



**KOTTAKKAL FAROOK**  
**ARTS & SCIENCE COLLEGE**

PARAPPUR P.O, KOTTAKKAL, MALAPPURAM DISTRICT, KERALA, 676503

**INTERNAL QUALITY ASSURANCE CELL**

**PROGRAMME OUTCOMES,  
PROGRAMME SPECIFIC OUTCOMES  
&  
COURSE OUTCOMES**



**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**

**INTERNAL QUALITY ASSURANCE CELL**

**PROGRAMME OUTCOMES,**

**PROGRAMME SPECIFIC OUTCOMES**

**&**

**COURSE OUTCOMES**



**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**  
**INTERNAL QUALITY ASSURANCE CELL**

**POs, PSOs & COs**

**BA English(Core)**

**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**  
**Affiliated to University of Calicut, Recognized by Govt. of Kerala**  
**Recognized Under Section 2(f) of the UGC Act, 1956**

syllabus year	2019
Department	English
Programme	English Language and Literature


**PROGRAMME OUTCOME(POs):**

Sl.No	Programme Outcome
PO1	Educate students in both the artistry and utility of the English language through the study of literature and other contemporary forms of culture.
PO2	Provide students with the critical faculties necessary in an academic environment, on the job, and in an increasingly complex, interdependent world.
PO3	Graduate students who are capable of performing research, analysis, and criticism of literary and cultural texts from different historical periods and genres.
PO4	Assist students in the development of intellectual flexibility, creativity, and cultural literacy so that they may engage in life-long learning.

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

Sl.No	Programme Specific Outcome
PSO1	Students should be familiar with representative literary and cultural texts within a significant number of historical, geographical, and cultural contexts.
PSO2	Students should be able to apply critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genres.
PSO3	Students should be able to identify, analyze, interpret and describe the critical ideas, values, and themes that appear in literary and cultural texts and understand the way these ideas, values, and themes inform and impact culture and society, both now and in the past.
PSO4	Students should be able to write analytically in a variety of formats, including essays, research papers, reflective writing, and critical reviews of secondary sources.
PSO5	Students should be able to understand the process of communicating and interpreting human experiences through literary representation using historical contexts and disciplinary methodologies.




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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	ENG 1 B01 INTRODUCING LITERATURE	CO1: Demonstrate proficiency in identifying and analyzing linguistic structures found in poetic texts, including symbols, metaphors, and various tropes.
		CO2: Exhibit the skill to identify and locate multiple perspectives presented within a single literary text, showcasing an understanding of polyphony and its significance.
		CO3: Develop the ability to read literary and cultural texts critically, moving beyond the surface-level interpretation to recognize and interpret the dominant voices present in the text and their underlying agendas
Semester 2	ENG2 B02 APPRECIATING POETRY	CO1: Gain proficiency in adopting diverse perspectives while analyzing poetry, exploring themes related to gender, race, caste, ethnicity, religion, region, environment, and nation.
		CO2: Develop familiarity with an array of poetry forms from around the world.
		CO3: Cultivate awareness regarding poetry's historical and global production, encompassing various forms and themes throughout literature's evolution
Semester 3	ENG3 B03 APPRECIATING PROSE	CO1: Familiarity with cultural diversity and distinct perspectives enhances their understanding of various cultures.
		CO2: Develop critical thinking skills, fostering both creative and analytical writing abilities.
	ENG3 B04 ENGLISH GRAMMAR AND USAGE	CO1: Students are able to understand the different sentence patterns in English.
		CO2: Learners improve their ability to express themselves in English in formal and informal situations
		CO3: They identify the linguistic and pragmatic variations in English in relation to context and speakers
		CO3: They attain an advanced level of mastery in all the macro skills of English
Semester 4	ENG 4 B05 APPRECIATING FICTION	CO1: Discover the pleasures and enjoyment of reading fiction.
		CO2: Gain insights into the complexities of the human condition and life through literary works.



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Semester 4	ENG 4 B06 LITERARY CRITICISM	CO1: Recognize and analyze different types of fictional narratives, including diverse techniques employed within them.
		CO2: Demonstrate the ability to identify and analyze the primary arguments presented in critical writings. Establish connections between critical perspectives and the historical development of both eastern and western ideas.
Semester 5	ENG 5 B07 APPRECIATING DRAMA AND THEATRE	CO1: Develop familiarity with theories concerning drama and theatre, encompassing both eastern and western perspectives.
		CO2: Acquire the ability to analyze plays in the context of history, culture, and theoretical frameworks.
		CO3: Gain empowerment in conceptualizing and executing theatrical projects effectively.
	ENG 5 B08 LITERARY THEORY	CO1: Demonstrate a comprehensive understanding of the history of literary theory.
		CO2: Develop the capability to critically analyze and evaluate major arguments presented in literary theories from various perspectives
		CO3: Gain familiarity with the essential primary texts in Western literary criticism, while also being introduced to Indian aesthetics
	ENG 5 B09 LANGUAGE AND LINGUISTICS	CO1: Gain a comprehensive understanding of the inter connections between linguistics and related disciplines.
		CO2: Employ linguistics as a valuable tool to comprehend and interpret written or spoken text effectively.
		CO3: Develop an awareness of the intricate nature of language structure and its functions in human communication.
		CO4: Enhance their English communication and analytical skills, leading to improved overall proficiency in the language
	ENG 5 B10 INDIAN WRITING IN ENGLISH	CO1: Demonstrate comprehension of the thematic concerns, genres, and prevailing trends in Indian writing in English.
		CO2: Identify and appreciate the pluralistic aspects and cultural diversity reflected in Indian literature.
		CO3: Attain a comprehensive understanding of the evolutionary phases and historical development of Indian writing in English.
	ENG 5 D03 APPRECIATING LITERATURE	CO1: Develop an appreciation for literature by engaging with accessible and popular literary works.
CO2: Acquire familiarity with various genres and diverse pieces of English literature selected for study		
CO3: Recognize the role of literature as a reflection of life in its manifold expressions.		



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Semester 6	ENG 6 B11 VOICES OF WOMEN	CO1:Cultivate a more informed and empathetic human perspective concerning women and their literary works.
		CO2:Demonstrate a keen interest in critically analyzing the diverse experiences of women across different regions and cultures
		CO3:Develop a heightened awareness of gender as a social construct, influencing perspectives and roles in society.
	ENG 6 B12 CLASSICS OF WORLD LITERATURE	CO1:Become acquainted with significant classics of world literature.
		CO2:Gain enlightenment through the experience of reading and engaging with great literary works.
		CO3:Develop a deeper understanding of comparative literature, enabling them to analyze and draw connections between different literary traditions.
	ENG 6 B13 FILM STUDIES	CO1:Acquire the skills to appreciate film as a profound art form, recognizing its aesthetics and artistic value.
		CO2:Gain a comprehensive understanding of visual aesthetics, various film forms, and the technological advancements used in filmmaking
		CO3:Develop the ability to critically connect films with contemporary societal and global issues, enhancing their analytical perspective
	ENG 6 B14 NEW LITERATURES IN ENGLISH	CO1:Engage in an exploration of cultural plurality and hybridity,gaining insights into diverse cultural perspectives and influences.
		CO2:Recognize and analyze literary representations of colonization, decolonization, identity, inequality, marginalization, and other relevant themes, fostering a deeper understanding of these complex issues in literature
		CO3:Develop the ability to articulate and critically discuss the implications of cultural plurality, hybridity, and the themes explored in literature, fostering a deeper appreciation for the complexities of human experiences and societal dynamics
ENG 6 B21 PROJECT	CO1:Encourage and support students in expressing their individual talents, potential, and creativity by creating their own artistic products based on the knowledge and skills they have acquired throughout the three-year program.	
	CO2:Encourage students to utilize their acquired knowledge and skills in the project work, fostering the expression of their unique talents and creativity while exploring diverse literary themes and cultural perspectives	



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**INTERNAL QUALITY ASSURANCE CELL**

**POs, PSOs & COs**

**BA English**

**(Common Course)**



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Syllabus Year	2022
Department	English
Programme	English Language & Literature

**PROGRAMME OUTCOME(POs):**

SL.No	Programme Outcome
PO1	Students will demonstrate a heightened ability to appreciate life and literature, developing a deeper understanding and enjoyment of literary works from various genres and cultures.
PO2	Students will have cultivated a keen interest in society and culture, recognizing the interconnectedness of literature with broader social and cultural contexts, and gaining insights into the diverse perspectives and experiences reflected in literary texts.
PO3	Students will be able to proficiently identify and articulate the key concepts of English grammar,
PO4	Students will be able to apply the principles of democracy and freedom to their daily lives
PO5	Students will have developed the ability to read and critically appreciate a wide range of Kerala literature, writings, and films, demonstrating a comprehensive understanding of the diverse nuances and distinctions within Malayalam literature
PO6	Students will possess the skills to read and critically appreciate various forms of Indian literature, writings, and films,

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

SL.No	Programme Specific Outcome
PSO1	Students will produce original literary works, such as short stories, poems, or essays, showcasing their creativity and imaginative thinking
PSO2	Students will critically analyze and interpret various literary works, demonstrating an understanding of literary techniques, themes, and historical contexts
PSO3	Students will apply close reading techniques to explore the nuances of literary texts, identifying symbolism, motifs, and figurative language to enhance their analytical skills.
PSO4	Students will examine literature from different cultures and perspectives, fostering an appreciation for diversity and gaining insights into various worldviews.
PSO5	Students will articulate their interpretations and opinions about literary works both orally and in writing, honing their communication skills and expressing complex ideas coherently.



  
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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	ENGA01 LITMOSPHERE: THE WORLD OF LITERATURE	CO1:Develop the qualities necessary to become good, kind and responsible human being
		CO2:Attain confidence to ask questions
		CO3:Apply logical and analytical skills in various situations
		CO4:Understand and apply problem solving skills
		CO5:Assimilate new perspectives on life
		CO6:Enhance the ability to express themselves through writing
	ENGA02 FUNCTIONAL GRAMMAR AND COMMUNICATION IN ENGLISH	CO1:Demonstrate the ability to use the syntactic structures within English texts.
		CO2:Distinguish logical and analytical skills in the use of language for communication
		CO3:Develop writing skills in various professional and career related situations
		CO4:Formulate the basic skills in spoken communication in formal contexts
Semester 2	ENG2 A03 READINGS FROM THE FRINGES	CO1:Discuss and contemplate on the areas of gender inequality, marginalization, disability studies, racism and casteism
		CO2:Develop sensitivity towards environmental concerns and feel responsible towards protecting nature
		CO3:Understand the everyday realities of the marginalized sections of the society and negate the stereotypes surrounding them and accept them as allies
		CO4:To develop scientific temper and scientific thinking.
	ENG2A04 READINGS ON KERALA	CO1:Develop critical understanding of literature of Kerala
		CO2:Interrelate the cultural and historical additions of the society and the development of literary sensibility
		CO3:Identify the diversity of literary endeavours and the cultural representations
		CO4:Identify and apply the insights and values in everyday life as a Keralite
		CO5:Critically analyse and interpret the present cultural production
Semester 3	ENG3 A05 READINGS ON INDIAN LITERATURES	CO1:Students learn to appreciate the multiple genres of Indian writings cutting across different sections of Indian Society
		CO2:Students can understand how social issues are represented in Indian literature
		CO3:Students will gain the knowledge of 'Indianness' through the works of Indian writers from different parts of India.
		CO5:Students will understand the pluralistic aspects of Indian culture and identity



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Semester 4	ENG4 A06 SONGS AND STORIES OF OUR WORLD	CO1: Gain familiarity with a variety of classical and marginal literatures
		CO2: Acquire knowledge of literatures from around the world and from different eras.
		CO3: Have an awareness of the ways in which different cultures perceive the world around them and how they capture these experiences in literature.
		CO4: Develop empathy and understanding on the face of diverse peoples and their experiences

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**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**  
**INTERNAL QUALITY ASSURANCE CELL**

**POs, PSOs & COs**

**BA Economics**

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Syllabus Year	2019
Department	Economics
Programme	BA Economics

**PROGRAMME OUTCOME(POs):**

SLNo	Programme Outcome
PO1	Critically evaluate and apply the theories and techniques of economics.
PO2	Demonstrate subject ; specific thinking skills that are readily transferable to problem solving and decision making in a wider context
PO3	Enhance their life long learning ,employing arrange of practical and professional skills.
PO4	Find ,evaluate, synthesize and use information from a variety of sources
PO5	Articulate an awareness of the social and community context within their disciplinary field.

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

SLNo	Programme Specific Outcome
PSO1	<b>Analyze Economic Phenomena:</b> Demonstrate the ability to critically analyze economic theories, concepts, and data to understand and explain various economic phenomena.
PSO2	<b>Apply Quantitative Methods:</b> Utilize quantitative techniques such as statistical analysis, econometrics, and mathematical modeling to analyze economic data and draw meaningful conclusions
PSO3	<b>Conduct Research:</b> Design and conduct independent research projects, gather relevant data, and present findings effectively using appropriate research methodologies.
PSO4	<b>Understand Market Dynamics:</b> Comprehend the functioning of various markets, including goods, services, labor, and financial markets, and analyze their impact on economic outcomes.
PSO5	<b>Analyze Socioeconomic Issues:</b> Analyze socioeconomic issues such as inequality, poverty, environmental sustainability, and social welfare, and propose strategies for addressing these challenges.



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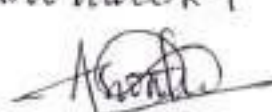
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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	ECO1 B01 Microeconomics 1	CO1:Students explain what economics is and explain why the subject is important
		CO2:Students explain how economists use economic models
		CO3:Students understand the scarcity and choice in the economy and the basic problems of an economy.
		CO4:Students explain and illustrate market equilibrium and disequilibrium.
		CO5:Students analyse how consumers maximize the total utility within a given income using the utility maximizing rule.
		CO6:Students describe how consumer's utility changes when income or price change.
		CO7:Students define the term production and explain what a production function is; define and differentiate between marginal, average and total product; compute and graph marginal, average and total product.
		CO8:Students define and differentiate between different cost concepts and interpret the relation between long run and short run costs.
Semester 2	ECO2 B02 Macroeconomics 1	CO1:Students appreciate the context in which Macroeconomics emerged as a separate discipline.
		CO2:Students understand the concepts regarding macroeconomic model building.
		CO3:Students understand and evaluate different concepts and measurements of national income
		CO4:Students explain how output and employment are determined in classical and Keynesian systems of economics.
		CO5:Students explain and analyze why actual output will fall short of the productive capacity of the economy.
		CO6:Students evaluate fiscal policies of Governments at different situations.
		CO7:Students understand and generalize the concept of money and money supply in the economy and evaluate monetary policy of different Governments.



