OFFICE OF THE PRINCIPAL
GOVERNMENT AUTONOMOUS COLLEGE, ANGUL, ODISHA-759143
ସରକାରୀ ସ୍ୱୟଂଶାସିତ ମହାବିଦ୍ୟାଳୟ, ଅନୁଗୋଳ, ଓଡିଶା: ୭୫୯୧୪୩
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COURSE OUTCOME - (PG)

The Institution offers 17 PG Programmes consisting of 393 Courses. The Arts stream comprises 08 PG programmes viz. Economics, Education, English, History, Odia, Political Science, Sanskrit, Sociology; the Science stream comprises 06 Programmes viz. Botany, Chemistry, Computer Science, Mathematics, Physics, Zoology; and 01Programme in Commerce. Along with these our institute provides 02 more self-financing programmes in PPP Mode i.e. IMBA and M.COM (F&C).

No. of Programmes offered in this HEI: 17

1. **Arts- 08**
2. **Commerce- 01**
3. **Science- 06**
4. **Self-Financing(PPP) - 02**

No. of Courses in each Programme: 393

- **Arts- 156**

1. Economics- 20
2. Education-20
3. English-20
4. History-20
5. Odia-18
6. Political Science-20
7. Sanskrit-20
8. Sociology-18

- **Commerce- 24**
- **Science- 127**

1. Botany- 19
2. Chemistry- 29
3. Computer Science- 23
4. Mathematics-19
5. Physics-18
6. Zoology-19

- **Self-Financing Programme- 86**

1. IMBA- 58
2. MCOM (F&C)- 28

NEW COURSES INTRODUCED: 212

Sl.No	Programme	No of Courses newly Introduced	Year
01	Education	20	2022
02	English	20	2022
03	History	20	2022
04	Sanskrit	20	2022
05	Sociology	18	2022
06	Commerce	24	2022
07	Botany	19	2022
08	Chemistry	29	2022
09	Computer Science	23	2022
10	Mathematics	19	2022

COLOR CODE USED FOR

- **New Courses-Red**
- **Local-Purple**
- **Regional-Orange**
- **National-Blue**
- **Global-Green**

Programme: ECONOMICS

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
1.	HCE-101	Micro Economics-I	To have a theoretical understanding of consumer behavior and decision-making 2. To get acquainted with recent advances in microeconomic theory and acquire the skills to apply the theoretical knowledge in research 3. To learn about theory of demand, Utility	On successful completion of this course students will be able to 1. have an understanding of the basic reasoning of Economics and understand the consumption; production and cost concepts in an analytical way; 2. apply mathematical tools and techniques to study	Global

			Functions - types and properties; Consumers' choice involving risk and uncertainty; Production function – types and properties; Theories of Cost and general equilibrium theory – An overview.	behavior of economic agents; and 3. understand the basic principles of General equilibrium theory.	
2.	HCE-102	Macro Economics-I	1. To analyse and establish the functional relationship between economy level/aggregates. 2. To have a proper understanding of macroeconomic theoretical structure 3. To educate the students on different terms and concepts in macroeconomics like national income accounting, Circular flows, consumption function, investment function, supply and demand for money etc	On successful completion of this course students will be able to: 1. apply the subject knowledge in understanding the working of the economy as well as the macroeconomic issues and policies; and 2. understand systemic facts and theoretical developments.	Global
3.	HCE-103	Quantitative Methods-I	1. To train the students to use the techniques of mathematical and statistical analysis, which are commonly applied to understand and analyze economic problems 2. To emphasize the mathematical methods rather than learning mathematics itself, which are usually used for understanding economic concepts 3. To learn about the classical techniques involving functions and calculus	On completion of this course, a student should be able to 1. express relationship between economic variables mathematically, analyze, optimize and interpret them; 2. use appropriate techniques to solve problems with calculus and linear algebra; and	Global

			4. To gain knowledge about the elements of Game Theory as applicable to real life economic analysis.		
4.	HCE-104	Public Economics	1. To provide the students with thorough analytical understanding to analyze public goods, externalities, market failures; economics of government expenditure, taxation and public borrowing; 2. To critically analyze fiscal policies/finance and its implication in Indian Economy.	On successful completion of this course, the students will be able to 1. have conceptual clarity on the theories of public goods, public expenditure, public revenue and public borrowing; and 2. apply the principles of public economics in analyzing various government policies	National
5.	HCE-105	Indian Economic Problems	1. To critically understand the economic growth trajectory, economic policies, and institutional reforms of modern India 2. To understand four major economics challenges of Indian Economy, i.e. Poverty, Inequality, Unemployment and inflation 3. To have an in-depth analysis of the sectoral contributions of agriculture, industry and service sector in India 4. To examine the operation and implementation of fiscal and monetary policy in India	On successful completion of this course students will be able to 1. have a clear picture of the economic growth trajectory, economic policies, and institutional reforms in India; 2. understand four major economics challenges of Indian Economy, i.e. Poverty, Inequality, Unemployment and inflation; 3. have an in-depth analysis of the sectoral contributions of agriculture, industry and service sector in India; and 4. understand the nitty-gritty of fiscal and monetary policy.	National
6.	HCE-201	Micro Economics-II	1. To impart theoretical	After completing the	Global

			knowledge on decision making under market imperfections 2. To impart theoretical knowledge on distribution.	course, the students are expected to have 1. deeper knowledge on decision making under different market imperfections including oligopoly; 2. deeper knowledge about the broad paradigm of neo-classical economics; and 3. deeper knowledge about distributional and welfare aspects of economic activities.	
7.	HCE-202	Macro Economics-II	1. To make the students understand the different terms and concepts in macroeconomics like Money market and real market, inflation in developing countries, causes of occurrence of business cycle in a market economy and ways to control them. 2. To expose the students to open economy macroeconomics and the dynamics there in.	On successful completion of this course students will be able to 1. apply the subject knowledge in understanding the macroeconomic dynamics both in a closed and an open economy; and 2. understand the functioning of a market economy and the ways and means to keep such an economy functioning properly	Global
8.	HCE-203	Quantitative Methods-II	1. To train the students to use the techniques of probability theory and statistical analysis, which are commonly applied to understand and analyze economic problems 2. To deals with simple tools and techniques, which will help in sampling theory and designs, data collection, analysis, theory of estimation and hypothesis testing 3. To initiates the correlation analysis -	On completion of this course, a student should be able to 1. have fair idea about probability theory which forms the foundation of inferential statistics; 2. understand theoretical distributions and their significance; 3. understand sampling and sampling designs, theory of estimation and hypothesis testing procedure; and 4. fit a linear and some commonly used non-linear curves.	Global

			simple, multiple and partial, and regression analysis - linear and non-linear.		
9.	HCE-204	Economics Of Social Sector	1. To study the role of economics in evaluating education and education policy 2. To familiarize with educational problems in the context of economic concepts, theories and techniques make education choices 3. To explain and predict education markets and their inefficiencies 4. To outline key principles of health economics including efficiency and equity 5. To provides a foundation for and rationale for performing economic evaluation	On successful completion of the course, students will be able to 1. understanding of key concepts, issues, theories and models relating to economics of education, along with empirical evidence on and policy implications of those theories and models and a deeper understanding of recent research activity; 2. understand methods used by economists to evaluate education policies; 3. understand and Model the Education Production Function; 4. gain knowledge of the key analytical reasoning and tools of health economics and their normative foundations and ethical implications; basic economic theories and models of regulation applied to health care providers as hospitals and long-term care organizations and the health-related behavioral determinants and an overview of some recent policies aimed at improving the populations' lifestyles; 5. use economic models to understand behaviors of actors in the health care sector, do analyses of needs for health care services, make analyses of efficiency and quality of health care organizations, find and	National

