunities and support for entrepreneurship in India.

## Common Core Course

## CM03BA901. Entrepreneurship Development and Project Management

> To equip the students a craving for individual freedom, initiative and enterprise by pursuing self-employment and small business entrepreneurship as a viable alternative to salaried employment.

## **Optional Course**

## CM04BBA01. Value Added Tax - Concept and Practice

The objective of the course is to provide an understanding of the concept of Value Added Tax Scheme and provide an insight into the aspects and procedures in connection with Kerala Value Added Tax Act and Rules, which are useful to the emerging entrepreneurs. The course also aims to enable the students to practice as tax consultants after graduation.

#### Semester 5

## Core Course

## CM05BAA01. Cost Accounting

- To familiarise the students with cost concepts.
- ➤ To make the students learn the fundamentals of cost accounting as a separate system of accounting.

## CM05CR001. Special Accounting

The purpose of the paper is to acquaint the students with advanced accounting principles and procedures.

## Complementary Course

# CM05CAB04. Advertising and Sales promotion

To make the students aware of the strategy, concept and methods of advertising and sales promotion.

## **Optional Core**

## CM05CR001. Income Tax Law and Practice

> To familiarise the students with Income Tax Act 1961 and to enable the students to compute Income taxable under the first three heads of Income

## Open Course

#### CM05DAA04. CAPITAL MARKET & INVESTMENT MANAGEMENT

To enable Students to get a base Knowledge for functioning of capital market in India and enable them to take investment management decisions

#### Semester 6

## Core Course

## CM06BAA01. Applied Cost Accounting - 2

- > To acquaint the students with different methods and techniques of costing.
- > To enable the students to identify the methods and techniques applicable for different types of industries.

## CM06BAA02. Practical Auditing

- To familiarize the students with the principles and procedure of auditing.
- To enable the students to understand the duties and responsibilities of auditors and to undertake the work of auditing.

## CM06BAA03. Accounting for Managerial Decision

- To equip the students to interpret financial statements.
- > To enable the students to have a thorough knowledge on the management accounting techniques in business decision making.

## CM06CAA01. Principles of Business Decisions

- ➤ To familiarise the students with the economic principles and theories underlying various business decisions.
- > To equip the students to apply the economic theories in different business situations.

## **Optional Course**

# CM06BBA01. Income Tax Assessment and Procedure

To have an understanding of determination of Total Income and tax payable and to get an overview regarding returns to be filed by an individual and also assessment procedure.

# Core Course

CM06BFA01. Project and Viva