  
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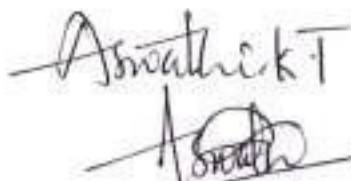
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Semester 3	ECO3 B03 Quantitative methods for economic analysis1,	CO1:Students understand and demonstrate sound quantitative skills to collect analyse and interpret empirical data related to socio-economic issues.
		CO2:Students understand the skill in statistical and mathematical techniques that are required for a meaningful study of applied economics and for carrying out empirical analysis.
		CO3:Students generalizes skills in quantitative analysis and apply it to study the concepts in most branches of economics
		CO4:Students solve and analyze the data using Spread Sheet
		CO5:Students draw graphs with the help of economic data
		CO6:Students analyse and apply different techniques of correlation and regression analysis.
	ECO3B04 Microeconomics 2	CO1:Students understand the difference between the firm and industry; explain and illustrate Demand curve, Average Revenue curve and Marginal Revenue curve of a perfectly competitive firm.
		CO2:Students understand and determine the break-even and shut down points of production for a perfectly competitive firm; understand why perfectly competitive markets are efficient.
		CO3:Students define and analyse the characteristics of monopoly and explain the sources of barriers to entry.
		CO4:Students explain why a monopoly is inefficient using dead weight loss; differentiate between a single-price monopolist and a price-discriminating monopolist.
		CO5:Students define the characteristics of a monopolistically competitive industry and explain the difference between short run and long run equilibrium in a monopolistically competitive industry.
		CO6:Students define characteristics of oligopolies and explain why collusion can occur in oligopolistic industries.
		CO7:Students explain pricing and employment of factor inputs and define demand for and supply of factor inputs.
		CO8:Students explain pricing and employment of factor inputs and define demand for and supply of factor inputs.



  
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Semester 4	ECO4 B05 Quantitative methods for economic analysis 2	CO1: Students understand the skill in the calculation of mathematical techniques that are required for a meaningful study of applied economics and other branches.
		CO2: Students understand and demonstrate sound quantitative skills to collect analyse and interpret empirical data related to socio-economic issues.
		CO3: Students understand and apply the concepts of Derivatives and Marginal Concepts
		CO4: Students quantify economic variables and apply statistical techniques in Economics.
		CO5: Students understand and calculate different concepts coming under index number.
		CO6: Students analyse and apply different concepts coming under the areas of vital statistics
		CO7: Students understand and solve different problems of probabilities.
Semester 4	ECO4 B06 Macroeconomics II	CO1: Students understand and derive IS-LM curves and use the framework to explain the working of an economy
		CO2: Students explain the way fiscal and monetary policy works and apply the concept of ISLM framework.
		CO3: Students explain the concept and measurement of inflation and unemployment.
		CO4: Students explain the trade-off between inflation and unemployment as predicted by the Phillips curve and its collapse after the stagflation of 1970s.
		CO5: Students analyze different phases of trade cycle, and demonstrate various trade cycle theories
		CO6: Students understand and analyse the reasons for economic recessions and suggest the appropriate instruments of monetary and fiscal policy.
		CO7: Students measure the inflation in the economy and apply the concepts like WPI-CPI-PPI-GDP deflator.
Semester 5	ECO5 B07 Fiscal economics	CO1: Students define and differentiate public finance and private finance and to generalize the concept of maximum social advantage
		CO2: Students understand and explain the public expenditure and the effects and importance of public expenditure in India
		CO3: Students understand the cost-benefit analysis and apply its principle in the day today economic life.



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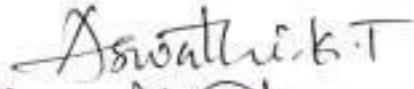
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Semester 5	<b>EC05 B07</b> <b>Fiscal economics</b>	<b>CO4:</b> Students understand various concepts of tax, explain the tax and non tax revenue and compare and contrast the direct tax and indirect tax and its benefits.
		<b>CO5:</b> Students understand and develop the skill to calculate personal, corporate income tax and other taxes
		<b>CO6:</b> Students explain the types of public debt and analyse how debt is repaid.
		<b>CO7:</b> Students describe government budget and budgeting and understand the different aspects of federal finance and local finance
		<b>CO8:</b> Students understand the federal finance, function of finance commissions and analyse Centre State financial relations
		<b>CO9:</b> Students understand NITI Aayog and explain local finances and functions and revenues
	<b>EC05 B08</b> <b>Indian economic development</b>	<b>CO1:</b> Students explain the growth and structural changes happened in Indian economy from British period to till date.
		<b>CO2:</b> Students understand the background and programmes under new economic policy.
		<b>CO3:</b> Students Understand the place of Agriculture, Industry and service sector in India's economy.
		<b>CO4:</b> Students describe the causes and magnitude of poverty and unemployment in India.
		<b>CO5:</b> Students analyse various economic issues happening around us.
		<b>CO6:</b> Students understand and evaluate numerical information relating to various aspects of Indian economy and India's economic policies
		<b>CO7:</b> Students refer books related to Indian economy, collect clippings and articles from newspapers and magazines and also follow economic survey, economic review and RBI Bulletin.
		<b>CO8:</b> Students explore beyond the texts, conducts field visits and report economic events from field visits.
		<b>CO9:</b> Students analyse the basic characteristics of Kerala economy and evaluate the Kerala model with other economies.



  
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Semester 5	ECOS B09 Economics of capital market	CO1: Students understand the basic structure of financial system and classify financial market, financial instruments, financial assets, financial institutions and financial services
		CO2: Students understand the role and features of capital market and differentiate its instruments
		CO3: Students understand capital markets operations and classify different capital market instruments as per its characteristics.
		CO4: Students understand primary market and analyse the methods of issuing new issues
		CO5: Students analyse the stock indices of various stock exchanges.
		CO6: Students understand the basics of capital market to lead a career from capital market.
		CO7: Students visits stock trading terminal so as to get an idea of the online buying and selling of shares.
		CO8: Students watch exclusive financial channels like CNBC TV 18, NDTV PROFIT etc, to get an idea of stock trading and capital market activities.
		CO9: Students read financial dailies like Economic Times, Business Line, Business Standard, Dhanam etc regularly in order to get a proper understanding of the terms and concepts and the working of capital markets
	ECOS B10 Mathematical economics	CO1: Students understand the language of mathematical economics and internalize how the whole body of economics is been influenced by mathematical science.
		CO2: Students understand mathematical models and generalize various functions in economics
		CO3: Students explain different marginal concepts in mathematical economics and solve mathematically different concepts of elasticity.
		CO4: Students solve optimization problems in economics by applying mathematical tools.
		CO5: Students analyse and solve problems related to production function, linear Programming and input output analysis
		CO6: Students solve the equilibrium of different market structure by using mathematical techniques.
		CO7: Students predict the economic variables from the existing data set
		CO8: Develop attitude to opt courses in economics in the institutes of high repute
		CO9: Students undertake minor research projects to apply the tools they assimilated.




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Semester 5	ECOS D01 Economics in everyday life	CO1:Non economic students understand the basic concepts in economics and recognize the importance of economic science in their everyday life.
		CO2:Students understand and explain basic concepts from micro and macro economics
		CO3:Students develop interest to understand the working of an economy.
		CO4:Students understand and evaluate the working of budgetary system in an economy
Semester 6	ECO6 B11 Financial Economics	CO1:Students understand the basic concepts in financial economics and the role of finance in the operation of an economy.
		CO2:Students understand and analyse different investment theories and the structure of interest rate in the formulation of a project.
		CO3:Students understand the fundamentals of valuation of bonds and securities.
		CO4:Students understand risk and return and analyse various types of risks.They evaluate the measurement of risk and return of an asset, measurement of risk and return of a portfolio.
		CO5:Students analyse cost of capital and capital asset pricing model
		CO6:Students explains derivatives and differentiate different derivatives like forward, future, options and swaps
		CO7:Students analyse the derivative market and evaluate different derivatives for investment.
		CO8:Students watch the conditions of financial markets and analyse its impact in the economy
		CO9:Students understand the operation of the Indian Financial System as a whole and find the place of financial assets in the market.
ECO6 B12 International economics	CO1:Students identify the basic difference between inter-regional and international trade and understand how international trade has helped countries to acquire goods at cheaper cost, and explain it through the various international trade theories.	
	CO2:Students evaluate how international trade promotes economic development.Students compare and contrast different trade theories.	
	CO3:Students understand the ways in which free trade and restrictive trade policies could be practiced	
	CO4:Students identify the issues and prospects of current international trade order with respect to India and its major trade partners	




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Semester 6	ECO6 B12 International economics	CO5: Students understand the functioning of foreign exchange markets in the world
		CO6: Students relate different exchange rate systems with the current systems of foreign exchange determination across the globe
		CO7: Students calculate the Balance of payments (BOPs) of nations and analyse different instruments to clear BOP disequilibrium
		CO8: The students are expected to acquire skill that will help them to take rational decisions in issues related to international economics.
		CO9: Students understand the role of international agencies in promoting world trade and economic cooperation.
	ECO6 B13 Development of economic thought	CO1: Students understand and generalize the development of economic thinking and economic analysis and explain the historical evolution of economic thought
		CO2: Students understand developments in major field of economics and explain different Schools of thought in economics.
		CO3: Students recognize some of the great economist from antiquity to contemporary times
		CO4: By the end of this course students identify the major ideas associated with each group or thinker studied, and thereby the origins of contemporary theory are better comprehended
		CO5: Students evaluate different streams of economic thinking as well some personalities who had a major impact on the history of economic thought
		CO6: Students identify theories that radically differ from modern mainstream theories of economics and thereby recognize that the theoretical basis of economics has been, and continues to be, contested.
		CO7: Students analyse and differentiate the philosophy of physiocrats and mercantilism.
		CO8: Students analyse and appreciate the contribution of British political economy and the rise of socialism.
		CO9: Students appreciate early and modern Indian thoughts on economics.



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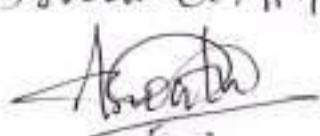
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Semester 6	ECO6 B14 Economics of growth and development	CO1: Students understand the theoretical framework for growth and development discourses under different schools of economic thoughts and develop better insights and knowledge on issues and challenges on economic development.
		CO2: Students analyze the factors affecting the long run economic growth, both from a positive and negative sense.
		CO3: Students understand various theories of growth and development and analyze the problems of the developing world.
		CO4: Students differentiate growth and development and measures growth and development by using different techniques like HDI, HPI etc.
		CO5: Students develop attitudes towards the problems of underdevelopment and evaluate different policies and theories to overcome the issues of underdevelopment.
		CO6: Students analyse and evaluate Neoclassical growth models.
		CO7: Students identify the problems of poverty and inequality and analyze the measures
		CO8: Students internalize the concept of Sustainable development, identify various environmental issues and appreciate the values of sustainable development.
	ECO6 B18 Urban economics	CO1: Students understand the fundamental terminologies of urban economics
		CO2: Students Identify the problems associated with urbanisation
		CO3: Understand the theories and analytical tools in urban economics
		CO4: Evaluate the policy initiatives developed in urban India



  
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Aswathi, K.T.  




**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**  
**INTERNAL QUALITY ASSURANCE CELL**

**POs, PSOs & COs**

**BA Political Science**

**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**  
**Affiliated to University of Calicut, Recognized by Govt. of Kerala**  
**Recognized Under Section 2(f) of the UGC Act, 1956**

Syllabus Year	2019
Department	Political Science
Programme	BA Political Science

**PROGRAMME OUTCOME(POs):**

SLNo	Programme Outcome
PO1	Understanding of political institutions and systems. students will acquire in-depth knowledge of political institutions at local, national and international levels and be able to assess their roles and functions critically
PO2	Comprehensive understanding of political theories and ideologies and applying this knowledge to analyze political phenomena and events
PO3	It enables students to evaluate complex political issues, policies and challenges from multiple perspectives and propose a well reasoned solutions
PO4	Students will acquire research methodologies and techniques, enabling them to conduct political research, analyse data and produce scholarly papers and reports
PO5	Students will be encouraged to develop a sense of social responsibility and ethical considerations
PO6	Preparation for advanced studies and career, this programme will provide strong foundation for further careers in various fields, such as law and public policy

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

SLNo	Programme Specific Outcome
PSO1	Students will be able to analyse and evaluate public policies, its implementation and its impact
PSO2	Graduates will be equipped to analyse and advocate for human rights and social justice issues
PSO3	Students will be well-versed in constitutional principles, the rule of law and functioning of political institutions
PSO4	Students will develop skills in comparative political analysis, to compare and contrast different political systems, institutions and governance.
PSO5	Students will be encouraged to actively participate in community engagement and political activism



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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	POL1B01 FOUNDATIONS OF POLITICAL SCIENCE	CO1:This course introduces the fundamentals of Political Science, its history and approaches,
		CO2:This course aims to introduce certain key aspects of conceptual analysis in Political Science
		CO3:This course aims to get the skills required to engage in debates surrounding the application of the concepts
Semester 2	POL2B02 CONCEPTS OF POLITICAL SCIENCE	CO1:Students will develop clear understanding of some of the important ideas in the discipline
		CO2:It will enable the students to understand and analyse the polity and society in which they live
Semester 3	POL3B01 INDIAN GOVERNMENT AND POLITICS	CO1:This course will help students to understand the constitutional development in India and evolution of modern governmental structures
		CO2:This course will help to understand salient features of Indian Constitution, Union Government State governments
		CO3:A detailed Study of the Indian judicial system, its functioning and recent trends is also included in this course
	POL3B02 WORLD CONSTITUTIONS COMPARATIVE ANALYSIS	CO1:This course is to develop awareness and familiarize students about various types of political system and constitution of different countries.
		CO2:This course enables students to have knowledge on constitutionalism, federal and parliamentary form of government
		CO3:This course will help to understand role of executive, legislature, and judiciary in major states in the world.
Semester 4	POL4B01 ANCIENT AND MEDIEVAL POLITICAL THOUGHT	CO1:This course will create in-depth knowledge about modern and medieval political thought among students.
		CO2:The course will help to understand key concepts - state, government,law, justice, etc,- of western and Indian political tradition.
	POL4B02 ISSUES IN INDIAN POLITICS	CO1:This course will help to understand socio-economic factors like caste, religion and class in Indian Politics.
		CO2:This course enables students to analyse trends in Indian electoral politics, various party systems,role and support base of national and regional parties and their policies and programmes
		CO3:This course will help to get indepth understanding on secularism, communalism and role of marginalised sections



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Semester 5	POL5B01 RESEARCH METHODOLOGY	CO1: This course will help the students to various research methods used in social science research
		CO2: The course is expected to develop comprehensive knowledge and necessary skills for conducting research
	POL5B02 MODERN WESTERN POLITICAL THOUGHT	CO1: Students will be able to identify important streams in modern western political thought
		CO2: It provides a fairly comprehensive overview of the major western political thinkers and their ideas.
		CO3: The course as a whole is meant to provide a sense of the broad streams of modern western political tradition while encouraging a specific knowledge of individual thinkers.
	POL5D02 HUMAN RIGHTS IN INDIA	CO1: The course can develop in-depth understanding of the concept of human rights and the different approaches to it.
		CO2: Students can know the major international instruments and institutions for the protection of human rights.
		CO3: Students are expected to know about major challenges to human rights and important laws for its protection in India by the end of the course.
	POL5B03 STATE, SOCIETY AND POLITICAL PROCESS IN KERALA	CO1: The course intends to create an in-depth understanding of modern Kerala, its society, polity and economy
		CO2: It will provide a detailed account of the evolution of socio-political processes, social and political movements, governmental actions, etc. that led to the formation of present day Kerala.
		CO3: The course also gives a comprehensive analysis of Kerala economy, its contemporary challenges and the problems faced by some of the important sections of the state.
	POL5B04 INTRODUCTION TO INTERNATIONAL POLITICS	CO1: This course aims to equip students with the basic intellectual tools for understanding International Relations.
CO2: Students can evaluate some of the most important theoretical approaches in international relations		
CO3: The Course will enhance the knowledge on different concepts in International Relations such as power diplomacy and foreign policy		
Semester 6	POL6B01 MODERN INDIAN POLITICAL THOUGHT	CO1: The course can provide insights into the different traditions of Indian political thinking
		CO2: This course can equip students to familiarise with ideas of modern political thinkers in India
		CO3: This course will help students to develop their own notions of socio-political issues.