				utilize relevant data sources describing and use relevant econometric models for the analysis of the economic agents' behaviour;	
10.	CEE-201	Economics Of Growth And Development	1. To learn neoclassical growth models of Solow, Meade, Robinson, Kaldor and Pasinetti 2. To discuss about Cambridge criticism over measurement of capital 3. To understand the importance of endogenous growth theories which highlight on human capital as an essential component for a country like India 4. To analyse the investment decisions through investment criterion along with its merits and demerits	On completion of this course, a student should be able to 1. To gain knowledge about recent developments in growth and development, and in particular dynamic growth theories focusing, among other issues, on labor market distortions, pollution and the cost benefit of projects to be undertaken	National
11.	HCE-301	Basic Econometrics	1. To introduce the relevant econometric theory and explaining the theory with examples 2. To understand Classical Linear Regression Models and regression diagnostics 3. To develop an intuitive understanding of the material that will allow these econometric tools to be utilized effectively and creatively.	On successful completion of this Course, students will be able to 1. learn various basic econometric methods, estimation methods and related econometric theories; and 2. apply these methods to data or econometric modeling techniques.	GLOBAL
12.	CEE-301	Industrial Economics	1.To acquaint the students with the concepts ,principles	1. Education and experience in industrial relation and management	Local

			issues connected with trade unions,collective bargaining, womens participation, grievance redressal and employees discipline and dispute resolution 2.To provide understanding of industrial relation problems, about laws and framework for analysis of such problems 3.To make students understand various concepts of industrial relations of employers and employee, industrial dispute acts, trade union acts, industrial Employment Acts	can open up many exiting career opportunities 2.Students can be able to solve various industrial problems	
13.	AEE-301	Agricultural Economics	1. To impart knowledge on applications of economic theories in agricultural sector, 2. To make students understand the linkage between agriculture and other sectors of the economy. 3. To impart knowledge on new developments in the policy paradigms related to agricultural sector.	After completing the course, the students are expected to have 1. deeper knowledge on different theories related to economic development and the agricultural sector; and 2. increased interest to undertake research activities related to aspects of agricultural sector in India and Odisha.	National
14.	FEE-301	International Finance	1. To educate the students on different terms and concepts in international finance like exchange rate and interest rate determination and forecasting, different forms of derivatives and its uses, different	On successful completion of this Course, students will be able to 1. appreciate the functioning of the international financial markets and its management and the determination of different exchange rates; and 2. understand the way the	Global

			financial risk in international market. 2. To enhance the skill of the student to understand the activities in international market.	foreign exchange market and the derivatives markets and the capital markets function using futures, options and swaps.	
15.	FEE-302	Enterpreneurship and Economic Development	1.To gain an understanding of core economic principles and how they apply to wide range of real word issues 2.To provide analytical skills required for understanding problems in industrial economics 3.to help students in understanding of cost structure and their role in firm decision	1. The students can describe an explain the determination of the size and structure of the firm and implications of the separation of ownership and control 2.The students can understand the industrial environment and thus able to solve the problems in an efficient manner	Local
16.	CEE-401	Dissertation	To teach the students the basic elements of research project writing	The students will be able to prepare and present their own research thesis	Global
17.	CEE-402	Demography	1.To achieve knowledge about the size, composition, organisation and distribution of population 2.Can describe the past evolution present distribution and future changes in population of an area 3.To enquire the trends of population and its relation with the different aspects of social organization in an area	1.It enables the students to earn about population growth and the measures to control it 2.Students can understand the concepts like fertility, mortality and migration and apply suitable measures in real life 3. Students can assist in addressing developmental challenges related to population growth such as poverty, unemployment and health issues	National
18.	AEE-401	Financial Institutions And Market	1. To educate the students on different terms and concepts in financial institutions and market like commercial and central bank, monetary policy,	On successful completion of this Course, students will be able to 1. understand the financial system: its structure and functions and equilibrium; 2. understand the way the different rates of interests	Global

			money and capital market. 2. To enhance the understanding of the students about organisation, operation and growth of financial systems.	are determined; 3. appreciate the functioning and importance of different banking and non-banking financial institutions and their role in a developing economy; and 4. explain the role and structure of money and capital markets.	
19.	AEE-402	Industrial Realtion And Management	1.To aware the students about the present industrial era in India. 2.To make students self reliant and provide work- life autonomy in the field of industry in India 3. To motivate the students for innovation and to help them in making a new start up in future 4.To. provide sufficient ideas of business activity like management of HRM, marketing Financial management, Transformational management, visionary management	1. After having a brief knowledge of entrepreneurship ,it will help in entry level roles in business, finance marketing sales and human resource 2. The course provides entrepreneurial skills needed to start a company 3. 3.Helps in providing career opportunities for the students	Local
20.	AEE-403	Financial Inclusion and Economic Development	The objectives of this course are to provide the students with thorough understanding of 1. financial inclusion and exclusion, relation between financial inclusion and economic development; and 2. role of financial institutions, micro finance and micro insurance in financial inclusion.	On successful completion of this course, the students will be able to 1. learn and analyse the dimensions of financial inclusion, the progress of financial inclusion in India; and 2. Analyse the complexities associated with financial inclusion in India.	National

Programme: EDUCATION

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
1.	Edn-1.1	Philosophical Foundations of Education	To state and analyse the meaning of education and form own concept on Education.	By studying this one can compare & contrast Indian and western philosophies of Education.	National
2.	Edn-1.2	Sociological Foundations of Education	To describe the relationship between education and sociology	Through this paper a student can justify the importance of education for social change.	National
3.	Edn-1.3	Psychological Foundations of Education	It can improve the understanding of students upon the classroom teaching and learner's behaviour.	Learning this paper the students will be able to use educational psychology in their teaching learning task.	Global
4.	Edn-1.4	Pedagogical Foundation	It can create a revolution in the traditional teaching & learning method and improvise the pedagogical knowledge.	By studying this paper a student can prepare a lesson plan in different design by his/her own.	Global.
5.	Edn-2.6	Statistics In Education	To compute and use various statistical measures of average, variation and interpretation of educational data.	Students will able to understand, organize and represent educational data in tabular and graphical form.	Global
6.	Edn-2.7	Educational Reaserch	To understand research design and procedure of research in education.	Students will able to develop procedure of collecting and analyzing data.	Global
7.	Edn-2.8	Development Of Education In India	To understand the development of education in India during ancient period, medieval period and pre independence period.	Students will able to implement recommendation of different policies and committee's reports of education in India.	National
8.	Edn-2.9	Modern Trends in Indian Education	To understand the development of Indian 8educationa system	Students will able to understand the education system across India.	National
9.	Edn-3.11	Educational Assessment And Evaluation	To know the importance and purpose of assessment for learning.	Students will able to develop or construct an unit test on any school subject.	Global
10.	Edn-3.12	Guidance And Counseling in Education	To explain the role of school in organising different guidance programmes.	Students will narrate the process, tools and techniques of guidance and counselling.	Global

11.	Edn-3.13	Eucational Technology	To improve the quality of education and enhance learning	Students can use educational technology to access online resources that help them at their own pace.	Global
12.	Edn-3.14	CurriculumDevelopment	To analyse bases and sources of different curriculum from courses of study and textbooks.	Students will able to make content analysis of any text book.	Global
13.	Edn-4.16	Educational Administration, Supervision And Management	To provides qualitative improvement to education. To ensure adequate utilization of all resources.	It enables students to prepare exemplary portfolio with which to pursue their professional goals, instructional leaders and community engagementyes	Global
14.	Edn-4.17	Environmental Education	It allows students to explore environmental issues, engage in problem solving and take action to improve the environment.	Multidisciplinary instructors, environmental educators	Global
15.	Edn-4.18	Teacher Education	It allows the students to understand the professional growth of teacher. It provides the meaning, purposes and strategies of teacher.	After completion of the course student will be able to understand the importance of teacher evaluation, characteristics of a good teacher, professional ethics and accountability of teacher.	National
16.	Edn-4.19	Early Childhood Care and Education	To study and practice of resource generation, allocation and utilization in education.	It enables students to know educational finance, sources and distribution, cost benefit of investment in education	Global