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Semester 6	POL6B02 INDIA'S FOREIGN POLICY	CO1: The course can build clear idea about the fundamentals of India's foreign policy
		CO2: This course will familiarise students with the basic principles, objectives, structures and processes of India's foreign policy formulation.
		CO3: It gives deep knowledge on India's engagements with international institutions, regions and states, as well as some of the major issues and challenges of foreign policy
	POL6B03 ISSUES IN INTERNATIONAL POLITICS	CO1: The course will familiarise students with the main issues and concerns of the contemporary international order.
		CO2: This course will give a range of themes in international politics with a view to developing critical insights on contemporary questions.
	POL6B04 INTRODUCTION TO PUBLIC ADMINISTRATION	CO1: The students can able to get an introduction to the discipline of Public Administration with a special focus on contemporary administrative developments.
		CO2: The course will help to explore to some of the systems and structures in public administration.
		CO3: Students will familiarise with classical and contemporary administrative theories
		CO4: The students can Understand comprehensive understanding on major elements of public administration
	POL6B061 ELECTIVE - DEVELOPMENT ADMINISTRATION	CO1: The course will help to familiarise students about various ideas related to development administration
		CO2: The course also includes discussions on theoretical approaches and various issues in the field.
	POL6B15(Pr) PROJECT WORK	CO1: Students will acquire research methodologies and techniques, enabling them to conduct social science research,
		CO2: Students will acquire practical knowledge on research methodology
		CO3: Students can analyze data and produce scholarly papers and reports



  
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**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**

**INTERNAL QUALITY ASSURANCE CELL**

**POs, PSOs & COs**

**BSc Botany**

**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**  
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Syllabus Year	2019
Department	Botany
Programme	BSc Botany

**PROGRAMME OUTCOME(POs):**

Sl.No	Programme Outcome
PO1	<b>Critical Thinking:</b> Take informed actions after identifying the assumptions that frame student thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at their ideas and decisions (intellectual, organizational, and personal) from different perspectives.
PO2	<b>Problem-Solving:</b> Understand and solve problems of relevance to society to meet the specified needs using the knowledge, skills, and attitudes acquired.
PO3	<b>Effective Communication:</b> Speak, read, write, and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media, and
PO4	<b>Effective Citizenship:</b> Demonstrate empathetic social concern, equity-centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
PO5	<b>Environment and Sustainability:</b> Understand the issues of environmental contexts and sustainable development.
PO6	<b>Self-directed and Life-long Learning:</b> Acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological change

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

Sl.No	Programme Specific Outcome
PSO1	<b>Scope and importance of Botany:</b> Understand the scope and importance of Botany in every field especially in dealing with societal and environmental issues, agriculture, ethics, and healthcare.
PSO2	<b>Environmental concern:</b> Understand the and the role of plants in sustaining life on Earth and the interrelationship between human beings and nature, create awareness of natural resources and their importance in sustainable development, analyze the importance of biodiversity conservation, estimate biodiversity loss, and develop conservation strategies.
PSO3	<b>Scientific temper:</b> Develop scientific temper and undertake scientific projects.
PSO4	<b>Practical applications:</b> Identify and classify plants according to the principles of plant systematics, apply techniques like plant propagation methods, organic farming, mushroom cultivation, preparation of biofertilizers, biopesticides, etc. in daily life.
PSO5	<b>Awareness of life processes:</b> Understand plant life processes, biomolecules and basic hereditary and evolutionary principles.



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**COURSE OUTCOME(COs):**

Semester	Course Name	Course Outcome
Semester 1	<b>BOT1B01T</b> Angiosperm Anatomy, Reproductive Botany & Palynology	CO1: Demonstrate the ability to differentiate plant organs by observing anatomical features.
		CO2: Understand the non-living inclusions of plants and their significance.
		CO3: Differentiate tissues and their functions.
		CO4: Illustrate primary and secondary (normal and anomalous) structures of plant organs
		CO5: Explain various developmental details of angiosperms.
		CO6: Realize the significance and applications of palynology
Semester 2	<b>BOT2B02T</b> Microbiology, Mycology, Lichenology & Plant Pathology	CO1: Understand basics of microbial life and their economic importance.
		CO2: Develop general awareness on the diversity of microorganisms, fungi and lichens
		CO3: Analyze the ecological role played by bacteria, fungi and lichens
		CO4: Identify plant diseases and find out control measures.
		CO5: Realize the significance of plant diseases as far as crop production is concerned.
Semester 3	<b>BOT3B03T</b> Phycology, Bryology & Pteridology	CO1: Appreciate the diversity and evolutionary significance of lower plant groups.
		CO2: Classify algae, bryophytes and pteridophytes.
		CO3: Understand the economic and ecological importance of lower plant groups.
Semester 4	<b>BOT4B04T</b> Methodology and Perspectives in Plant Science	CO1: Develop scientific temper and problem-solving skills.
		CO2: Undertake scientific projects and prepare project reports
		CO3: Summarize, organize and display quantitative data and derive conclusions
		CO4: Prepare permanent slides, applying the histochemical techniques
Semester 5	<b>BOT5B06T</b> Gymnosperms, Palaeobotany, Phytogeography & Evolution	CO1: Understand the role of gymnosperms as a connecting link between pteridophytes and angiosperms
		CO2: Appreciate the process of organic evolution.
		CO3: Realize the importance of fossil study
		CO4: Understand the climatic conditions of the past and realize the changes happened
		CO5: Recognize the phytogeographic zones of India.
	<b>BOT5B07T</b> Angiosperm Morphology & Systematics	CO1: Appreciate the diverse morphology of angiosperms.
		CO2: Identify and classify plants based on taxonomic principles.
		CO3: Make scientific illustrations of vegetative and reproductive structures of plants.
		CO4: Develop the skill of scientific imaging of plants.
		CO5: Realize the importance of field study.
		CO6: Change their attitude towards over-exploitation of rare/endemic plants.



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Semester 5	BOT5B08T Tissue culture, Horticulture, Economic Botany & Ethnobotany	CO1: Critically evaluate the advantages of tissue culture and horticulture over conventional methods of propagation.
		CO2: Apply various horticultural practices in the field.
		CO3: Experiment on the subject and try to become entrepreneurs.
	BOT5B09T Cell Biology & Biochemistry	CO4: Identify the economically important plants.
		CO1: Appreciate the ultra-structure of a plant cell.
		CO2: Enumerate the functions of each cell organelle.
BOT5D02T Applied Botany	CO3: Draw and explain the structure of biomolecules.	
	CO1: Develop general awareness on applied aspects of Plant science.	
	CO2: Realize the role of plants in everyday life	
	CO3: Apply vegetative propagation methods in everyday life.	
Semester 6	BOT6B10T Genetics & Plant Breeding	CO4: Realize the economic importance of plants
		CO1: Appreciate the facts behind heredity and variations.
		CO2: Understand the basic principles of inheritance.
		CO3: Solve problems related to classical genetics.
		CO4: Predict the pattern of inheritance.
		CO5: Understand various plant breeding techniques.
	BOT6B11T Biotechnology, Molecular Biology & Bioinformatics	CO6: Realize the role of plant breeding in increasing crop productivity.
		CO1: Analyze the role of biotechnology in daily life.
		CO2: Understand the basic aspects of bioinformatics.
	BOT6B12T Plant Physiology & Metabolism	CO3: Explain the concepts in molecular biology.
		CO1: Identify the physiological responses of plants.
		CO2: Analyze the role of external factors in controlling the physiology of plants.
		CO3: Explain the metabolic processes taking place in each cell.
	BOT6B13T Environmental Science	CO4: Appreciate the energy fixing and energy releasing processes taking place in cells.
		CO1: Realize the importance of ecological studies.
		CO2: Develop environmental concern in all their actions and practise Reduce, Reuse and Recycle.
		CO3: Try to reduce pollution and environmental hazards and change their attitude towards throwing away plastic wastes.
		CO4: Spread awareness of the need of conservation of biodiversity and natural resources.
BOT6B14T(E3) Genetics and Crop Improvement	CO5: Analyze the reasons for climate change and find out ways to combat it.	
	CO1: Understand various techniques employed for increasing crop productivity.	
	CO2: Identify diseases affecting crop plants.	
		CO3: Attain general awareness on various crop research stations of the country.



  
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**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**  
**INTERNAL QUALITY ASSURANCE CELL**

**POs, PSOs & COs**

**BSc Chemistry**

**(Complementary)**



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Syllabus Year	2019
Department	Chemistry
Programme	BSc. Chemistry (complementary)

**PROGRAMME OUTCOME(POs):**

Sl.No	Programme Outcome
PO1	To understand basic facts and concepts in chemistry.
PO2	To appreciate the achievements in chemistry and to know the role of chemistry in nature and in society.
PO3	To summarize with the emerging areas of chemistry and their applications in various spheres of chemical sciences and to apprise the students of its relevance in future studies.
PO4	To develop skills in the proper handling of instruments and chemicals.
PO5	To develop an eco-friendly attitude by creating a sense of environmental awareness
PO6	To be conversant with the applications of chemistry in day-to-day life


**PROGRAMME SPECIFIC OUTCOME(PSOs):**

Sl.No	Programme Specific Outcome
PSO1	To develop proficiency in quantitative and qualitative analysis
PSO2	Expertise in organic preparation and determination of physical constants.
PSO3	To provide the students with a thorough knowledge of colloidal chemistry, nanochemistry, and the importance of chemistry in daily life. It also provides a basic idea related to separation and spectral techniques. It also imparts the idea of green processes with special emphasis on the environment
PSO5	To develop proficiency in quantitative and qualitative analysis and expertise in organic preparation and determination of physical constants.

**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	CHE1C01 GENERAL CHEMISTRY	CO1: To understand and apply the theories of quantitative and qualitative analysis
		CO2: To understand the theories of chemical bonding
		CO3: To appreciate the uses of radioactive isotopes
		CO4: To understand the importance of metals in biological systems
Semester 2	CHE2C02 PHYSICAL CHEMISTRY	CO1: To understand the importance of free energy in defining spontaneity
		CO2: To realize the theories of different states of matter and their implication.
		CO3: To understand the basic principles of electrochemistry



  
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Semester 3	CHE3C03 ORGANIC CHEMISTRY	CO1: To understand the basic concepts involved in reaction intermediates
		CO2: To realise the importance of optical activity and chirality
		CO3: To appreciate the importance of functional groups and aromatic stability
		CO4: To understand the basic structure and importance of carbohydrates, nucleic acids, alkaloids, and terpenes
Semester 4	CHE4C04 PHYSICAL AND APPLIED CHEMISTRY	CO1: To understand the basic concepts behind colloidal state and nanochemistry
		CO2: To understand the importance of green chemistry and pollution prevention
		CO3: To appreciate the importance of different separation methods and spectral techniques
		CO4: To understand the extent of chemistry in daily life.
	CHE4C05(P) CHEMISTRY PRACTICAL	CO1: To understand the basic concepts of inter group separation
		CO2: To enable the students to develop analytically and preparation skills. To enable the students to develop analytical and preparation skills.



  
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**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**  
**INTERNAL QUALITY ASSURANCE CELL**

**POs, PSOs & COs**

**BSc Zoology**

**(Complementary)**

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Syllabus Year	2019
Department	Zoology
Programme	B.Sc Zoology(Complementary)

**PROGRAMME OUTCOME(POs):**

Sl.No	Programme Outcome
PO1	<b>Critical Thinking:</b> Take informed actions after identifying the assumptions that frame student thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at their ideas and decisions (intellectual, organizational, and personal) from different perspectives.
PO2	<b>Problem-Solving:</b> Understand and solve problems of relevance to society to meet the specified needs using the knowledge, skills, and attitudes acquired.
PO3	<b>Effective Communication:</b> Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.
PO4	<b>Effective Citizenship:</b> Demonstrate empathetic social concern and equity-centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
PO5	<b>Environment and Sustainability:</b> Understand the issues of environmental contexts and sustainable development.
PO6	<b>Self-directed and Life-long Learning:</b> Acquire the ability to engage in independent and life - long learning in the broadest context of socio-technological change.

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

Sl.No	Programme Specific Outcome
PSO1	Understand the biological diversity and grades of the complexity of various animal forms through their systematic classification and process of organic evolution.
PSO2	Understand the roles of plants, animals, and microbes in the sustainability of the environment and their interaction among themselves and the deterioration of the environment due to anthropogenic activities.
PSO3	Understand the concepts and principles of biochemistry, immunology, physiology, ethology, endocrinology, developmental biology, cell biology, genetics, molecular biology and microbiology and develop technical skills in biotechnology, bioinformatics, and biostatistics.
PSO4	Perform laboratory procedures as per standard protocols in the areas of animal diversity, systematics, cell biology, genetics, biochemistry, molecular biology, microbiology, physiology, immunology, developmental biology, environmental biology, ethology, evolution and science methodology.



  
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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	BOT1C01T ANGIOSPERM ANATOMY AND MICROTECHNIQUE	CO1: Explain the types, structure and functions of plant tissues.
		CO2: Explain primary and secondary (normal and anomalous) structures of plant organs.
		CO3: Identify plant organs by observing anatomical features.
		CO4: Illustrate primary and secondary (normal and anomalous) structures of plant organs
		CO5: Apply the histochemical techniques in laboratory works.
Semester 2	BOT2C02T CRYPTOGAMS, GYMNOSPERMS AND PLANT PATHOLOGY	CO1: Analyze the role of the lower plants in the process of evolution.
		CO2: Explain the ecological significance of lower plants.
		CO3: Identify plant diseases and take remedial measures to control them.
Semester 3	BOT3C03T MORPHOLOGY, SYSTEMATIC BOTANY, ECONOMIC BOTANY, PLANT BREEDING AND HORTICULTURE	CO1: Appreciate the diverse morphology of angiosperms.
		CO2: Identify and classify plants based on taxonomic principles
		CO3: Make scientific illustrations of vegetative and reproductive structures of plants
		CO4: Identify the economically important plants
		CO5: Understand the basic principles of plant breeding
		CO6: Apply various horticultural practices in the field
Semester 4	BOT4C04T PLANT PHYSIOLOGY, ECOLOGY AND GENETICS	CO1: Explain the physiological processes in plants.
		CO2: Understand the basic principles of heredity and variation.
		CO3: Realize the importance of ecology.
		CO4: Spread awareness of the necessity of conservation of biodiversity and natural resources
		CO5: Solve problems related to classical genetics



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**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**

**INTERNAL QUALITY ASSURANCE CELL**

**POs, PSOs & COs**

**BSc Mathematics**

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Syllabus Year	2020
Department	Mathematics
Programme	BSc Mathematics

**PROGRAMME OUTCOME(POs):**

Sl.No	Programme Outcome
PO1	<b>Disciplinary knowledge :</b> (i)The capability of demonstrating comprehensive knowledge of mathematics and understanding of one or more disciplines that form a part of an undergraduate program of study.
PO2	<b>Communications skills :</b> (i) Ability to communicate various concepts of mathematics effectively using examples and their geometrical visualizations (ii) Ability to use mathematics as a precise language of communication in other branches of human knowledge. (iii) Ability to show the importance of mathematics as a precursor to various scientific developments since the beginning of civilization.
PO3	<b>Critical thinking:</b> (i)Ability to employ critical thinking in understanding the concepts in every area of mathematics.
PO4	<b>Analytical reasoning :</b> (i)Ability to analyze the results and apply them to various problems appearing in different branches of mathematics.
PO5	<b>Problem-solving:</b> (i) Capability to solve problems using concepts of linear algebra. (ii) Capability to solve various models such as growth and decay models, radioactive decay models, LCR circuits, and population models using techniques of differential equations. (iii) Ability to solve linear systems of equations, linear programming problems, and network flow problems. (iv) Ability to provide new solutions using the domain knowledge of mathematics acquired during this program.
PO6	<b>Research-related skills :</b> (i) Capability for inquiring about appropriate questions relating to the concepts in various fields of mathematics. (ii) To know about the advances in various branches of mathematics.
PO7	<b>Information/digital literacy :</b> (i)Capability to use appropriate software to solve a system of equations and differential equations
PO8	<b>Self-directed learning :</b> (i)Ability to work independently and do an in-depth study of various notions of mathematics.



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PO9	<b>Lifelong learning :</b> (i)Ability to think, acquire knowledge and skills through logical reasoning, and inculcate the habit of self-learning.
PO10	<b>Application skills :</b> (i)Ability to apply the acquired knowledge in all aspects.
PO11	<b>Moral and ethical awareness/reasoning :</b> (i)Ability to identify unethical behavior such as fabrication, falsification, or misrepresentation of data and adopting objective, unbiased, and truthful actions in all aspects

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

Sl.No	Programme Specific Outcome
PSO1	Think in a critical manner.
PSO2	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
PSO3	Formulate and develop mathematical arguments in a logical manner.
PSO4	Acquire good knowledge and understanding in advanced areas of mathematics and statistics, chosen by the student from the given courses

**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester I	<b>MTS1B01 BASIC LOGIC AND NUMBER THEORY</b>	<b>CO1:</b> Prove results involving divisibility, the greatest common divisor, least common multiple, and a few applications.
		<b>CO2:</b> Understand the theory and method of solutions of LDE.
		<b>CO3:</b> Solve linear congruent equations.
		<b>CO4:</b> Learn three classical theorems viz. Wilson's theorem, Fermat's little theorem, and Euler's theorem, and a few important consequences.
	<b>MTS1C01 MATHEMATICS I</b>	<b>CO1:</b> The fundamental ideas of limit, continuity, and differentiability
		<b>CO2:</b> Increasing and decreasing functions, local maxima, minima, concavity, and inflection points
		<b>CO3:</b> How to apply these ideas in drawing the graphs of functions
		<b>CO4:</b> Find the solution to maximum-minimum problems using the idea of derivatives
		<b>CO5:</b> The Mean Value Theorem and L'Hospital rule
		<b>CO6:</b> To solve the area problem, the problem of finding the arc length of a plane curve, and the volume of solids.
		<b>CO7:</b> Average values and the Mean Value Theorem for integrals



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Semester 2	MTS2B02 CALCULUS OF SINGLE VARIABLE-1	CO1: Learn sketching of curves
		CO2: Solve optimization problems
		CO3: Solve definite integrals
		CO4: Solve scientific problems
	MTS2C02 MATHEMATICS 2	CO1: Represent points in polar coordinates and convert from one system to another
		CO2: Do the graphing in polar coordinates
		CO3: Find the derivatives and anti-derivatives of hyperbolic and inverse hyperbolic functions
		CO4: Find the arc length and surface area of revolution using definite integrals
		CO5: Find the improper integrals
		CO6: Find the limit of sequences
		CO7: Find the integral using the trapezoidal rule and Simpson's rule
		CO8: Find the convergence and divergence of series
		CO9: Solve a system of linear equations using matrix theory
CO10: Find the rank and inverse of a matrix using elementary row transformations		
CO11: Find the eigenvalues and the corresponding eigenvectors of a matrix		
CO12: Check whether a matrix is diagonalizable or not		
Semester 3	MTS3B03 CALCULUS OF SINGLE VARIABLE-2	CO1: Learn convergent series
		CO2: Learn coordinate systems
		CO3: Handle vectors and geometry
	MTS3C03 MATHEMATICS 3	CO1: Work on the idea of limit, continuity, and derivative of vector-valued functions
		CO2: Use partial derivatives to find the tangent plane and normal line to a point on a surface
		CO3: Understand the properties and applications of the gradient of a function
		CO4: Apply double integral and triple integral to find the mass of a lamina, center of mass, etc.
		CO5: Evaluate curl and divergence of a vector field
		CO6: Understand line integral, surface integral, and triple integral
		CO7: Learn the three important theorems: Green's theorem, Gauss's theorem, and Stokes's theorem and their applications
		CO8: Learn about harmonic functions and their relation with analytic functions
		CO9: Understand the definition and evaluation of complex integral
		CO10: Learn the fundamental results on contour integration such as Cauchy-Goursat Theorem
CO11: Understand Cauchy's integral formula and apply it to derive Liouville's theorem and the Fundamental Theorem of Algebra		
CO12: Derive the Fundamental Theorem of Algebra		



  
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Semester 4	MTS4B04 LINEAR ALGEBRA	CO1: Solve eigen value problems
		CO2: Test for the invertibility of a square matrix
		CO3: Understand diagonalizable matrices
		CO4: Learn the applications of fundamental linear algebra
	MTS4C04 MATHEMATICS 4	CO1: They learn the major classifications of differential equations.
		CO2: They learn the conditions for the existence of solutions of first and second-order Initial Value Problems.
		CO3: They learn how to formulate a mathematical model of a physical process.
		CO4: They learn to solve the first-order differential equations that are linear, separable, exact, and Bernoulli's forms.
		CO5: They learn about the numerical method of solving a differential equation using Euler's method.
		CO6: They become familiar with the theory and method of solving second-order linear homogeneous and non-homogeneous equations with constant coefficients.
		CO7: They learn the method of reduction of order to find a the second solution of the linear second-order equation by reducing to a linear first-order equation.
		CO8: They learn the method of solution of Cauchy-Euler equations.
CO9: They learn about linear models and Boundary value problems.		
CO10: They learn to solve a differential equation using the Laplace method, which is useful for dealing with engineering problems.		
Semester 5	MTS5B05 ABSTRACT ALGEBRA	CO1: Learn fundamentals of group theory
		CO2: Learn permutation groups
		CO3: Learn cyclic groups
		CO4: Understand isomorphisms & homomorphism
		CO5: Learn Ring theory
	MTS5B06 BASIC ANALYSIS	CO1: Learn properties of the real number system
		CO2: Learn about sequences and applications.
		CO3: Understanding some basic topological properties.
		CO4: Understanding topological concepts of open and closed sets
		CO5: Learn algebraic, geometric, and topological concepts of complex number systems
		CO6: Study on complex functions.
	MTS5B07 NUMERICAL ANALYSIS	CO1: Understanding different numerical methods
		CO2: Understand the concept of interpolation
		CO3: Understand techniques for numerical integration and differentiation.
		CO4: Find out numerical approximations



  
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Semester 5	MTS5B08 LINEAR PROGRAMMING	CO1: Solve linear programming problems geometrically
		CO2: Solve transportation and assignment problems
		CO3: Understand the Game theory
	MTS5B09 INTRODUCTION TO GEOMETRY & THEORY OF EQUATION	CO1: Understanding the basics of Conic sections
		CO2: Understanding the Kleinian way of Euclidean Geometry
CO3: Understand the fundamental theorem of Affine geometry		
CO4: Learn to solve polynomials upto degree 4		
Semester 6	MTS6B10 REAL ANALYSIS	CO1: Learn about continuous functions
		CO2: Realize the difference between continuity and uniform continuity
		CO3: Understanding Reimann Integrability
		CO4: Understand fundamental theorems of calculus
		CO5: Practicing change of variable formula.
		CO6: Understanding uniform convergence and divergence of sequences
	MTS6B11 COMPLEX ANALYSIS	CO1: Learn about Analytic functions.
		CO2: Learn about Harmonic functions
		CO3: Understanding complex power series
	MTS6B12 CALCULUS OF MULTIVARIABLE	CO1: Learn the limit and continuity of multivariable functions.
		CO2: Calculate maximum and minimum of multivariable functions.
		CO3: Learn Lagrange multiplier method of optimization of problems
		CO4: Understanding line integral and surface integral and their applications
	MTS6B13 DIFFERENTIAL EQUATIONS	CO1: Learn the ODE and the IVP
CO2: Learn the linear and nonlinear DE,s		
CO3: Solving second order homogeneous and nonhomogeneous DE,s		
CO4: Learn method of solving PDE,s		
CO5: Learn method of separation of variables		
MTS6B14 GRAPH THEORY	CO1: Analyze properties of Graphs.	
	CO2: Understanding trees and their properties	
	CO3: Analyze planar graphs	



  
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**POs, PSOs & COs**

**BSc Statistics**

**(Complementary)**

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Syllabus Year	2019
Department	Mathematics
Programme	BSc. Statistics (Complementary)


**PROGRAMME OUTCOME(POs):**

SL.No	Programme Outcome
PO1	<b>Mathematical Foundation:</b> Demonstrate a strong understanding of mathematical concepts and their applications in statistics.
PO2	<b>Statistical Analysis:</b> Apply various statistical techniques to analyze and interpret data, drawing valid conclusions and making informed decisions.
PO3	<b>Data Management:</b> Collect, organize, and preprocess data effectively, demonstrating proficiency in using statistical software tools.
PO4	<b>Probability and Inference:</b> Understand and apply principles of probability theory and statistical inference to draw conclusions from sample data.
PO5	<b>Problem Solving:</b> Identify and address real-world problems using statistical methods, offering data-driven solutions.
PO6	<b>Interdisciplinary Skills:</b> Apply statistical knowledge in interdisciplinary contexts, collaborating with professionals from diverse fields.

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

SL.No	Programme Specific Outcome
PSO1	<b>Data Visualization and Interpretation:</b> Visualize data effectively using appropriate graphical tools and interpret visual representations for insightful analysis.
PSO2	<b>Statistical Software Proficiency:</b> Demonstrate competence in using statistical software packages for data analysis, modeling, and simulations.
PSO3	<b>Experimental Design:</b> Design experiments and surveys, considering factors like randomization, control, and replication, to ensure valid conclusions.
PSO4	<b>Regression Analysis:</b> Apply regression techniques to model relationships between variables and make predictions based on statistical models.
PSO5	<b>Time Series Analysis:</b> Analyze time-dependent data using time series techniques for forecasting and trend identification.
PSO6	<b>Statistical Consulting:</b> Provide statistical consultation to individuals or organizations, guiding them in data analysis and interpretation.



  
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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	STA 1C 01 INTRODUCTORY STATISTICS	CO1: Gain a foundational understanding of key statistical concepts such as mean, median, mode, variance, standard deviation, and probability.
		CO2: Learn techniques for collecting data, organize data using tables and graphs, and interpret different data representations.
		CO3: Calculate and interpret measures of central tendency, variability, and shape of data distributions.
		CO4: Understand the concepts of correlation and linear regression, perform regression analysis, and interpret the results in terms of real-world relationships.
Semester 2	STA 2C 02 PROBABILITY THEORY	CO1: Gain a solid foundation in basic probability concepts, including sample spaces, events, and axiomatic definitions of probability.
		CO2: Apply the laws of probability, including the addition and multiplication rules, to solve problems involving multiple events.
		CO3: Define and comprehend the concept of random variables, distinguish between discrete and continuous random variables, and calculate probabilities using probability mass and density functions.
		CO4: Understand joint and conditional probability, calculate probabilities of intersections and unions of events, and apply the concept to real-world scenarios.
Semester 3	STA 3C 03 PROBABILITY DISTRIBUTIONS AND SAMPLING THEORY	CO1: Describe and analyze discrete probability distributions such as binomial, Poisson, and hypergeometric distributions, calculating probabilities and expected values.
		CO2: Explain properties of continuous probability distributions such as normal and exponential distributions, and compute probabilities using standard normal tables.
		CO3: Understand and apply the Central Limit Theorem to describe the distribution of sample means, and use it to estimate population parameters.
		CO4: Differentiate between various sampling methods (simple random, stratified, systematic, etc.) and calculate sample sizes to ensure representative and efficient samples.
		CO5: Evaluate the effectiveness of different probability sampling techniques and their applications in real-world scenarios.
Semester 4	STA 4C 04 STATISTICAL INFERENCE AND QUALITY CONTROL	CO1: Comprehend the fundamental concepts of statistical inference, including population, sample, parameter, estimator, and hypothesis testing.
		CO2: Describe and apply various probability distributions, such as normal, binomial, and Poisson distributions, in the context of statistical inference.



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Semester 4	STA 4C 04 STATISTICAL INFERENCE AND QUALITY CONTROL	CO3: Calculate and interpret confidence intervals for population parameters, and understand the concept of margin of error.
		CO4: Formulate null and alternative hypotheses, perform hypothesis tests for means, proportions, and variances, and make decisions based on p-values and significance levels.
		CO5: Understand the principles and importance of quality control in various industries, including statistical process control and acceptance sampling.
		CO6: Construct and interpret control charts to monitor the stability and quality of a process over time.
		CO7: Apply statistical inference and quality control concepts to real-world scenarios, such as manufacturing, healthcare, and business processes.



  
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**BSc Physics**

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Syllabus Year	2020
Department	Physics
Programme	BSc. Physics

**PROGRAMME OUTCOME(POs):**

Sl.No	Programme Outcome
PO1	<b>Understanding of Core Concepts:</b> Students should have a comprehensive understanding of fundamental concepts in classical mechanics, electromagnetism, quantum mechanics, thermodynamics, and other areas of physics.
PO2	<b>Problem-Solving Skills:</b> They should be able to apply theoretical knowledge to solve complex physics problems, both in theoretical and experimental settings
PO3	<b>Practical Skills:</b> Students are expected to develop practical skills in conducting experiments, analyzing data, and interpreting results accurately.
PO4	<b>Critical Thinking:</b> The program aims to foster critical thinking and analytical skills, allowing students to approach and analyze scientific problems systematically
PO5	<b>Communication Skills:</b> Effective communication skills, both written and oral, are emphasized to enable students to convey scientific concepts and research findings clearly
PO6	The program may encourage students to explore the interdisciplinary nature of physics, how it relates to other scientific fields and real-world applications.