Programme: ENGLISH

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
01.	CC-101	Literary Criticism	From Plato to Leavis	#Introduce students to tradition of western literary criticism from classical antiquity to early modern period # The role of criticism in literary studies. # Inform students about the foundational principles of western literary criticism	
02.	CC-102	The Age Of Initiation And The		# Acquaint students with the shift from Middle ages to	

		Age Of Exploration		Renaissance # Inform students the larger historical, political, and cultural changes of the time # The rise of Drama and the beginning of Metaphysical poetry. # The rise of Puritanism and its impact on literature.	
03.	CC-103	The Age Of Reason		# Acquaint students with transformations that occurred in English Literature # The major features of Neo-Classicism and Enlightenment # The foregrounding of logic and reason # Study three representative forms: Essays, mock-heroic poetry, and restoration drama.	
04.	CC-104	Age Of Revolution		# Develop familiarity with dominant intellectual currents of the Victorian era. # Identify the major themes and characteristics of Victorian literature. # Explore the democratic spirit in politics, a scientific attitude towards life, and colonialism.	
05.	CC-105	Age Of Uncertainty		# Introduce students to a democratic spirit in politics, a scientific attitude towards life, and colonialism. # Expose the dominant intellectual currents of the Victorian era. # Identify themes and characteristics of Victorian literature.	
06.	CC-206	Literary Theory		# Appreciate the relevance and value of literary studies. # Demonstrate greater understanding of major critical tools available. # Apply critical concepts in close reading of a literary text.	
07.	CC-207	The Age Of Anxiety I		# Expose students to works of modern period marked by anxiety, a spirit of self-	

				questioning, and flair for experimentation.	
08.	CC-208	The Age Of Anxiety II		# Measure the impact of historical, political, social and cultural events on literature. # Understanding of literary modernism and its experimentation with language.	
09.	CC-209	Literature From The World		# Reading of selected literary texts from around the world. # Evaluate impact of indigenous issues and concerns #Examine how the texts represent collective humanity.	
10.	CC-210	Research Methods In English Studies		# Grasp the basics of research in literary studies. # Choose the type and tools of research to write their MA project. # Understand the nature and scope of research	Global
11.	CE1-301	Indian Writing In English (IWE: Fiction)		# Familiarize students with major writings in Indian English fiction, non-fiction, poetry, and translation. # Phases of development such as colonial, post-colonial, and modern times. # Explore Indian litterateurs describing their environs and social milieu	National
12.	CE1-302	IWE: Plays			
13.	CE1-303	IWE: Poetry			
14	CE1-304	IWE: Non-Fiction			
15	CE1-305	Literature of the Diaspora			
16	AE1	History of English Literature		# Learn the basic skills of writing and editing # Create an employable post-graduate	
17	AE2				
18	FE4-401	Gothic Literature		# Introduce students to the genre of gothic #Focus on the major themes in Gothic literature #Expose the thrilling psychological environment	

Programme: HISTORY

Course Outcome

Sl.No	Core	Course Name	Thrust Area/Objective	Outcome	Relevance

	Paper				
01	HIST-C-01	Ancient Civilizations	Prehistory of some anceint civilizations	Acquaint students with Technological development during the Neolithic Age and Bronze Age	Global
02	C-02	World History (1500-1900)	Transition from Medieval period to modern period	Introduce students to Idea of nationalism, democracy, parliamentary reforms and revolutionary movements	Global
03	C-03	Twentieth Century World (1900-1945)-I	Developments during the period between the two world wars	Expose students to Economic and political problem in different countries, Nazism, Fascism , Effort for disarmament	Global
04	C-04	Twentieth Century World(1945-200)-II	Post world war II period, Organizations like UNO, NATO, Disintegration of USSR	Political & diplomatic relation between European and Non-European countries, Regional security Alliances	Global
05	C-05	Historical Theories and Methods	Development in Historical writing	Acquaint students with Historical writing in Greece, Medeival understanding , Scientific history and Total history	Global
06	C-06	Medieval Societies	Medieval religions-	Introduce students to Idea on Confucianism , Taoism, Judaism, Christianity	Global
07	C-07	Cultural Heritage of India	Culture and religion of India	Expose students to Understanding Indian Culture, religion, language, literature, art and architecture	National
08	C-08	History of China and Japan	Political, economic development in China and Japan	Knowledge of history of China and Japan	Global
09	C-09	Indian Historiography	Historical writing in India	Interpretation of history, Marxist, colonial, nationalist and Subaltern school	National
10	C-10	History of Science and Technology in India	Science and Technology	Technological innovations in India	National
11	C-11	Cultural Heritage of Odisha	Religion, Art and Architecture	Introduce students to Buddhism, Jainism and the Cult of Lord Jagannath	National
12	C-12	History of Peasant and Labour Movements in India	Peasant and Labour studies	Knowledge on Peasant, Labour and trade Union Movement	National
13	CE-13	History of Odisha (Early Times to 1118AD)	Early history of Odisha	Familiar with the geography, polity and culture of ancentOdisha	Regional
14	CE-14	History of Odisha (1118-1500AD)	Political and cultural development in Early	Expose students to political and cultural history of Early	Regional

			Medieval Odisha	medieval Odisha	
15	CE-15	History of Odisha (15^{th} -16^{th} century)	Culture in Medieval Odisha	Idea on early Odia literature and Bhakti movement	Regional
16	C-16	Application of history in Tourism	Historical sites, and monuments	Introduce students to monuments, art and architecture and religion of Odisha	Regional
17	C-17	Women in Indian History	Women studies	Acquaint students with Developments in India and role of women	Regional
18	CE-18	Odisha in 16^{th} -19^{th} century	Mughal and Maratha rule in Odisha	Expose students to Maratha and Mughal rule in Odisha	Regional
19	CE-19	History of Odisha(1866-1964)	Economic and Political development in Odisha	Expose students to Growth of Odia Nationalism and political developments	Regional
20	C-20	Project	Odisha history	Acquaint students with Detailed study on specific topics	Regional

Programme: ODIA

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
01	P-1.1	Mythology and Ancient Odia poetry	Ancient Odia poetry and Culture of Odisha	* Introduction to classical epics. *Knowledge on Ancient Odia poetry	Regional
02	P-1.2	Modern Poetry	Modern Odia Poetry and literary theory	*Introduction to Modern Odia poetry. *Aspects of ancient Literary theory. *Ancient Poetry.	National
03	P-1.3	Odia Prose and Fiction	Fiction on Social and Cultural aspects of Odisha	*Introduction to classic odia prose. *Knowledge on fiction and short stories.	Regional
04	P-1.4	Prose Literature	Biography and Travelogue	*Introduction to notable Autobiography. *Notable Odia travelogue.	National
05	P-2.1	Linguistics	Origin of Language , Vocal Organ	*Origin and evolution of language. *Importance of vocal organ. *Language family and influence of other languages on Odia.	Global
06	P-2.2	History of Odia Literature	Ancient, Medieval and Modern litterateurs	*Pre-SaralaOdia literature. *Medieval literature.	Regional