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

SLNo	Programme Specific Outcome
PSO1	Understand the basic concepts of fundamentals of mechanics, properties of matter and electrodynamics
PSO2	Understand the theoretical basis of quantum mechanics, relativistic physics, nuclear physics, optics, spectroscopy, solid state physics, astrophysics, statistical physics, photonics and thermodynamics
PSO3	Understand and apply the concepts of electronics in the designing of different analog and digital circuits
PSO4	Understand the basics of computer programming and numerical analysis
PSO5	Apply and verify theoretical concepts through laboratory experiments



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**COURSE OUTCOME(COs):**


Semester	Course Code & Name	Course Outcome
Semester 1	PHY1B01 MECHANICS I	CO1: Understand and apply the basic concepts of Newtonian Mechanics to Physical Systems
		CO2: Understand and apply the basic idea of work-energy theorem to physical systems
		CO3: Understand and apply the rotational dynamics of rigid bodies
	PHY1C01 PROPERTIES OF MATTER AND THERMODYNAMICS	CO1: Understand the basic principles of elasticity
		CO2: Understand the concepts of surface tension
		CO3: Understand the aspects of viscosity
CO4: Understand the basic principles of thermodynamics		
Semester 2	PHY2B02 MECHANICS II	CO1: Understand the features of non-inertial systems and fictitious forces
		CO2: Understand and analyze the features of central forces with respect to planetary forces
		CO3: Understand the basic ideas of Harmonic Oscillations
		CO4: Understand the analyze the basic concepts of wave motion
	PHY2C02 OPTICS, LASER & ELECTRONICS	CO1: Understand the basic concepts of interference and diffraction
		CO2: Understand the concepts of polarization
		CO3: Understand the fundamentals of electronics
		CO4: Understand the important principles of laser physics
Semester 3	PHY3B03 ELECTRODYNAMICS I	CO1: Understand and apply the fundamentals of vector calculus
		CO2: Understand and analyze the electrostatic properties of physical systems
		CO3: Understand the mechanism of electric field in matter.
		CO4: Understand and analyze the magnetic properties of physical systems
		CO5: Understand the mechanism of magnetic field in matter.
	PHY3C03 MECHANICS, RELATIVITY, WAVES AND OSCILLATIONS	CO1: Understand the basic ideas of frames of reference and the principles of conservation of energy and momentum
		CO2: Understand the concepts of relativity
		CO3: Understand the basic ideas of oscillations and waves
Semester 4	PHY4B04 ELECTRODYNAMICS II	CO4: Understand the basic ideas of modern physics
		CO1: Understand the basic concepts of electrodynamics
		CO2: Understand and analyze the properties of electromagnetic waves
		CO3: Understand the behavior of transient currents.
		CO4: Understand the basic aspects of ac circuits
CO5: Understand and apply electrical network theorems		



  
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Semester 4	PHY4C04 ELECTRICITY, MAGNETISM AND NUCLEAR PHYSICS	CO1: Understand the basic ideas of static and current electricity
		CO2: Understand the concepts of magnetism
		CO3: Describe the fundamental concepts of nuclear physics
		CO4: Understand the basic ideas of cosmic rays and elementary particles
	PHY4B05 PRACTICAL I	CO1: Apply and illustrate the concepts of properties of matter through experiments
		CO2: Apply and illustrate the concepts of electricity and magnetism through experiments
		CO3: Apply and illustrate the concepts of optics through experiments
		CO4: Apply and illustrate the principles of electronics through experiments
	PHY4C05 PHYSICS PRACTICALS I	CO1: Apply and illustrate the concepts of properties of matter through experiments
		CO2: Apply and illustrate the concepts of electricity and magnetism through experiments
		CO3: Apply and illustrate the concepts of optics through experiments
		CO3: Apply and illustrate the principles of electronics through experiments
Semester 5	PHY5 B06 COMPUTATIONAL PHYSICS	CO1: Understand the Basics of Python programming
		CO2: Understand the applications of Python modules
		CO3: Understand the basic techniques of numerical analysis
		CO4: Understand and apply computational techniques to physical problems
	PHY5 B07 QUANTUM MECHANICS	CO1: Understand the particle properties of electromagnetic radiation
		CO2: Describe Rutherford – Bohr model of the atom
		CO3: Understand the wavelike properties of particles
		CO4: Understand and apply the Schrödinger equation to simple physical systems
		CO5: Apply the principles of wave mechanics to the Hydrogen atom
	PHY5 B08 OPTICS	CO1: Understand the fundamentals of Fermat's principles and geometrical optics
		CO2: Understand and apply the basic ideas of interference of light
		CO3: Understand and apply the basic ideas of diffraction of light
		CO4: Understand the basics ideas of polarization of light
		CO5: Describe the basic principles of holography and fibre optics



  
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Semester 5	PHY5 B09 ELECTRONICS (ANALOG & DIGITAL)	CO1: Understand the basic principles of rectifiers and dc power supplies
		CO2: Understand the principles of transistor
		CO3: Understand the working and designing of transistor amplifiers and oscillators
		CO4: Understand the basic operation of Op-Amp and its applications
		CO5: Understand the basics of digital electronics
	PHY5D01(1) Non Conventional Energy Sources	CO1: Understand the importance of non-conventional energy sources
		CO2: Understand basic aspects of solar energy
		CO3: Understand basic principles of wind energy conversion
		CO4: Understand the basic ideas of geothermal and biomass energy and recognize their merits and demerits
		CO5: Understand the basic ideas of oceans and chemical energy resources and recognize their merits and demerits
Semester 6	PHY6B10 THERMODYNAMICS	CO1: Understand the zero and first laws of thermodynamics
		CO2: Understand the thermodynamics description of the ideal gas
		CO3: Understand the second law of thermodynamics and its applications
		CO4: Understand the basic ideas of entropy
		CO5: Understand the concepts of thermodynamic potentials and phase transitions
	PHY6B11 STATISTICAL PHYSICS, SOLID STATE PHYSICS, SPECTROSCOPY & PHOTONICS	CO1: Understand the basic principles of statistical physics and its applications
		CO2: Understand the basic aspects of crystallography in solid state physics
		CO3: Understand the basic elements of spectroscopy
		CO4: Understand the basics ideas of microwave and infra red spectroscopy
		CO5: Understand the fundamental ideas of photonics
	PHY6B12 NUCLEAR PHYSICS AND PARTICLE PHYSICS	CO1: Understand the basic aspects of nuclear structure and fundamentals of radioactivity
		CO2: Describe the different types of nuclear reactions and their applications
		CO3: Understand the principle and working of particle detectors
		CO4: Describe the principle and working of particle accelerators
		CO5: Understand the basic principles of elementary particle physics
	PHY6B13 RELATIVISTIC MECHANICS AND ASTROPHYSICS	CO1: Understand the fundamental ideas of special relativity
		CO2: Understand the basic concepts of general relativity and cosmology
		CO3: Understand the basic techniques used in astronomy
		CO4: Describe the evolution and death of stars
		CO5: Describe the structure and classification of galaxies



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Semester 6	PHY6B14 (EL3) MATERIALS SCIENCE	CO1: Understand the basic ideas of bonding in materials
		CO2: Describe crystalline and non crystalline materials
		CO3: Understand the types of imperfections and diffusion mechanisms in solids
		CO4: Describe the different properties of ceramics and polymers
		CO5: Describe the different types of material analysis techniques
	PHY6B15 PRACTICAL II	CO1: Apply and illustrate the concepts of properties of matter through experiments
		CO2: Apply and illustrate the concepts of electricity and magnetism through experiments
		CO3: Apply and illustrate the concepts of optics and spectroscopy through experiments
		CO4: Apply and illustrate the principles of heat through experiments
	PHY6B16 PRACTICAL III	CO1: Apply and illustrate the principles of semiconductor diode and transistor through experiments
		and oscillator through experiments
		CO3: Apply and illustrate the principles of digital electronics through experiments
		CO4: Analyze and apply computational techniques in Python programming
	PHY6B17(P) PROJECT	CO1: Understand research methodology
		CO2: Understand and formulate a research project
		CO3: Design and implement a research project
		CO4: Identify and enumerate the scope and limitations of a research project
	PHY6B17(R): RESEARCH METHODOLOGY (In lieu of Project)	CO1: Understand research methodology
		CO2: Understand the concept of measurement in research
		CO3: Understand the significance and limitations of experimentation in research
CO4: Understand and formulate a research project, ethics and responsibility of scientific research		



H.O.D of Physics

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**MSc Physics**



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Syllabus Year	2019
Department	PHYSICS
Programme	MSc PHYSICS

## PROGRAMME OUTCOME(POs):

Sl.No	Programme Outcome
PO1	Acquire a comprehensive knowledge in physics
PO2	Will develop a broad understanding of the physical principle of the universe
PO3	Acquire laboratory skills to design advanced experiments and precision measurements
PO4	Be proficient in computing and interfacing techniques
PO5	Be empowered for critical thinking and innovation in dealing the scientific problems and experiments
PO6	Develop advanced laboratory techniques and instrumentation skills for a career in research
PO7	Develop independent research skills through projects
PO8	Be provided with opportunities to further their knowledge in frontier areas through elective courses
PO9	Be empowered fir plan a career in physical sciences and also in taking up jobs in other fields in the contemporary society
PO10	Be able to communicate effectively and participate actively in team work

## PROGRAMME SPECIFIC OUTCOME(PSOs):

SLNo	Programme Specific Outcome
PSO1	A deep understanding of fundamental concepts in classical mechanics, electromagnetism, quantum mechanics, statistical mechanics, thermodynamics, and other areas of physics.
PSO2	Ability to apply mathematical and analytical methods to solve complex physical problems.
PSO3	Proficiency in conducting experiments, analyzing data, and interpreting experimental results.
PSO4	Effective communication of scientific ideas through written reports and presentations.
PSO5	Development of research skills and the ability to think critically and analytically about physical phenomena.
PSO6	Understanding the applications of physics in various fields like engineering, materials science, and technology.
PSO7	Awareness of ethical considerations in scientific research and practice.




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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	PHY1C01 CLASSICAL MECHANICS	CO1: Explain the fundamental concepts in Lagrangian and Hamiltonian formulation in mechanics
		CO2: Apply the concepts of Lagrangian, Hamiltonian
		CO3: Develop analytical and mathematical skills for describing the dynamics of rigid bodies. It could be applied to practical situations. This can be applied spectroscopic analysis of samples
		CO4: Explain the theory of small oscillations. Small oscillations are part and parcel of all bound physical systems
		CO5: Elucidate the concepts in nonlinear dynamics and chaos. These techniques can be directly applied in nonlinear physics and also to verify various experimental results
	PHY1C02 MATHEMATICAL PHYSICS	CO1: Describe coordinate systems appropriate for different physical problems. Applies it to solve Laplace's equation in different coordinate systems.
		CO2: Perform transformation operations and get the corresponding transformation matrices. Learns procedures for matrix diagonalization.
		CO3: Distinguish the class of objects called tensors, their classifications, and their use. Understand differential equations of special nature and the ways to solve them
		CO4: Identify differential equations of special nature and the ways to solve them.
		CO5: Illustrate special functions as solutions to problems in atomic, molecular nuclear, solid state physics, etc., and will put them into use.
		CO6: Distinguish Fourier series and integral transforms of different types and their properties. This will enable him/her to analyze or solve different mathematical problems in physical science
	PHY1C03 ELECTRODYNAMICS & PLASMA PHYSICS	CO1: Explain the significance of displacement current, Maxwell's, and general electromagnetic wave equations, and their solutions regarding potential and fields. Another basic concept of physics called gauge transformation will be understood. Multipole expansion of different orders, potentials, fields, and multipole moments will be learned.
		CO2: Describe the propagation of electromagnetic waves through free space and the consequences of reflection from different types of boundaries. These have important consequences in wave propagation
		CO3: Discusses propagation of electromagnetic waves through confined media like waveguides and cavity resonators.
		CO4: Enables to appreciate the magnificent results of the blending of relativity and electrodynamics and motivate me to take up a course on quantum field theory, the study of fields, interactions, and symmetries.
CO5: Understand the criteria for a medium to be called plasma and the various properties of it.		



  
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Semester 1	PHY1C04 ELECTRONICS	CO1: Analyse characteristics of JFET and MOSFET and their specific applications.
		CO2: Distinguish the basic characteristics of light-emitting and light-sensing devices and illustrate the basic concepts behind integrating electronic and photonic devices suitable for microwave communication.
		CO3: Classify characteristics of op-amps and their implementation in various elementary-level applications.
		CO4: Identify the basics of logic gates, flip flops, and registers and the designing of counters, satisfying specific conditions. Understands RAM and D/A converter and basic features of specific microprocessors.
Semester 2	PHY2C05 QUANTUM MECHANICS	CO1: Appreciate the importance and implication of vector spaces. Will be able to use Dirac ket and bra notations. Use operators and will be able to solve eigenvalue problems. Understand the generalized uncertainty principle in quantum mechanics and the need for quantum mechanical formalism and its basic principles.
		CO2: Explain the time evolution of quantum mechanical systems and learn different time evolution approaches -Schrodinger's picture and Heisenberg's picture. Apply different approaches in quantum dynamics to various fundamental problems.
		CO3: Develop a better understanding of the mathematical foundations of spin and angular momentum. Make use of spherical harmonics to compute Clebsch - Gordon coefficients.
		CO4: Apply Schrodinger's equation to central potentials problems, to solve various quantum mechanical problems.
		CO5: Understand invariance principles based on the symmetry of the system and establish the associated conservation laws. These quantum mechanical concepts will be applied to analyze the ground state of the Helium atom. Here it will be understood that all symmetry elements possess the mathematical property of groups.
	PHY2C06 MATHEMATICAL PHYSICS	CO1: In general, physical phenomena are expressed in equations involving complex quantities. Sometimes we get complex solutions to equations. Solving such problems requires special procedures. On completing this module he/she will gain the skill for solving and interpreting such problems.
		CO2: Acquire preliminary training in group theory. All symmetry elements possess the mathematical property of groups. Concepts of group theory will help to solve problems in quantum mechanics. It is quantum mechanics that gives more stress on symmetry than classical mechanics.
		CO3: Apply the techniques of calculus of variation to diverse problems in physics
		CO4: Apply the Greens function technique to solve problems showing causality relationships



  
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Semester 2	PHY2C07 STATISTICAL MECHANICS	CO1: Understand macroscopic and microscopic states, thermodynamic potentials, basic concepts of entropy, Liouville's theorem, and its consequences. Also, the students will have an understanding of the connection between statistics and thermodynamics
		CO2: Have a detailed understanding of different canonical ensembles
		CO3: Develop an understanding of the statistical behavior of Bose-Einstein and Fermi-Dirac systems.
	PHY2C08 COMPUTATIONAL PHYSICS	CO1: Write computer programs using core python
		CO2: Use advanced mathematical modules like Numpy and Pylab in python program for solving mathematical and physical problems and also to present the result visually using graphs and charts.
semester 3	PHY3C09 QUANTUM MECHANICS -II	CO3: Solve numerically mathematical problems like interpolation, curve fitting, integration, etc. and to write Python programs for these
		CO4: Solve numerical mathematical problems like differential equations, Fourier transforms etc. and also to write Python programs for these.
		CO5: Analyse by simulating simple physical problems in physics like one-dimensional and two-dimensional motion, harmonic oscillator, radioactive disintegration, chaos, solution of Schrodinger equation etc., using Python programs by applying the knowledge acquired for the course.
		CO1: Understand time-independent perturbation theory and apply it to harmonic and anharmonic oscillators, and learn the fine structure and hyperfine splitting of Hydrogen atoms in the presence of external magnetic and electric fields.
		CO2: Apply methods like Ritz variational technique and WKB approximation to quantum mechanical systems.
	PHY3C10 NUCLEAR AND PARTICLE PHYSICS	CO3: Interpret time-dependent perturbation theory and apply it to describe radiative transitions in atoms. Understand Fermi's Golden rule and learn Born approximation.
		CO4: Explain the theory of scattering and apply the method of partial waves to scattering by central potential and square well potential
		CO5: Identify the principles of relativistic quantum mechanics and apply them to Dirac particles, the Klein-Gordon equation. Also, understand the concept of spinors and the non-relativistic limit and Hole theory.
		CO1: Interpret the properties of the nucleus, binding energy, angular momentum, two nucleon scattering, spin dependence, tensor force, partial wave concept, and the theory of deuteron structure.
		CO2: Elucidate the theory of various types of nuclear decay, selection rules of transition, the concept of parity, and multipole moments.
		CO3: Compare various nuclear models and nuclear processes like fission and fusion. Will be able to apply it to various nuclear systems in the chart of nuclides.
		CO4: Demonstrate the working of one or two nuclear radiation detectors of different types and the signal processing analyzing units