07	P-2.3	Odia Drama	Pre and post-independent drama	*Evolution of Odia drama. *Knowledge Notable Experimental drama.	National
08	P-2.4	Comparative Literature, Theory of Criticism, Translation study	Theory of criticism, Translation Studies	*Meaning and Scope of comparative literature. *Introduction to translation studies.	Global
09	P-3.1	Linguistics – I	Different aspects of Language , Phoneme, Vocal organ, IPA	*Different aspects of Linguistics. *Speech sounds and speech organ. *Phoneme and IPA.	Global
10	P-3.2	Linguistics-II	Phonemes Law, Morphology, Stylistics, History of Linguistics	• Phonetic laws. • Syntactic and semantic analysis of language. • Nature of speech sound and Stylistics. • History of linguistics.	Global
11	P-3.3	Stage and Dramaturgy	Theory of Drama, Stage Management, Different trends in Drama	• Origin and development of Drama. • Different aspects of stage and Dramaturgy. • Different trends in drama.	Global
12	P-3.4	Drama and Dramatist	Pre & Post-Independent and Contemporary trends in drama.	• Development of modern odia drama. • Notable Odia dramatist. • Current trend in Odia drama.	Regional
13	P-3.5	Modern Odia Poetry	Application of different eastern and western poetic aspects in Odia poetry.	• Trends in Odia poetry. • Notable modern poets of Odisha. • Post modernodia poetry.	Regional
14	P-3.6	Modern Odia Prose	Essay, Short Story, Fiction, Biography, Autobiography and Travelogue	• Different theory and aspects of Prose. • Important essays, novels and short stories. • Important essayist, novelist and short story writers.	Regional
15	P-4.1	Folk Literature	Theory and application of Folk Literature, Motif, Types and morphology	• Meaning, scope and different aspects of folk literature. • Motif, types and morphology. • Applications of Folk literature.	National
16	P-4.2	Research	Meaning and scope of	• Meaning, scope and	Global

		Methodology	research, Field Study, Data collection and analysis.	types of research. • Acquaint students with Tradition, different aspects and stages of research. • Data collection, analysis, field study etc.	
17	P-4.3	Dissertation	Research work as a part of implementing research Methodology	• Application and experiment of research methodology.	National
18	P-4.4	Seminar Presentation with Viva	Oral presentation Skill	• Seminar preparation skill and oral presentation practice.	National

Programme: POLITICAL SCIENCE

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
01	Paper-1	Comparative Politics:Concepts and Models	It imparts the knowledge about comparative politics, David Estonestheory , constitutionalism and elite theory.	The Students knew about the application of comparative methods to the study of politics, behavioralism, constitutionalism, structural-functional approach & Elite theory.	Global
02	Paper-2	Administrative Theory: Principles and approaches	This theory focuses on public administration theory of organization, administrative management and concepts of public administration.	The Students knew about the Public Administration, Theories of Organization, concepts of Public Administration and Administrative Management.	Global
03	Paper-3	International Relations: Major concepts and theories	It gives knowledge about theory and approaches of international relations , National interest, International terrorism and conflict resolution.	The Students knew about the subjects like International Relations, Theories of Deterrence, Arms control along with Contemporary Global issues.	Global
04	Paper-4	Contemporary Political Theory	This course focuses on nature and scope of political theory, theory of Democracy, Theory of Justice , Civil Society , NGO and self help groups.	The Students knew about the Decline and resurgence of political theory, models of Democracy, Rawls Theory of justice, Civil Society, NGO and Self Help Group.	Global
05	Paper-5	Political Ideologies	To acquaint the students about political	The Students knew about the different types of Political	Global

			ideologies like liberalism, feminism, socialism, modernism and multi-culturalism.	Ideologies like Maxism, Feminism, Modernism, Multiculturalism and Environmentalism.	
06	Paper-6	Comparative Political Process	This course focuses on comparative study in development of underdeveloped Nations , political parties, pressure groups , political change and public policy .	The Students knew about the Comparative Politics, different Social Movements, Revolutions, Political Parties, Pressure Groups and Policy formulation, implementation and evaluation.	Global
07	Paper-7	Public Administration and Management	It gives knowledge about budget, major issues in administration, civil service conduct and new trends of Public Administration.	The Students knew about the Budget, Relation between Political and Permanent Executive Civil Service conduct, Good Governance Citizens charter, E-Governance	National
08	Paper-8	Global Politics:Contemporary Challenges and Issues	To acquaint the students about global politics, contemporary global concerns, UNO and Human Rights.	The Students knew about the Cold War, Functionalism, Global Environmental Issues, Role of United Nation in peace & Security and Human Rights.	Global
09	Paper-9	Contemporary Debates in Political Theory	It provides the knowledge about contemporary debates on maxism ,role of ideologies and theory of change .	The Students knew about the Marxism, End of Ideology, Ideology of Lenin, Mao and Gandhi.	Global
10	Paper-10	Political Sociology: Concepts and Issues	It imparts the basic knowledge about sociological ideas and views of sociological thinkers.	The Students knew about the Ideas of Karlmarx, Max Weber, Emile Durkheim, Talcott Persons, Elite Theories, Political communication, Social change and Social Conflicts.	Global
11	Paper-11	Research Methodology and Statistical Methods	To acquaint the students with research methodology , research design , survey methods, data analysis and basic statistical techniques.	The Students knew about the objective of Research, Research Methods, Types of Research, Survey methods, Data analysis, Sampling and Basic Statistical techniques.	National
12	Paper-12	Contemporary International Studies: Concepts and Challenges	This course gives knowledge about globalization , inter-paradisdm debates , post positivist approaches , alternative perspectives on security	The Students knew about the Globalization and its Challenges, Liberalism, Post-positivist approaches, Environmental Security, Political Economy and International Relations,	Global

			and political economy of international relations.	Dependency Theory, New Imperialism Debate.	
13	Paper-13	Indian Government and Policies: Processes	To impart the knowledge about Indian Government and its working , political parties, electoral system and pressure groups .	The Students knew about the Indian Parliament and its working, Supreme Court, Nature of Party system and coalition Politics, Electoral Reforms, Pressure Groups and their action	National
14	Paper-14	Working of Democracy in India	This course focuses on Democracy of India , The Grass roots of Democracy and the challenges of Democracy.	The Students knew about the Historical overview of Democracy, Rural and Urban Local Self Government, Challenges and Performance of Democracy.	National
15	Paper-15	India: Regional and International Organizations	It gives knowledge about UNO, roll of India and various International Organizations.	The Students knew about the Role of India in the UNO, India and SAARC, India and BRICS, India and European Union and India and ASEAN.	National
16	Paper-16	Western Political Thought	It imparts the knowledge about Western political philosophers and their thoughts from ancient to modern.	The Students knew about the Ancient Greek Philosopher like Plato, Aristotle, Mediaval Philosophers like Hobbes, Locke, Rousseaus, Modern Philosophers like Hegel, J.S. Mill, Marx, Gramsci, Arendt and Rawls.	Global
17	Paper-17	Indian Political Ideas	This course focuses on the ancient political thinkers, social reformers, freedom fighters and their contributions.	The Students knew about the Ancient Indian Philosophers like Manu, Kautilya, Social Reformers like DayanandaSaraswati, Raja Ram Mohan Ray, Freedom Fighters like GokhleTilak, Jawaharlal Neheru, B.R. Ambedkar, Mahatma Gandhi and M.N. Roy.	National
18	Paper-18	Society and Polity in India	It discusses about the Society and elements , social change in India , Social moments , new challenge in Indian Democracy.	The Students knew about the Diversity of Indian Society, Caste, Class, Reservation Issues, Social Change, Women Movements, Tribal Movements, State and Globalization, Challenges of Democracy in India.	National
19	Paper-19	State and Local Administration in India with special reference to Odisha	To impart the Administration of Odisha , Urban and Rural local Government and Odisha Secretariat .	The Students knew about the Administration of Odisha, RDC, BDO, Board of Revenue- State Secretariat, Panchayat Raj of Odisha,	Regional