  
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Semester 3	PHY3C10 NUCLEAR AND PARTICLE PHYSICS	CO5: Compare basic interactions and classify the elementary particles Interactions are linked with the concept of symmetry and conservation laws. Understand the Sakata model, Gellmann- Okubo mass formula, Quark mode and their significance.
	PHY3C11 SOLID STATE PHYSICS	CO1: Analyse the structure of materials based on X-ray diffraction and interpret it on the basis of the theory understood
		CO2: Distinguish different excitations in crystals. The properties of quasiparticles could be explained. Arrive at the proper explanation of specific heat.
		CO3: Explain the free electron model and interpret the properties of metals. Gain a deeper understanding of the energy bands based on the properties of carriers.
		CO4: Interpret properly the thermal, electrical, and magnetic properties of materials. This will enable the student to understand the current research going on in the related areas.
		CO5: Illustrate using phase diagrams, phase transitions in materials leading to superconductivity and different types of superconductors.
	PHY3E05 EXPERIMENTAL TECHNIQUES	CO1: Explain vacuum, Gauges to measure vacuum, types of pumps, and their utility, cryogenics, etc.
		CO2: Explain and demonstrate different thin film fabrication techniques, thickness measurement and application of thin films
		CO3: Explain different types of particle accelerators, their working and specific applications
		CO4: Explain methods of materials analysis by different nuclear techniques.
		CO5: Be trained in defining X-ray techniques to characterize materials.
	Semester 4	PHY4C12 ATOMIC & MOLECULAR SPECTROSCOPY
CO2: Apply the behavior of a nonrigid rotor and understand the microwave spectroscopy		
CO3: Distinguish between Raman and IR spectroscopy and elucidate on the features of the Raman spectrum.		
CO4: Explain electronic spectroscopy and applications.		
CO5: Identify the structure of the sample from spin resonance and Mossbauer spectra		
PHY4E14 LASER SYSTEMS, OPTICAL FIBRES & APPLICATIONS		CO1: Understand the basic laser theory and the important laser systems.
		CO2: Analyse the fundamentals of nonlinear optics and its applications.
		CO3: Identify the applications of lasers in various disciplines.
		CO4: Learn the importance of materials in the nanoscale region and the quantum effect of nanomaterials.
		CO5: Identify applications of lasers in various disciplines
		CO6: Understand the basics of Optical Fibers and their applications.
PHY4E23 MICROPROCESSORS, MICROCONTROLLERS & APPLICATIONS		CO1: Be equipped with essential knowledge of the design and programming of simple microprocessor-based systems.
		CO2: develop basic skills in the design of simple AVR microcontroller based embedded systems



  
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 Recognized Under Section 2(f) of the UGC Act, 1956

Syllabus Year	2019
Department	Commerce & Management
Programme	B.Com Computer Application

**PROGRAMME OUTCOME(POs):**

SLNo	Programme Outcome
PO1	<b>Knowledge Base:</b> Demonstrate a comprehensive understanding of accounting, finance, taxation, computer applications, and related business concepts.
PO2	<b>Critical Thinking:</b> Analyze and evaluate complex business problems, apply logical reasoning, and provide effective solutions.
PO3	<b>Communication Skills:</b> Communicate effectively through written and oral mediums, including the use of technology, for business-related communication.
PO4	<b>Entrepreneurial Skills:</b> Identify opportunities, formulate business ideas, and develop entrepreneurial skills for initiating and managing small businesses.
PO5	<b>Research Orientation:</b> Display an understanding of research methodologies, gather and analyze business-related data, and make informed decisions based on research findings.
PO6	<b>Interdisciplinary Knowledge:</b> Integrate knowledge from different disciplines like accounting, commerce, and computer applications to solve real-world business challenges.

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

SLNo	Programme Specific Outcome
PSO1	<b>Accounting Proficiency:</b> Apply accounting principles to prepare and interpret financial statements, analyze financial data, and demonstrate proficiency in various accounting techniques.
PSO2	<b>Taxation Skills:</b> Understand and apply tax laws, prepare tax returns, and provide tax planning advice for individuals and businesses.
PSO3	<b>Computer Application Competence:</b> Utilize computer applications to process and analyze financial data, create business reports, and enhance overall business efficiency.
PSO4	<b>E-commerce and IT Skills:</b> Utilize information technology for e-commerce, online business operations, and digital marketing strategies.
PSO5	<b>Problem Solving through Case Studies:</b> Analyze case studies related to business, taxation, and accounting issues and propose viable solutions based on theoretical knowledge and practical insights.



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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	BCM1B01 BUSINESS MANAGEMENT	CO1:Understand the concept of management
		CO2:Understand the importance of management in global perspective
		CO3:Understand the differences between management and leadership in real life situation.
		CO4:Analyse the concept of corporate social responsibility towards various stake holders
		CO5:Understand about the most modern techniques of management practiced in developed countries.
	BCM1C01 MANAGERIAL ECONOMICS	CO1:Understand macro and micro economics and its role in managerial decision making.
		CO2:Understand the concept of law of diminishing marginal utility.
		CO3:Understand the structure and importance of different type of markets.
		CO4:Understand the played by government in regulating Indian economy.
		CO5:Understand the conceptual knowledge regarding Indian's foreign trade and application of this knowledge securing business opportunities.
Semester 2	BCM2B02 FINANCIAL ACCOUNTING	CO1:Students learns to prepare accounts even from incomplete information
		CO2:The learners learn to prepare company accounts
		CO3:Understands the concept of debenture and learns to account for debentures.
		CO4:Understand the application of IFRS in companies.
		CO5:Critical learns 'AS' and IFRS.
	BCM2C02 MARKETING MANAGEMENT	CO1:The learners understands the core marketing concepts and consumer buying behaviour
		CO2:The scholar learns the concept of creating and capturing value.
		CO3:Understand the concept of marketing channels in the competitive environment
		CO4:Learns to enrich the firm's competitive strength
		CO5:Understand and develop an idea about the latest trends in e-commerce and e-marketing.
Semester 3	BCM3A11 BASIC NUMERICAL METHODS	CO1:The learner learns the concept of equation and quadratic formula
		CO2:Facilitate the scholar to use matrices for large volume of data processing
		CO3:This helps to solve the problems involving arithmetic and geometric progression.
		CO4:Able to choose the right mode of interest and EMI for debt repayment
		CO5:Develop the skill of using descriptive statistical tools



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Semester 3	BCM3A12 PROFESSIONAL BUSINESS SKILL	CO1:Facilitate easy business communication
		CO2:Improve knowledge of e-learning resources and delivery broaden vision and insight of management.
		CO3:Knowledge of artificial intelligence and data analysis helps to diversify and business cutting across obstacles
		CO4:Knowledge of existing national and international cyber laws make communication and business easier.
		CO5:Digital marketing and its application of social media channels and advertisements enhance changes and horizons of business.
	BCM3B03 BUSINESS REGULATIONS	CO1:To establish and run the business as directed by the government
		CO2:Acknowledge Indian contract Act 1972 helps to enter into valid contracts in life and business.
		CO3:Learning of the sale of Goods Act helps to do business keeping all legal formalities
		CO4:Understanding of the privileges and rights of consumers helps to do legally standing business admitting the status of customers .Increases business and relationship in the longrun.
		CO5:Able to create LLP business with sound legal knowledge
	BCM3B04 CORPORATE ACCOUNTING	CO1:Become competent to prepare accounts related with the redemption of preference shares,bonus shares, right issues of shares and buy back of shares
		CO2:Realise the concept of preparation of final accounts of banking companies
		CO3:Develop the skill of preparing final accounts of life insurance companies.
		CO4:Able to prepare the final accounts of a group of companies.
		CO5:Understand the concept of disclosure-based accounting standard and interim reporting.
	BCM3C03 HUMAN RESOURCES MANAGEMENT	CO1:Knowledge of human resources management help to run business effectively
		CO2:Understand the necessary skill required for the employment in an organization.
		CO3:Familiarity with induction and organizational training practices helpsto have effective trained work force in the organization.
		CO4:Understand the concept of career panning and performance appraisal.
		CO5:Insight of compensation and grievances management practices helps to take effective and appropriate decision on time.



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Semester 4	BCM4A13 ENTREPRENEURSHIP DEVELOPMENT	CO1: To motivate the learner to become an entrepreneur.
		CO2: Knowledge of support available helps to reap the benefit of easily.
		CO3: It is intended to trigger the mind set of youth to establish and run MSME in life.
		CO4: Knowledge of establishing the industrial unit help to start with business units easily
		CO5: The learner can draft and finalise project report without external helps and support.
	BCM4A14 BANKING AND INSURANCE.	CO1: Candidates get clear picture of the banking business India help and he can plan accordingly
		CO2: Knowledge of negotiable instruments, features and formalities help to deal with care.
		CO3: This help the candidate to be up to date in banking formalities and fund transfer.
		CO4: Knowledge of insurance business helps to hedge, avoid, and reduce risk in business.
		CO5: Knowledge of LIC and IRDA helps to move with insurance people with confidence.
	BCM4B05 COST ACCOUNTING.	CO1: The learner gets insights in to the costing and cost accounting tools and techniques.
		CO2: The learner understand the scientific material cost control measure in use.
		CO3: The scholar gets used to the scientific labour and overhead cost control measures
		CO4: Knowledge of various methods of costing helps the learner to practice in life.
		CO5: Variance analysis helps to identify its causes and take corrective actions.
Semester 4	BCM4B06 CORPORATE REGULATIONS	CO1: Knowledge of indian companies Act gives legislative background of a company. the company which will help to form more corporate in life.
		CO3: The knowledge of raising fund will help the candidate to choose between debt and equity easily.
		CO4: The candidate can easily manage a company and he know the rights, duties and power of all position.
		CO5: Knowledge of situation a company may go for liquidation helps to run the business effectively.



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Semester 4	BCM4C04 QUANTITATIVE TECHNIQUES FOR BUSINESS.	CO1:knowledge of QT broaden the vision and outlook of the candidate to face business problems.
		CO2:Understanding of correlation and regression analysis helps to predict with greater degree of accuracy.
		CO3:Awareness of probability and other theories helps to have critical thinking and rational decision.
		CO4:Familiarity with theoretical distributions helps to correlate issues with standard theories and take decision.
		CO5:Knowledge of LLP modeling will be great help in decision making.
Semester 5	BCM5B07 ACCOUNTING FOR MANAGEMENT.	CO1:To make the learner aware of methodologies of management accounting
		CO2:It is to make the candidate learn how to conceive and interpret financial statement.
		CO3:Ratios are very helpful tools for analysis and interpretations.
		CO4:knowledge of movements in working capital helps to check/control flow of fund/cash
		CO5:Knowledge of CVP analysis will be great help for managerial decision making.
	BCM5B08 BUSINESS RESEARCH METHODS.	CO1:The learner knows the primary matters of business research.
		CO2:The student know how to fix a research design, scaling, checking validity etc.
		CO3:The candidate knows the method of data collection and its processing and validation.
		CO4:The learner know to process collected data, test and hypothesis and arrive at conclusions.
		CO5:The student knows well how to write academic report and present it.
Semester 5	BCM5B09 INCOME TAX LAW AND ACCOUNTS	CO1:To Undrstand the method and methodology of taxation on income in india.
		CO2:To learns the provisons related to computation of Taxable salary income.
		CO3:Knowledge of taxing income from house property help the learner to compute taxable income under the head House Property correctly.
		CO4:Knowledge of computing income under the head profit and gains of business or profession helps the learner to do it effectively in life.
		CO5:Knowledge of computing income under the head Capital Gain and Other sources makes the learner self -confident and competent to practice income tax.



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Semester 5	BCM5B10 COMPUTER APPLICATIONS IN BUSINESS	CO1: Knowledge of networking and its application business helps students to learn in a networked community much more easily.
		CO2: Knowledge of website creation and its updation and maintenance magnifies the identity and scope of business at much cheaper at cost.
		CO3: This helps to grow business across borders easily
		CO4: Students become more competitive in this digital era for he knows these entire well
		CO5: Knowledge of the threats present in the Net helps to take preventive measures early and thereby could be avoided on time.
	BCM5B11 BUSINESS INFORMATION SYSTEMS	CO1: Knowledge of MIS helps to gather, process and take decisions easily.
		CO2: It helps to provide right information at the right time at the right quantity
		CO3: Knowledge of DBMS helps to process data scientifically keeping all manifestations and Understanding of ERP helps easy automation and results in reduced costs.
		CO4: Business Process Reengineering results in increased dignity in business and profits
	Semester 6	BCM5D02 BASICS OF ENTREPRENEURSHIP AND MANAGEMENT
CO2: Inculcate a spirit of entrepreneurship and develop various entrepreneurial traits in students		
CO3: Develop an understanding of the basic concepts and principles of management.		
BC6B12 INCOME TAX & GST		CO1: Students will be able to Compute tax liability of individuals.
		CO2: The Learner can do filing of returns of income meeting statutory obligations
		CO3: The scholars understand the concept of GST and e-filing procedures
		CO4: The Learner learns the rights, duties and powers of CAG and tax authorities.
		CO5: The candidates understand the offences and penalties under the Acts.
BCM6B13 AUDITING AND CORPORATE GOVERNANCE		CO1: Knowledge of auditing helps gives newer insights and wide vision on the topic independently.
		CO3: Knows to set internal control system effectively to check frauds, errors and omissions
		CO4: Solid understanding of the models and benefits of corporate governance
		CO5: Evaluate different stakeholders' roles and significance in corporate governance.-



  
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Semester 6	BCM6B14 OFFICE AUTOMATION TOOLS	CO1:Students understand how to prepare documents using MS-Word
		CO2:Learner demonstrates excel spreadsheets and its applications.
		CO3:The candidate knows Power Point Presentations and its use in business meetings
		CO4:Scholar acquires knowledge on distributed and client server computing
		CO5:Understand the applications of the internet in the field of business education and governance
	BCM6B15 COMPUTERISED ACCOUNTING WITH TALLY	CO1:Helps to develop awareness on accounting concepts and principles
		CO2:Aids to perform documentation, accounting and inventory operations using Tally
		CO3:Assist preparation of financial statements, tax documents, budgets and presentations
		CO4:Develop adequate knowledge on accounting information system and their application.
		CO5:To excel in budgets, reporting and accounting using Tally.
	BCM6B16 PROJECT REPORT	CO1:Students get clear idea on idea generation, topic selection, factors to be considered before selection of a topic, drafting methodology, sampling, etc.
		CO2:Gets insight on collection, tabulation, processing, analysis and interpretation of data clearly.
		CO3:Students get clarity of expressions and judgments.
		CO4:Students get acquainted with the forms, formalities and methodology of presenting an academic document
		CO5:It improves skill, enthusiasm and a spirit of inquisitiveness among younger generations to look further and further and elicit hidden facts before the academia.