				Urban Local Government of Odisha, Minister, Chief Minister and Governor of Odisha.	
20	Paper-20	Dissertation/ Project work	To help students to acquire the knowledge of research work , to make students learn the methods of writing a Research Report.	The Students knew about Research work. They are better off in understanding published works and discovered their passion for research.	National

Programme: SANSKRIT

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
01	Sans-1.1.1	Vedic Language and Literature	Vedic Scriptures are the hidden treasure of many branches of modern knowledge. So the students would be able to establish a co-ordination between oriental and modern learning system by studying Vedic texts.	# Expose students to Knowledge of Hymns from Rgveda, Atharvaveda, Ishavasyopanisad, Kenopanisad # Exposure to ancient Sanskrit literature	National
02	Sans-1.1.2	Grammar 9 Sidhanta- kaumudi)	Grammar is the intellectual instrument that keeps any language and literature vibrant and alive. Students would be able to form correct words and sentences by studying Sanskrit Grammar.	# Grammatical knowledge of Samjna, paribhasa, Sandhi, Samasa, Karaka strengthened	National
03	Sans-1.1.3	Systems of Indian Philosophy-1	Philosophy is the essence of any subject – oriented text. Especially the philosophical texts in Sanskrit aim at to realize the inner self. So these texts are included in the syllabus.	# Expose students to Concepts of Samkhya-karika, Vedantasara, Pratyabhijna-darshana introduced and discussed increasing students' acquaintance with them.	National
04	Sans-1.1.4	Poetics-1	Poetics and Rhetoric's are the guiding principles of Literary Texts. By studying these texts, the students would be able to create their	# To introduce students to concepts of Natyasashtra, Dhvanyaloka, Sahityadarpana # Knowledge of Alamkaras increased.	National

			own literary compositions with ornamentation.		
05	Sans-1.1.5	Indian Culture and History	Oriental prose and poetry- texts are the path – shower to new generation for their creative writings. So these texts are included.	# Study philosophies of Charvaka, Buddha, Jaina # To be informed about Indian art of dancing, music, theatre, drawing, sculpture	National
06	Sans-1.2.6	Ancilliary Vedic Literature	*Nirukta* deals with the formation of Vedic words, Bhasyabhumika is the background of Vedic Commentary and Rkpratisakhya is the grammar text relevant to Vedic study . So these taxes are included to understand the Vedic texts properly.	# Students will have knowledge of Samjnas such as Samanaksara, Sandhyaksara, rakta, Aksara, Aghosa etc. # Adequate knowledge of Rgveda-bhasya-bhumika of Sayanacarya	National
07	Sans-1.2.7	Grammar and Philology	Grammar and philology helps in using the right word in appropriate place and it is very much necessary in a language subject. So it is included in the syllabus.	# Expose students to Concepts of VaiyakaranaSiddhantaKaumudi # Knowledge of phonetics, phonology, semantics, syntax and Morphology	National
08	Sans-1.2.8	Systems of Indian Philosophy-II	By studying various philosophical texts, the students would be able to co-relate the principles of different philosophy. So these texts are included hear.	# Knowledge of TarkaSamgraha strengthened # Information about BauddhaDarshana provided	National
09	Sans-1.2.9	Sanskrit plays and Poetics	Plays are the mirror of the society and poetics helps in developing a positive social view among the people. So this is prescribed in the syllabus.	# To study ancient texts of Sanskrit plays like Mrcchakatikam and Uttara-rama-caritam	National
10	Sans-1.2.10	Group B– (Cell) Classical Literature: Prose, Poetry and Drama	These texts are helpful in developing a positive attitude towards life and literature.	• Ancient texts of Sanskrit develop a positive attitude toward both life and literature.	National
11	Sans-2.3.11	Poetics and Plays-II	Poetics develops the critical outlook to study and write literary texts in a positive way and small plays are more effective	• The statement suggests that Poetics helps develop a constructive critical approach to	National

			on social reforms. So these texts are included.	studying and writing literature, focusing on its deeper meaning and purpose. • It also emphasizes that small plays are impactful tools for social reform, as they address societal issues concisely and effectively. • These texts are included in literary studies for their potential to inspire social change and their importance in shaping critical thought.	
12	Sans-2.3.12	Group B– (Cell) Classical Literature (Sahitya)	While composing verses in traditional meters, the knowledge of prosody is required. So these texts are included to meet that need.	• The understanding of prosody, which is the study of rhythm, meter, and sound in poetry, is essential for writing verses in traditional poetic forms. • The purpose of including these texts is to provide the necessary guidance or knowledge to help with this aspect of poetry composition.	National
13	Sans-2.3.13	Group B– (Cell) Classical Literature (Sahitya)	Various sastra-kavyas like Bhattikavya guide how to compose kavyas for propagation of Grammar and other branches of Knowledge and deep study of poetics develops the ability of critical appreciation. So keeping that in view the present texts are included.	• Texts like **Bhattikavya** serve as guides for composing kavyas (poetic works) to promote the study of grammar and other fields of knowledge. • A deep understanding of poetics helps develop critical appreciation skills. Thus, the inclusion of these texts is intended to foster both knowledge and the ability to critically evaluate poetry.	National
14	Sans-2.3.14	Allied elective-I from other departments	This is an inter-discipline paper and our students study Archaeology in this paper to develop their	• Students studying this inter-disciplinary paper, which includes archaeology, develop a historical and	National

			historical and archaeological approach	archaeological perspective. • It aims to enhance their ability to analyze and understand history and archaeology in a comprehensive way.	
15	Sans-2.3.15	Free elective-I from Parent Departments or Other Departments	In this paper some functional aspects of Sanskrit are prescribed. Noting, drafting and Conversation etc. are studied in this paper.	• Learn practical aspects of Sanskrit, such as noting, drafting, and conversation, through the prescribed paper. • This aims to enhance their functional use and communication skills in Sanskrit.	National
16	Sans-2.4.16	Technical Literature	Some technical texts on Ayurveda, Horticulture, and Engineering are Architecture is prescribed here to prepare the students for self- employment.	• Students are equipped with technical knowledge in Ayurveda, Horticulture, Engineering, and Architecture, preparing them for self-employment opportunities in these fields.	National
17	Sans-2.4.17	Ancient Indian history, Culture and Epigraphy	History of some ancient Indian civilizations, inscriptions, temple architecture and sculpture are included here to build a bridge between past and present.	• students gain knowledge of ancient Indian civilizations, inscriptions, temple architecture, and sculpture, helping them connect the past with the present.	National
18	Sans-2.4.18	Group B– (Cell) Classical Literature (Sahitya)	Later poetics liks**Rasagangadhara** conveys some new and developed ideas of creative writings in comparison to ancient texts. So this text is prescribed along with Odishan contribution.	• Students are introduced to new and evolved concepts of creative writing through later poetics like **Rasagangadhara**, alongside an understanding of the Odishan contribution, enhancing their appreciation of the development in literary ideas over time.	National
19	Sans-2.4.19	Group B– (Cell) Classical Literature (Sahitya)	In addition to the study of specific texts, the general idea about the six schools of poetics is required for the students of literature. So the same schools along with	• Students gain a general understanding of the six schools of poetics and their technical terms, enriching their overall knowledge of literary theory in addition to specific texts.	National

			technical terms are included here.		
20	Sans-2.4.20	Dissertation	To enrich the research ability of students this paper is prescribed and the students learn to develop a research oriented attitude by studying this paper.	• Students develop a research-oriented attitude and enhance their research abilities through the study of this paper.	National