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**POs, PSOs & COs**

**B.Com Finance**

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 Recognized Under Section 2(f) of the UGC Act, 1956

Syllabus Year	2019
Department	Commerce & Management
Programme	B.Com Finance

**PROGRAMME OUTCOME(POs):**

SLNo	Programme Outcome
PO1	<b>Knowledge Base:</b> Demonstrate a comprehensive understanding of accounting, finance, taxation, computer applications, and related business concepts.
PO2	<b>Critical Thinking:</b> Analyze and evaluate complex business problems, apply logical reasoning, and provide effective solutions.
PO3	<b>Communication Skills:</b> Communicate effectively through written and oral mediums, including the use of technology, for business-related communication.
PO4	<b>Entrepreneurial Skills:</b> Identify opportunities, formulate business ideas, and develop entrepreneurial skills for initiating and managing small businesses.
PO5	<b>Research Orientation:</b> Display an understanding of research methodologies, gather and analyze business-related data, and make informed decisions based on research findings.
PO6	<b>Interdisciplinary Knowledge:</b> Integrate knowledge from different disciplines like accounting, commerce, and computer applications to solve real-world business challenges.

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

SLNo	Programme Specific Outcome
PSO1	<b>Investment Analysis:</b> Demonstrate competence in analyzing investment options, evaluating risk and return profiles, and recommending suitable investment strategies for individuals and organizations.
PSO2	<b>Financial Reporting:</b> Apply accounting standards and principles to prepare, interpret, and analyze financial statements, ensuring accurate representation of a company's financial position.
PSO3	<b>Risk Management:</b> Develop skills in identifying financial risks, assessing their potential impact, and formulating risk management strategies to safeguard financial assets.
PSO4	<b>Corporate Finance:</b> Understand the principles of capital budgeting, financing decisions, and dividend policies, and apply them to assess the financial health of corporations.
PSO5	<b>Taxation Knowledge:</b> Gain an understanding of taxation laws and regulations, enabling the computation and planning of taxes for individuals and businesses.
PSO6	<b>Banking and Financial Institutions:</b> Understand the functions and operations of banks and other financial institutions, including the regulatory environment in which they operate.



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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	BCMIB01 BUSINESS MANAGEMENT	CO1:Understand the concept of Management
		CO2:Understand the importance of Management in a global perspective
		CO3:Understand the differences between management and leadership in real life situations
		CO4:Analyze the concept of corporate social responsibility towards various stake holders.
		CO5:Understand about the most modern techniques of management practiced in developed countries.
	BCM1C01 MANAGERIAL ECONOMICS	CO1:Understand Macro & Microeconomics & its role in managerial decision making
		CO2:Understand the concept of law of diminishing marginal utility theory
		CO3:Understand the structure and importance of different types of markets.
		CO4:Understand the role played by government in regulating Indian economy
		CO5:Understand a conceptual knowledge regarding India's foreign trade and the application of this knowledge in securing business opportunities
Semester 2	BCM2B02 FINANCIAL ACCOUNTING	CO1:Students learn to prepare accounts even from incomplete information
		CO2:The learner learns to prepare Company accounts
		CO3:Understands the concept of debentures and learns to account for debentures.
		CO4:Understand the application of IFRS in Companies
		CO5:Critically learns 'AS' and IFRS.
	BCM2C02 MARKETING MANAGEMENT	CO1:The learner understands the core marketing concepts and consumer buying behaviour
		CO2:The Scholar learns the concept of creating and capturing value.
		CO3:Understand and develop an idea about the latest trends in e-commerce and e-marketing.
		CO4:Understand the concept of marketing channels in the competitive environment.
		CO5:Learns to enrich the firm's competitive strength.
Semester 3	BCM3A11 BASIC NUMERICAL METHODS	CO1:The learner learns the concepts of equations and quadratic formula
		CO2:Facilitates the scholar to use matrices for large volume data processing.
		CO3:Solve problems involving arithmetic and geometric progressions.
		CO4:Able to choose the right mode of interest and EMI for debt repayment
		CO5:Develop the skill of using descriptive statistical tools.



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Semester 3	BCM3A12 PROFESSIONAL BUSINESS SKILLS	CO1:Facilitates easy business communication
		CO2:Improved knowledge of E-learning resources and its delivery broadens vision and insight of management.
		CO3:Knowledge of existing national and international cyber laws makes communication and business easier.
		CO4:Knowledge of artificial intelligence and data analysis helps to diversify and grow business cutting across obstacles
		CO5:Digital marketing and its application of social media channels and advertisements enhances changes and horizon of business.
	BCM3B03 BUSINESS REGULATIONS	CO1:Helps to establish and run business as directed by the government
		CO2:Knowledge of Indian Contract Act 1872 helps to enter into valid contracts in life and business.
		CO3:Learning of Sale of Goods Act helps to do business keeping all legal formalities
		CO4:Able to create LLP business with sound legal knowledge.
	BCM3B04: CORPORATE ACCOUNTING	CO1:Becomes competent to prepare accounts related with redemption of preference shares, bonus shares, right issue of shares and buy back of shares.
		CO2:Realizes the concept of preparation of final accounts of banking companies.
		CO3:Develop the skill of preparation of final accounts of life insurance companies.
		CO4:Understand the concept of disclosure based accounting standard and interim reporting.
		CO5:Able to prepare the final accounts of group companies.
	BCM3C03 HUMAN RESOURCE MANAGEMENT	CO1:Knowledge of human resource management helps to run business effectively
CO2:Understand the necessary skills required for the employment in an organization.		
CO3:Familiarity with the induction and organizational training practices helps to have effective trained work force in the organisation..		
CO4:Understand the concept of career planning and performance appraisal.		
CO5:Insight on compensation and grievance management practices helps to take effective and appropriate decisions on time.		
Semester 4	BCM4A13: ENTREPRENEURSHIP DEVELOPMENT	CO1:It motivates the learner to become an entrepreneur.
		CO2:Knowledge of supports available helps to reap the benefits of easily
		CO3:It is intended to trigger the mind set of youth to establish and run MSMEs in life
		CO4:Knowledge of establishing industrial units helps to start with business units easily.
		CO5:The learner can draft and finalise project report without external aids and supports.



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Semester 4	BCM4A14 BANKING AND INSURANCE	CO1: Candidates get clear picture of the banking business India and he can plan accordingly
		CO2: Knowledge of negotiable instruments, features & formalities helps to deal with care.
		CO3: helps the candidate to be up-to-date in banking formalities and fund transfer
		CO4: Knowledge of insurance business helps to hedge, avoid, and reduce risk in business.
		CO5: Knowledge of LIC and IRDA helps to move with Insurance people with confidence.
	BCM4B05 COST ACCOUNTING	CO1: He learner gets insights into the costing and cost accounting tools and techniques.
		CO2: The learner understands the scientific material cost control measures in use..
		CO3: The scholar gets used to the scientific labour and overhead cost control measures
		CO4: Knowledge of various methods of costing helps the learner to practice in life.
		CO5: Variance analysis helps to identify its causes and take corrective actions.
	BCM4B06 CORPORATE REGULATIONS	CO1: Knowledge of Indian Companies Act gives the legislative backgrounds of a company.
		CO2: The candidate knows the formalities for formation of a company which will help to form more corporates in life
		CO3: The knowledge of raising funds will help the candidate to choose between debt and equity easily
		CO4: The candidate can easily manage a company as he knows the rights, duties and powers of all positions
		CO5: Knowledge of situations when a company may go for liquidation helps to run the business effectively
BCM4C04 QUANTITATIVE TECHNIQUES FOR BUSINESS	CO1: Knowledge of QT broadens vision and outlook of the candidate to face business problems-	
	CO2: Understanding of correlation and regression analysis helps to predict with greater degree of accuracy	
	CO3: Awareness of probability and other theories helps to have critical thinking and rational decisions.	
	CO4: Familiarity with theoretical distributions helps to correlate issues with standard theories and take decisions	
	CO5: Knowledge of LPP and modeling will be of great help in decision making	
Semester 5	BCM5B07 ACCOUNTING FOR MANAGEMENT	CO1: To make the learner aware of the methodologies of Management Accounting
		CO2: It is to make the candidate learn how to conceive and interpret financial statements
		CO3: Ratios are very helpful tools for analysis and interpretations.
		CO4: Knowledge of movements in working capital helps to check/control flow of funds /cash
		CO5: Knowledge of CVP analysis will be of great help for managerial decision making.




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Semester 5	BCM5B08 BUSINESS RESEARCH METHODS	CO1: The learner knows the primary matters of business research
		CO2: The student know how to fix a research design, scaling checking validity etc
		CO3: The candidate knows the method of data collection and its processing and validation.
		CO4: The learner knows to process collected data, test hypothesis and arrive at conclusion
		CO5: The student knows well how to write an academic report and present it
	BCM5B09 INCOMETAX LAW AND ACCOUNTS	CO1: To understand the method and methodology of taxation on income in India.
		CO2: To learn the provisions related to computation of Taxable Salary Income
		CO3: Knowledge of taxing income from house property helps the learner to compute taxable income under the head House Property correctly
		CO4: Knowledge of computing income under the head profits and gains of business or profession helps the learner to do it effectively in life.
		CO5: Knowledge of computing income under the head Capital Gains and other source smakes the learner self-confident and competent to practice income tax.
	BCM5B10 FINANCIAL MARKETS AND SERVICES	CO1: The learner acquires thorough knowledge about the financial markets and products available
		CO2: The scholar understands Indian Money Market, Players in the market, Instruments traded, and their functions
		CO3: The candidate gets clear idea of the composition Indian Capital Market, Who all are the major players in it
		CO4: The scholar gets clear idea of the regulatory mechanism in India and role of RBI and SEBI in enforcing transparant fair dealings
		CO5: The Student get acquainted with various NBFCs in playing in India, major instruments traded in the country ,factoring, leasing etc in the country, factoring, leasing etc.
	BCM5B11 FINANCIAL MANAGEMENT	CO1: Knowledge of financial management and time of value money helps decisions making effective
		CO2: Understanding of capital investment evaluation techniques makes investment selection casier selection casier.
		CO3: Familiarity with cost of capital helps to use capital judiciously
		CO4: Knowledge of dividend policies helps to take appropriate decision on dividend
		CO5: Helps to have effective working capital management.
BCM5D02 BASICS OF ENTREPRENEURSHIP AND MANAGEMENT	CO1: Students will have an understanding of thebasic concepts of business and forms of business	
	CO2: Inculcate a spirit entrepreneurship and develop various entrepreneurial traits in students	
	CO3: develop an understanding of the basic concepts and Principles of management.	



  
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Semester 6	BC6B12 INCOME TAX & GST	CO1:Students will be able to Compute tax liability of individual
		CO2:The Learner can do filing of returns of income meeting statutory obligations
		CO3:The scholars understand the concept of GST and e-filing procedures
		CO4:The candidates understand the offences and penalties under the Acts.
		CO5:The Learner learns the rights, duties and powers of CAG and tax authorities.
	BCM6B13 AUDITING AND CORPORATE GOVERNANCE	CO1:Knowledge of auditing helps gives newer insights and wide vision on the topic
		CO2:Learns to do verification, vouching and valuation independently.
		CO3:Knows to set internal control system effectively to check frauds, errors and omissions
		CO4:Solid understanding of the models and benefits of corporate governance
		CO5:Evaluate different stakeholders' roles and significance in corporate governance.
	BCM6B14 FUNDAMENTALS OF INVESTMENT	CO1:Develops a broad understanding of the concept of investment management
		CO2:Learn security valuation of bonds, preference shares and equity shares
		CO3:Study calculation of return on investment and expected return through examples
		CO4:Understand analysis of securities, approaches, tools, stock charts, patterns and theories
		CO5:Understands portfolio management, analysis and redress issues easily.
	BCM6B15 FINANCIAL DERIVATIVES	CO1:This helps to master capital market segment and derivatives market
		CO2:This develops knowledge on derivatives trading and its legal framework
		CO3:It helps to differentiate between various types of derivatives
		CO4:Understand the trading strategies adopted on option trading
		CO5:It helps to learn forwards, futures, and swaps.
BCM6B16 PROJECT REPORT	CO1:Students get clear idea on idea generation, topic selection, factors to be considered before selection of a topic, drafting methodology, sampling, etc.	
	CO2:Gets insight on collection, tabulation, processing, analysis and interpretation of data clearly	
	CO3:Students get clarity of expressions and judgments.	
	CO4:Students get acquitted with the forms, formalities and methodology of presenting an academic document	
	CO5:It improves skill, enthusiasm and a spirit of inquisitiveness among younger generations to look further and further and elicit hidden facts before the academia	



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**KOTTAKKAL FAROOK ARTS AND SCIENCE COLLEGE**

**INTERNAL QUALITY ASSURANCE CELL**

**POs, PSOs & COs**

**M.Com Finance**

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**Recognized Under Section 2(f) of the UGC Act, 1956**

Syllabus Year	2019
Department	Commerce & Management
Programme	M.Com Finance

**PROGRAMME OUTCOME(POs):**

SLNo	Programme Outcome
PO1	The candidate can acquire the qualification of NET/JRF and do M.Phil/Ph.D. and can become Assistant Professor in Govt. College/ Govt. Aided Colleges/Self Financing Colleges or Universities.
PO2	The candidate can acquire the qualification of NET/JRF and do M.Phil/Ph.D. and can become Assistant Professor in Govt. College/ Govt. Aided Colleges/Self Financing Colleges or Universities.
PO3	To acquaint a student with conventional as well as contemporary areas in the discipline of Commerce.
PO4	To facilitate the students in conducting business, accounting, and auditing practices, the role of regulatory bodies in corporate and financial sectors nature of various financial instruments.
PO5	To provide an in-depth understanding of all core areas specifically Advanced Management Accounting, Management Science, Business Environment, Research Methodology & Tax Planning.
PO6	Can commence Business Incubation centers and can develop new platforms to connect entrepreneurs and the general public.

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

SLNo	Programme Specific Outcome
PSO1	Ability to work in teams with enhanced interpersonal skills and communication.
PSO2	Develop an ability to apply knowledge acquired in problem solving
PSO3	The students can work in different domains like Accounting, Taxation, HRM, Banking and administration
PSO4	Ability to work in MNCs as well as pvt, and public companies
PSO5	Students can go further for professional courses like CA/ CS/CMA/CFA



  
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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	MCM1C01: BUSINESS ENVIRONMENT & POLICY	CO1:Ability to understand and analyse the impact of internal and external environmental
		CO2:To understand the role and influence of New Economic Policy and Economic reforms in the perspective of Business.
		CO3:Acquire the analytical skill to understand the impact of the environment and its configurations in business decision making
		CO4:To understand and evaluate the various international agreements and organizations and it's workings.
		CO5:To create awareness about the various policies related to FDI and Multi-National Corporations.
		CO6:Familiarise the students with the knowledge of corporate ethics
		CO7:Enable the students to understand the emerging trends in good governance practices.
	MCM1C02 CORPORATE GOVERNANCE AND BUSINESS ETHICS	CO1:Create corporate financial reports in the global and Indian context
		CO2:Identify and analyze the emerging trends in good governance practices, both in the global and Indian contexts.
		CO3:Create accurate and comprehensive corporate financial reports adhering to international accounting standards and regulations in the global and Indian business environments.
	MCM1C03 QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS	CO1:Understand and acquire the skill in the basic concepts of probability theory and analyze the different probability distributions
		CO2:Acquire skill in the application of hypothesis testing for validation and interpretation of the results
		CO3:Acquire skill in the application of parametric and non-parametric tests.
		CO4:Understanding and knowledge in statistical quality control
		CO5:Understand and acquire the skill in conducting statistical analysis.
	MCM1C04: MANAGEMENT THEORY AND ORGANISATIONAL BEHAVIOR	CO1:Provide in-depth knowledge about the process of formation of the group behavior in an organization set up
		CO2:Make the students understand various concepts of organization behavior
	MCM1C05 ADVANCED MANAGEMENT ACCOUNTING	CO1:Understand and acquire the skill in the applications of Management Accounting for taking various decisions making
		CO2:Students get deeper insights into the performance evaluation process and different pricing strategies in use.
		CO3:Competency and skill in evaluating Capital investment decisions under different circumstance.



  
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Semester 2	MCM2C01 INTERNATIONAL BUSINESS	CO1: Students get a clear idea of the role of Tariffs in international trade. Major theories in use, barriers hindering the free flow of goods and services across borders
		CO2: Students get insights into international trade and different terms used in international trade. They also get insights on how to import or export goods and services.
		CO3: The students get well-versed in the tools and techniques used in investment evaluation process
		CO4: Students get a clear idea of the stages of growth of an organization when goes international. Students also get a clear idea of the merits and demerits of internationalization.
		CO5: It provided a vivid picture of the various international trade agreements in the world and what are the protocols to be observed in international trade
	MCM2C06 ADVANCED CORPORATE ACCOUNTING	CO1: Provide knowledge and skills in the theory and practice of corporate financial accounting
		CO2: Provide insight into some of the important accounting standards of IFRS /Ind AS
		CO3: Enable problem-solving abilities among students in matters of various corporate situations such as consolidation of group information, corporate restructuring and liquidation
		CO4: Develop problem-solving abilities to address complex corporate situations, such as group information consolidation, corporate restructuring, and liquidation, using appropriate accounting techniques.
	MCM2C07 ADVANCED STRATEGIC MANAGEMENT	CO1: Provide an understanding of the Tasks, Functions, and Skills of strategic management and latest developments.
MCM2C09 INTERNATIONAL BUSINESS	CO1: Critically analyze case studies and real-world examples of international business strategies, drawing insights for practical decision-making in a global business environment.	
	CO2: Evaluate the different modes of entry into foreign markets and determine the most appropriate strategies for the international market expansion.	
	CO3: Demonstrate knowledge of international trade theories and their implications for global business strategies and policies.	
	CO4: Analyze the impact of cultural, political, legal, and economic factors on international business operations and decision-making.	
	CO5: Understand the fundamental concepts and theories of international business and their application in the global context.	
MCM2C10 MANAGEMENT SCIENCE	CO1: Familiarize students with concepts of management science and tools supporting decision making	
	CO2: Enable students to apply Management science techniques in appropriate decision situations.	
	CO3: Evaluate the strengths and limitations of different management science tools, enabling students to select and apply appropriate techniques to solve specific decision problems.	
	CO4: Analyze and interpret data to formulate relevant models and utilize quantitative methods to make informed and effective decisions in complex management situations.	



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Semester 3	MCM3C11 FINANCIAL MANAGEMENT	CO1: Acquaint the students with the basic analytical techniques and methods of financial management of business organization.
		CO2: Provide the students the exposure to certain advanced analytical techniques that are used for taking financial policy decisions.
		CO3: Evaluate the impact of financial decisions on an organization's overall financial performance and long-term sustainability.
		CO4: Communicate financial information and recommendations effectively to stakeholders, enabling better financial planning and strategic decision-making.
	MCM3C12 INCOME TAX: LAW, PRACTICE AND TAX PLANNING I	CO1: Enable students to understand the computation of income under various heads, taxable income of various entities, tax planning, and procedure of assessment.
	MCM3C13 RESEARCH METHODOLOGY	CO1: Acquaint students with the process and methodology of research.
		CO2: Enable students to identify research problems, collect and analyze data and present results.
		CO3: Enhance capabilities of students to conduct research in the field of social sciences and business.
		CO4: Aware the students of the art of using different research methods and techniques.
	MCM3EF 02 FINANCIAL MARKETS AND INSTITUTIONS	CO1: Provide the students with sound information and knowledge of the broad framework of financial markets and institutions.
CO2: Impart the students an understanding of the inter-linkages and regulatory framework within which the system operates in India.		
MCM3EF01 INVESTMENT MANAGEMENT	CO1: establish a conceptual framework for the study of security analysis and portfolio management. This course will provide the students the ability to understand and utilize the skill of optimizing returns.	
Semester 4	MCM4C15 INCOME TAX: LAW, PRACTICE AND TAX PLANNING II	CO1: Acquaint the students with theoretical and practical knowledge of assessment and tax planning of different assesses.
		CO2: Familiarize the students with the major and latest provisions of the Indian tax laws and related judicial pronouncements pertaining to various assessments with a view to deriving the maximum possible tax benefits admissible under the law.
	MCM3EF01 ADVANCED STRATEGIC FINANCIAL MANAGEMENT	CO1: Analyze and formulate effective long-term financial plans and forecasts that align with the strategic goals of the organization.
		CO2: Apply financial modeling and quantitative methods to address complex financial management problems and support strategic decision-making.
		CO3: Make informed decisions on capital structure, taking into account the risk-return tradeoff and its impact on the company's overall value.
		CO4: Apply strategic financial management concepts to mergers, acquisitions, and other corporate restructuring activities.
CO5: Analyze the cost of capital and its components to optimize the financing mix and enhance the company's investment decisions.		



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<b>Semester 4</b>	<b>MCM4C14 FINANCIAL DERIVATIVES AND RISK MANAGEMENT</b>	<b>CO1:</b> Understand the concept of financial derivatives and their role in modern financial markets.
		<b>CO2:</b> Identify and assess different types of financial risks and their potential impact on businesses and investments.
		<b>CO3:</b> Develop critical thinking and problem-solving skills to design effective risk management strategies for various financial scenarios
		<b>CO4:</b> Understand the regulatory environment and ethical considerations related to financial derivatives and risk management.
		<b>CO5:</b> Apply theoretical concepts to real-world situations, making informed decisions about financial risk management for individuals and organizations.
	<b>MCM4EFT03 INTERNATIONAL FINANCE</b>	<b>CO1:</b> Understand the concept and significance of international finance.
		<b>CO2:</b> Understand the international financial markets and exchange theories
		<b>CO3:</b> Get an idea about foreign exchange exposure and risk management



  
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**POs, PSOs & COs**

**BBA**

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**Recognized Under Section 2(f) of the UGC Act, 1956**

Syllabus Year	2019
Department	Commerce And Management Studies
Programme	Bachelor of Business Administration

**PROGRAMME OUTCOME(POs):**

SLNo	Programme Outcome
PO1	To promote students with the basic understanding about management education
PO2	To prepare students to exploit opportunities being newly created in the management profession
PO3	To focus on the holistic development of students with conceptual clarity and analytical ability critical thinking and communication skill
PO4	To develop appropriate skills in the students so as to make them competent and provide themselves self-employment
PO5	To train the student to be competent entry-level management professionals
PO6	To impart basic and operational knowledge on all functional areas of management.
PO7	To inculcate entrepreneurial skills among the management graduates to turn to successful entrepreneurs
PO8	To equip students to demonstrate the capabilities required to apply cross-functional business knowledge and technologies in solving real-world business problems.
PO9	To promotes ethical and value-based leadership ability.

**PROGRAMME SPECIFIC OUTCOME(PSOs):**

SLNo	Programme Specific Outcome
PSO1	Students will exhibit an understanding of broad business concepts and principles.
PSO2	Students will be able to define, analyze and find solutions for different business problems
PSO3	Students will be able to apply appropriate quantitative and qualitative techniques in solving business problems
PSO4	Students are able to demonstrate competency in the underlying concepts, theory and tools taught in the core undergraduate curriculum.
PSO5	Students will be able to effectively communicate business issues, management concepts, plans and decisions both in oral and written form using appropriate supportive technologies.



  
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**COURSE OUTCOME(COs):**

Semester	Course Code & Name	Course Outcome
Semester 1	BBA1B01 MANAGEMENT THEORY AND PRACTICE	CO1:Apply the concepts of planning, organizing, staffing, and controlling for effective management.
		CO2:Showcase ethical and socially responsible behavior in Management, Aware and pursuing modern management practices in business
Semester 1	BBA1C01 MANAGERIAL ECONOMICS	CO1:Acquire knowledge regarding relevant economic concepts applicable in managerial decisions, Design strategies, including costing, pricing, product differentiation and market environment according to the nature of products and the structures of the markets, Understand the business cycles and make forecasts on the basis of prevailing conditions.
Semester 2	BBA2B02 FINANCIAL ACCOUNTING	CO1:Discuss and apply fundamental accounting concepts, principles and conventions,
		CO2:Record basic accounting transactions and prepare annual financial statements for a sole proprietorship business
		CO3:Record accounting transactions in respect of hire purchase and installment system and branches
		CO4:Understand the accounting process for the issue of shares and debentures in a company
	BBA2B03 MARKETING MANAGEMENT	CO1:Analyse statutory provisions and the core concepts in business laws
CO2:Analyse legal issues arising in day-to-day business operations prevalent in India.		
CO3:Identify unfair trade practices and gain insights about the consumer redressal mechanism in the country.		
CO4:Discuss possible solutions to issues in organizations in the frame work of business laws		
CO5:Understand the provisions of RTI Act		
Semester 3	BBA3A11 BASIC NUMERICAL METHOD	CO1:Solve numerical equations for the value of unknown
		CO2:Gain an understanding of matrices and progressions
		CO3:Compute simple and compound interest and also have an understanding of financial mathematics
		CO4:Understand the concept of descriptive statistics and their application
	BBA3B05 FINANCIAL MANAGEMENT	CO1:Understand various basic concepts of finance.
		CO2:Develop skills for effective Financial, Investment and Dividend decision making.
BBA3B04 CORPORATE ACCOUNTING	CO3:Evaluate projects and select the most suitable project after analysing various aspects.	
	CO1:Understand and apply fundamental IndASs on inventories, PPE, provisions, income tax, borrowing cost and intangible assets	
		CO2:Prepare annual financial statements for companies and compute accounting ratios.
		CO3:Record transactions in respect of redemption of preference shares and debentures.



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Semester 3	BBA3A12 PROFESSIONAL BUSINESS SKILLS	CO1: Acquire the various soft skills required for professionals.
		CO2: Describe the nuances of professional communication and business data analysis.
		CO3: Know the different dimensions of e-learning
	BBA3CO2 BUSINESS REGULATION	CO1: Analyse statutory provisions and the core concepts in business laws
		CO2: Analyse legal issues arising in day-to-day business operations prevalent in India.
CO3: Identify unfair trade practices and gain insights about the consumer redressal mechanism in the country.		
CO4: Discuss possible solutions to issues in organizations in the frame work of business laws		
CO5: Understand the provisions of RTI Act		
Semester 4	BBA4A13 ENTREPRENEURSHIP DEVELOPMENT	CO1: Get a deep understanding of the concept of entrepreneurship.
		CO2: Identify and develop the entrepreneurial talents in them
		CO3: Generate innovative business ideas in the emerging industrial scenario.
		CO4: Look for appropriate guidance and assistance for setting up a business.
	BBA4A14 BANKING AND INSURANCE	CO1: Acquire knowledge about the basics of Banking and Insurance.
		CO2: Understand modern trends in banking
		CO3: Know the various payment modes including digital and electronic mechanisms.
		CO4: Prepare life insurance proposal and know the procedure for claiming insurance amount
	BBA4C04 QUANTITATIVE TECHNIQUES FOR BUSINESS	CO1: Acquire knowledge about the meaning and utility of Quantitative Techniques.
		CO2: Measure changes in the variables like price, and volume of sales using Index numbers and Time-series Analysis.
		CO3: Employ the principles of linear regression and correlation, including the least square method, predicting a particular value of Y for a given value of X and the significance of the correlation coefficient.
		CO4: Use different distributions to solve a simple practical problem
	BBA4B06 COST AND MANAGEMENT ACCOUNTING	CO1: Recognize and apply appropriate theories, principles and concepts relevant to cost accounting.
		CO2: Exercise appropriate judgment in selecting and presenting information using various methods relevant to cost accounting.
		CO3: Acquire knowledge in the spheres of budgets and prepare budgets including cash budget.
		CO4: Perform CVP analysis and break-even analysis.



  
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Semester 4	BA4C03 CORPORATE REGULATIONS	CO1: Define the basic concepts of Companies Act 2013
		CO2: Describe the procedure of the formation of a company
		CO3: List the documents related to formation of a company
		CO4: Explain the provisions of share capital and its issue
		CO5: Describe the provisions for appointment, removal, disqualifications and other aspects of a director in a company
		CO6: Explain the modes of acquiring membership in a company
		CO7: Describe the meaning and modes of winding up in a company
Semester 5	BBA5B07 HUMAN RESOURCES MANAGEMENT	CO1: Develop insights on various concepts and functions of Human Resource Management
		CO2: To Design and formulate various HRM processes such as Recruitment, Selection, Training, Development, Performance appraisals and Compensation Plans.
		CO3: Equip themselves with the understanding of the importance of HR Planning and related aspects.
		CO4: Learn the latest trends in Human Resource Management.
	BBA5 B08 BUSINESS RESEARCH METHODS	CO1: Develop an understanding of the basic framework of the business research process
		CO2: Develop skills for conducting business research.
		CO3: Get knowledge of variables, sources of data, data collection tools, tools for analysis etc.
		CO4: Apply appropriate analysis tools depending upon the nature and type of data and interpret the results.
		CO5: Prepare research reports
	BBA5B09 OPERATIONS MANAGEMENT	CO1: Describe the different concepts of Operations Management.
		CO2: Acquire the knowledge to make plans at the operational level of an industry
		CO3: Describe the concepts of facilities planning, capacities planning and aggregate planning.
		CO4: Describe the various tools for quality control in an organisation
	BBA5B10 INCOME TAX	CO1: Acquire complete knowledge of basic concepts of income tax
		CO2: Identify and comply with the relevant provisions of the Income Tax Act as it relates to the income tax of individuals
		CO3: Compute different heads of income as well as total income and tax liability
	BBA5B11 FINANCIAL MARKETS AND INSTITUTIONS	CO1: Describe different aspects and components of a financial system.
CO2: Gain insights about various financial institutions in the country.		
CO3: Gain understanding of various financial instruments like shares, bonds and derivatives.		
BBA 5D0 ECOMMERCE	CO1: Describe the practice of e-commerce, e payment and also the security issues,	
	CO2: Elucidate the concept of EDI, e-payment strategy, etc	
	CO3: Explain the various e-commerce business models	



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Semester 6	BBA6B15 FINANCIAL SERVICE	CO1: Describe the various financial services available in the Indian financial system.
		CO2: Differentiate between fund and non- fund based services.
		CO3: Learn about Mutual funds, leasing, factoring, venture capital financing, etc.
	BBA6B16 INVESTMENT MANAGEMENT	CO1: Describe the basics of investment management
		CO2: Identify various investment avenues
		CO3: Understand the concept of risk and returns.
		CO4: Perform stock market analysis using fundamental and technical analysis.
		CO5: Get familiarized with the concept of Portfolios.
		CO6: Know the process of portfolio management. Marketing
	BBA5B09 OPERATIONS MANAGEMENT	CO1: Understand the different concepts of operation Management.
		CO2: Acquire the knowledge to make plans at the operational level of an industry
	BBA6B12 ORGANISATIONAL BEHAVIOR	CO1: Understand the different concepts of Organisational Behaviour
		CO2: Analyse individual and group behaviour
		CO3: Understand and deal with organizational change, development and stress
	BBA6B13 MANAGEMENT SCIENCE	CO1: On completion of the course, the students will be able to learn different OR techniques useful in managerial decisions
	BBA6B 14 PROJECT MANAGEMENT	CO1: Understand the different concepts of managing a project
		CO2: Analyse the viability of a project.



  
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