Programme: SOCIOLOGY

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
1	SOC-C-1	Sociological Concepts	• To have a preliminary understanding of any discipline, one needs to understand the context of its emergence and knowledge of the concepts used.	This paper helps students have a preliminary idea of the discipline, its scope and nature and the themes that the discipline deals with	Local
2	SOC-C-2	Perspectives on Indian Society	• After going through the course the students can visualize the Indian society through sociological lens/imaginations developed by Indian sociologists.	They will get into a confluence of sociological universality and sociological specificity to a large extent.	National
3	SOC-C-3	Research methods	• To differentiate between sociological knowledge and common sense knowledge and the rise of critical thinking. • To understand the vantage point for a sociologist to understand social reality. • To understand different approaches for	This paper helps students evolve as social scientists where they would learn the techniques of research and be employable	Global

			understanding social reality. • To learn different tools and techniques of social research		
4	SOC-C-4	Classical Sociological Tradition	• To elaborate the seminal ideas of the thinkers who brought the subject to the forefronts of academic discussions. • To unfold before the students their vision of the social conditioning of various phenomena as envisioned and analysed by these thinkers and to provide them a perspective to look into the social processes and progress. • To en skill the students with a theoretical base to critically think, and analyse the social scenario around them.	After going through this paper, students will have a clear understanding of the ideas of the founding fathers of the subject, the theories built up by them to study the social phenomena and to get a macro perspective on the discipline.	National
5	SOC-C-5	Sociology of Tribes	• This paper helps understand the diverse tribal distribution across the country and helps us learn that tribes do not make a monolithic structure. • It helps the students understand the culture, economy of the tribes and addresses the basic issues of the tribes	It helps students examine and understand the different nature of tribal lives across the nation.	National
6	SOC-C-6	Globalization and Society	• Giving a fair idea to the students on the meaning, features,	After going through this paper, it is expected that the students will have a clear	Global

			dimensions of this process and its historicity. • Making them understand, the ideological currents that are shaping and the institutional transformations that are taking place under the process of globalisation. • Apprising the students with the consequences of globalisation on various groups of individuals and institutions of the society. • Generating a clear-cut impression about its recent courses and the new form it is taking.	understanding of this continuing process of social change, its consequences and courses.	
7	SOC-C-7	Sociology of change & development	• To examine the different forms of change • To understand the different parameters to examine the global scenario in terms of development. • To study the different theories of development. • To understand the Indian experience of development.	This paper will enable students to understand the politics of development and underdevelopment, and understand how development can be quantified, theorized and explained globally.	Global
8	SOC-C-8	Advanced sociological theories	• To understand the context and concerns of advanced social theories • Discuss the role of Functionalism, Neo-Functionalism, Structuralism, Post-structuralism, Neo Marxism,	After reading this course the students can grasp the sociological and social theories for a comprehensive and critical understanding of social structure and social institution in the contemporary society.	Regional

			Phenomenology, Ethno-methodology & Symbolic Interactionism • Assess the role of context in the rise of social theory.		
9	SOC-C-9	Voluntary sector studies	• To understand the meaning, nature, types of voluntary sector • To know about its origin and growth • To examine its role	This paper enlightens the students about the emerging sector and its scope. This paper would give employment opportunity to students in the voluntary sector.	Regional
10	SOC- C-10	Sociology of health & Gerontology	• The nature of Sociology of health and gerontology • The contribution of different scholars to the understanding of health and gerontology • Evolution of social medicine in India and the provision of health service in term of various programmes, contribution of health care providers and traditional healers in India • Strategies taken for the rehabilitation of the elderly through elderly homes, various NGOs	The students will be able to develop an understanding of the contribution of sociology in understanding the concept of health. • They will be able to define gerontology and understand its scope and significance. To develop awareness about the ways in which different organizations both national and international are involved in providing health services in India. • Develop an understanding about the strategies taken by different organizations in the resentment and rehabilitation of the elderly in India. • By providing an insight into the ways in which various voluntary organizations operate in India, the course provides a holistic picture of the health care scenario in the country.	Global
11	SOC -C-11	Urban Sociology	• To introduce the Scope and Approaches of Urban Sociology • To critically study the urban sociology theories • To analyze city type and functions in India • To understand the	This course provides an exposure to key theoretical perspectives for understanding urban social life in historical and contemporary contexts. • Students will get an opportunity to define urban sociology and demonstrate the nature and scope of urban sociology. • Develop an	National

			trends of India's contemporary urbanization pattern.	understanding about the impacts and trends of urbanization on Indian society. • Develop awareness of urban problems as well as policies adopted to solve such problems.	
12	SOC-12 (FE/AE/-I)	Applied research methodology	• Generating an understanding among the students about research, its types, designs to be adopted for various types of research and the ethics to be followed in research. • Providing ideas about the needs of reviewing literature, the techniques of reviewing, getting them acquainted with the various referencing styles. • Explaining and making them used to various types of research writing styles. • Allowing them to have experiential knowledge in research from problem identification to application of various tools in the field situation and bringing solutions and deriving conclusions.	After going through this paper, it is expected that the students will have thorough knowledge on research process which will make them better employable in the fields involving research.	Regional
13	SOC-13 (FE/AE/-II)	Sociology of Gender	• To learn about social construction of gender • How patriarchy shapes our ideas • To understand the context of different waves of feminism	This helps students to be gender sensitive both at home and in the public sphere, and enhances their employability as well	National

			and the theories • To learn on the status of Indian women at different historical junctures and the different movement for improving their status • To learn on the different approaches on gender and development.		
14	SOC -C-14	Sociology of Environment & Climate Change	• Establish before the students the reciprocal relationship between environment and society, the scope and subject matter of Sociology of environment, the approaches to environment developed by various schools. • Provide substantial idea about the environmental degradation process, their markers and the movements launched to protect the environment in India. • Accumulate ideas about the ideological currents, issues that drive environment movements. • Make the students sensitized about the great global environmental catastrophes and their consequences. • Give a stock	After going through this paper, it is expected that the students will have a fair amount of conscious knowledge on the significance of environment in a society, its present state of degradation and the concern thereof and the societal responsibility to preserve and protect it.	Global

			knowledge on the various international efforts undertaken and strategies adopted to conserve environment.		
15	SOC -C-15	Introduction to Sociology of Media and Popular Culture	• Learn on the history of popular and mass culture • Analyze texts from different theoretical lens • Understand the contemporary issues in media studies	Students can decipher the meaning of particular media text and images, the ideologies associated with it and critically analyze the texts they consume.	National
16	SOC -C-16	Rural Sociology	• To understand the nature scope and relevance of rural sociology. • To study village communities in contemporary times. • To learn about the rural movements and programmes for improving rural life.	In today's era when the rural and the urban are interpenetrating into each other, it is important for students to understand who the rural is understood.	National
17	SOC -C-17	Sociology of Development Induced Displacement and Rehabilitation & Resettlement	This course can enable the students to understand the causes and consequences of development induced displacement and land acquisition . • To gain insights of rehabilitation and resettlement policies with regard to development induced displacement. • To develop an analytical framework of rehabilitation & resettlement issues • To analyze the quintessence of displacement caused impoverishment risk	After reading this course the students will • Get acquainted with the concepts- displacements, compensation, rehabilitation and Resettlement. • Gain a comparative and critical understanding of international, national and project specific Rehabilitation and resettlement policy. • Visualize the problematic of DIDR resistance and explicate the DIDR protest movements in democratic India.	National

			and reconstruction • To assess the dynamics of Displacement caused Resettlement & Resistance		

Programme: COMMERCE

Course Outcome

S.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Whether there is any Local/Regional/National/Global relevance?
01.	MC1001	Advanced Accounting	Toexposestudentswith definitiveandcomprehensiveaccountancycoveringadvancedandspecialisedaccounting for companies as well as different types of organizations.	• Develop Insights about Corporate Restructuring and Accounting for various Types of Restructuring • Present and Analyze Consolidated Financial Statements of Holding and Subsidiary Companies • Understand Double Account System and Prepare Final Accounts of Electricity Companies • Develop the Skill of Preparation of Financial Statements of Banking Companies • Gain Knowledge and Competency in Accounting for Insurance companies.	National
02.	MC1002	Macro Economics	This course aims at introducing the students to the specialized concepts of Macroeconomics. This course discusses the concepts	• Acquire a fair degree of Proficiency in National Income accounting • Build Competence in National Income Determination and various sectorial	National

			associated with the National Income Accounting and Determination, Determination and measurement of aggregate macroeconomic variable like GDP, money, inflation, and the social costs of macroeconomic variable.	models • Have Better Idea about money, credit creation and monetary policy • Develop an understanding of the concept of Inflation and its social costs • Know the IS-LM Model and different equilibrium conditions	
03.	MC1003	Organisational Behaviour	The Objective of this course is to help students understand the Conceptual Framework of Interpersonal and Organizational Behavior.	• Understand the Concepts of Organizational Behavior • Learn about Group Dynamics, Team Spirit Development, and Motivation Theories • Have a Better Insight about Leadership Concept, Styles, and Theories • Know the Basics of Interpersonal and Organizational Communication • Develop Competence on Sources and Types of Organizational Conflicts and their Resolution.	Global
04.	MC1004	Corporate Legal Framework	TheObjectiveofthiscourseistofamiliarizestudentswiththerelevantprovisionsofvariouslaws influencing business.	• Have an insight of the Indian Companies Act and its requisite provisions • DevelopanideaonBankingRegulationActsprevailinginIndiaanditspolicies • Gain awareness about the IRDAActandSEBIActandtheirnorms • Gainknowledgeabouth	National

				eDepositoryAct,FugitiveandEconomicOffendersAct • Understandtheconcepts ofIntellectualProperty RightsanditsvariousActs.	
05.	MC1005	Financial Modeling And Valuation	The Objective of this course is to enable the students to understand the financial management in the contextof a corporate entity and acquaint them with different dimensions of financial management with applicationofthereleva nttoolsandtechniqueso ffinancialdecision-makingaimedatshareh olderswealthmaximiza tion.	• Understandtheconcept ofFinancialManageme nt,Valuation&RiskMa nagement • DeveloptheskillofCapit alInvestmentDecisions ofcorporates • Equipthemselveswithc onceptof capitalization,financial structureandcapitalstru cture • Gaininsightsaboutdeter minantsofDividend,Di videndpoliciesanddivid enddecisions • Enabletheskillsforman agementofCurrentAsse ts &WorkingCapital	National
06.	MC1006	Digital Marketing	Theobjectiveofthispap eristohelpstudentstoac quirethebasicconceptu alknowledgeofE-Marketingandto impartskillsfor useof technologyin marketing.	• HaveaninsightoftheInte rnetinIndia,SearchEngi neOptimization,andSea rchAdvertising • Developanideaon Displayadvertising,We bAnalytics,andConsum ersOnline • GainawarenessaboutSo cialMediaMarketingan dSocialMediaAnalytics • GainknowledgeonMob ileMarketingandEmail Marketing • Understandtheconcepts of Internetmarketingstrate gyandContentmarketin g,Privacyconcernsand Cyber Security.	Global

07.	MC2007	Advanced Cost and Management Accounting	To acquaint the students with the advanced concepts used in cost and management accounting,various methods involved, and tools and techniques used for costing and managerial decision makingat themacrolevel	• Understandtheconcept ofstandardcostingandin terpretationofvariances • Gaintheknowledgeabo utbudgetingprocessand preparationofbudget • Knowtheconceptandest imationofprocesscostin g • Understandtheprocedur eofcontract costing • Knowhowtoreconcilec ostandfinancialaccount ing	National
08.	MC2008	Strategic Management	The Objective ofthiscourseistohelpst udentsunderstandtheC onceptualFrameworko fBusinessStrategies to sustain inan economy.	• Understandtheroleofstr ategistandvarioustypes ofstrategiesusedinanor ganisationswhilefacing varioussituations. • Understandhowstrategi esareformulated andimplementedinanor ganisation • Knowthestrategies usedbythemultinational companies • Knowthebasicsofstrate gicalliance • Knowthechallengesfac edbyanorganisationwhi leformulatingstrategies andwhataretherecenttre nds in strategicmanagement	Global
09.	MC2009	International Business and Environment	To Understand about various national and international factors that are having impact on the functioning ofbusiness.	• Defineinternationalbus inessanddescribehowit differsfromdomesticbu sinesswithrespecttolaw s, regulations and taxation. • Identifyanddescribefac torsandforcesthataffect	Global

				anorganisation'sdecisiontointernationalizeitsbusiness • Describeandcomparestrategiesforinternationalization • Identifyandanalysechallengesinworking,communicating,andnegotiatinginacross-culturalcontext	
10.	MC2010	Quantitative Technique And Operational Research	To understand about various national and international factors that are having impact on the functioning ofbusiness.	• Understandthebasicsofnetworkanalysisanditsimplicationsinabusiness • Understandthegeneralstructureoftransportationproblem • Toknowthesolutionsandstrategiesforsolvingassignmentproblems • Understandthemethodofsolvinglinearprograming • Toknowthestructureofqueuingmodels	Global
11.	MC2011	Human Capital Development	The Objective ofthis courseis to help students understand the Concept of Human Capital Developmentandmeasurementof valueadditionto theorganisation.	• Understand the importance of Human Capital for an organization. • Acquiretheconceptualknowledgeofhumanresourcedevelopmentinanorganisation. • KnowtheimportanceStrategicHumanResource Management&planningfortheorganization • ExplaintheimportanceofHumanResourceTraining&Development. • AppraisetheHumanResourceAccountingandits measurement.	National
12.	MC2012	Research Methodology & Summer Internship	The Objective of this course is to help the	• Describetheresearchprocessandlistthecharacteristicsofvarioustypesof	Global

		Program	students to understand the use of various techniquesofeconometricsin research and writing aprojectreport.	research. • FormulateResearchProblem,ResearchObjectivesandHypothesisfromagivenresearchproblem. • Describevariousresearchdesignsandmethodsofdatacollection • CreatingaDatabaseandUseofStatisticalTechniques inAnalysis	
13.	MC3013	Forensic Accounting and Auditing	Toexpose studentswithdefinitiveandcomprehensive accountancycoveringForensic AccountingAuditingforcompaniesaswellasdifferenttypesoforganisations.	• DevelopInsightsabouttheForensicAccounting • PresentandAnalyseauditenvironment • Understandvariousforensicaccountingtoolsandtechnique • Gainknowledgeaboutthefrauds donebycorporates • Tounderstandthereasonsforbankruptcyandmoneylaundering.	Global
14.	MC3014	Business Data Analytics	To expose students with the horizons of information technology and its implication on business	• Toknowthebasicsofinformationtechnology • PresentandAnalysetheimportanceofinformationtechnologyformanagers • Understand the process of ofimplementationofITonbusiness • DeveloptheSkilltoapplyinformationtechnologyonbusiness • GainKnowledgeabouttheprofessionalethicsandresponsibilitywhileusingIT	Global
15.	MC3015	Basic Econometrics	TheObjectiveofthiscourseistohelpthestudentstounderstandtheuseof	• Understandtheuseandscopeofeconometrics. • EstimateANOVAandte	National

			varioustechniquesofeconometrics in research and statisticalproblems.	stingofsignificance. • UnderstandtheMulticollinearityofthevariablesanditsconsequences. • Understandtheheteroscedasticityofthedataandhowtodetectit. • Understandtheuseofdummyvariableinregressionmodel • Toacquaintedwithavailablestatistical	
16.	EMH3001	Consumer Behavior	The basic objective of this course is to develop and understanding about the many aspects of consumer behaviour and its applications in marketing.	• Understand the basics of consumer behavior • Know the needs of the consumer • Learn various theories developed to understand consumer behavior • Understand the self-concept of consumer behavior • Gain Knowledge about the family life cycle.	National
17.	EMH3002	International Marketing	The objective of this course is to acquaint the students with the environment, principles and strategies of and trends in international marketing and related aspects**.**	• Develop Insights about the need of international market in present scenario • Present and analyse various situation of market • Understand international market situation and segmentation • Learn the importance of the international marketing organization • Gain Knowledge about the foreign trade strategy	Global
18.	EMH3003	Human Resource Planning and Development	The objective of this course is to acquaint the students with the man power planning and development of the human resources in an organization	• Understand the macro level man power planning • Present and analyze the work force flow mapping • Understand the models and	Global

				techniques of manpower demand and supply • Learn the strategies of redeployment • Gain Knowledge about the career management	
19.	MC4016	Dynamics of Banking &Insurance	To equip students with tools and methods of analysing aspects related to financial systems, settlement of banks and the workings of the insurance companies and its regulations.	• Know the Indian banking system • Understand the various functions of the RBI • Understand how the settlement works in the banking system • Learn how the clearing system works • Gain Knowledge and Competency to understand the workings of the insurance companies	National
20.	MC4017	Investment Management	To let the studentsaware of the different types of investment avenues and to learn the impact of the various investment decision on an organisation.	• Develop the knowledge of the investment decisions • Present and Analysethe investment environment. • Understand various forensic accounting tools and technique • Gain knowledge about the frauds done by corporates • To understand the reasons for bankruptcy and money laundering.	Global
21.	MC4018			•	
22.	EMH4003	Customer Relationship Management	• To understand the concepts and principles of CRM • To appreciate the role and changing face of CRM as an IT enabled function • To enable managing Customer Relationship.	• Understand the concept of the CRM • Know the importance of the CRM in Marketing • Learn how to manage and share customer data • Develop the Skill to	Global

				implement CRM in a business	
23.	EMH4004	Supply Chain Management and Logistics	To provide an understanding of the supply chain management system and the distribution System	• Develop Insights about the supply chain management system • Know the designing of supply chain management • Understand the basics of the inventory management system • Develop the Skill of purchasing and vendor management • Gain Knowledge of logistic management	Global
24	EMH4005	Human Resource Audit and Human Capital accounting	To provide an understanding of Huma Resource Audit and its accounting. Students will get fair idea about the need of the human resource audit.	• Know the basics of the human resource audit • Understand the methods and techniques of the human resource audit • Understand the benefits of human capital accounting • Learn the different aspects of the human capital accounting	National

Programme: BOTANY

Course Outcome

S.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Whether there is any Local/Regional/National /Global relevance?
1.	BOT-101	Diversity Of Life	To acquaint the students with the microbial world, other cryptogams like Algae, fungi, bryophytes and pteridophytes.	Students will be able to understand the diversity of microbes, their life cycle and economic importance	Global
2.	BOT-102	Diversity Of Vascular Plants	The paper deals with evolutionary diversification, morphology, reproduction of extinct and present day vascular plants. It also exposes students to	Students will learn about evolution of gametophytes, sporophytes and conducting tissues of fossil and living pteridophyte as well as	Global

			paleobotany and palynology.	gymnosperm. Students will have knowledge on basics of paleobotany and palynology along with their applications.	
3.	BOT-103	Cell & Molecular Biology	The objective of the present course content is to provide a foundation and background of cellular structure, cell organelles in relation to their functions and regulatory mechanisms.	The students will be learning about the structure and function of cell wall and plasma membrane, cell organelles such as chloroplast, mitochondria and others. Students will have knowledge on nuclear organization, DNA structure, replication and repair, transcription, translation and protein sorting. Understanding about regulatory mechanism of cell cycle and apoptosis of the students will be enhanced.	Global
4.	BOT-104	Plant Biochemistry	The course exposes students to basic principles biophysics, fundamentals of biochemistry, structure and properties of various bio-molecules such as carbohydrates, proteins, lipids and enzymes.	Students will be learning about concepts of reaction kinetics, thermodynamics and their biological applications, fundamentals of biochemistry including metabolism and bioenergetics. Students will gain knowledge on structure and properties of carbohydrate, proteins, lipids and secondary metabolites. Students will learn the basics of enzyme kinetics and regulation of enzyme activity.	Global
5.	BOT-105	Practical	Aim of the course is to impart knowledge on practical aspect of structure of microorganisms, lower plants and vascular plants.	Students will gain practical knowledge on microscopic examination microorganisms like bacteria, fungi, and algae.	Global

			Practical skills on analysis of cell cycle, isolation and analysis bio-molecules along with understanding of their biochemistry will be given.	Students will be learning about gametophytic and sporophytic structures of bryophytes, pteridophytes and gymnosperm. Students will be able to isolate and quantify bio-molecule like DNA, RNA, protein, carbohydrate and lipids. Students will be able to identify different stages of cell cycle.	
6.	BOT-201	Cytogenetics, Plant Breeding & Biostatistics	The paper deals with chromatin organization, structural and numerical alternation in chromosomes, genetics of prokaryotes and eukaryotic organelles, molecular cytogenetics and regulation of gene expression. Students will be taught about basics of statistical analysis and its application in biological studies.	Students will learn about genetic recombination and mapping techniques, karyotype analysis, chromosomal aberrations, DNA damage and repair mechanism. Students will gain knowledge on plant breeding techniques for crop improvement. Students will have basic knowledge on regulation of gene expression, molecular markers and their application. Students will learn about sampling techniques, testing of hypothesis, correlation and regression.	Global
7.	BOT-202	Biotechnology & Genetic Engineering Of Plants	The paper deals with plant cell, tissue & organ culture, somatic hybridization and cybridization, recombinant DNA technology and genetic engineering of plants. Students will be taught about various instruments and techniques used in biological experiments.	Students will learn about clonal propagation, production of haploids, somaclonal variants, development of somatic hybrids and cybrids for crop improvement. Students will gain knowledge on recombinant DNA technology and agrobacterium mediated gene transfer for development of transgenic plants. Students will learn	Global

				techniques like electrophoresis, blotting techniques, spectroscopy, chromatograph, ELISA etc.	
8.	BOT-203	Plant Physiology	The course aims to educate students on concepts like membrane transport, translocation of water and solutes, photosynthesis,respiration, lipid and nitrogen metabolism, sensory photobiology, plant growth regulators and mechanism of flowering.	Students will learn about mechanism of membrane transport, transport through xylem and phloem, mechanism of photosynthesis, respiration and nitrogen metabolism. Students will gain knowledge of stress physiology, photoreceptors, flowering and senescence in plants.	Global
9.	BOT-204	Plant Taxonomy, Ecology & Evolution	The course aims to add to understanding of the students about the nomenclature, classification and diversity of flowering plants. Students learn about ecosystem, population and community ecology. It exposes students to concepts of evolution and population genetics.	Students will learn about ICBN and rules for plant nomenclature, merits and demerits of major systems of classification, Taxonomic evidence and range of floral structures of different orders. Students will gain knowledge on habitat, population characteristics, structure and attributes of community, ecological succession, structure and function of ecosystem. Students will learn about theories of evolution and maintenance of gene frequency in population.	Global
10.	BOT-205	Practical	Aim of the course is to impart knowledge on practical aspects of karyotype chromosomal aberrations, micropropagation, electrophoresis, spectrophotometry, identification of plants and community analysis.	Students will gain hands on training on identification of chromosomal aberrations, karyotyping, photosynthetic pigment isolation and quantification, aseptic techniques in clonal propagation, taxonomic identification of	Global

				flowering plants, chromatographic techniques for separation of compounds and quantitative analysis of plant communities in various ecosystems.	
11.	BOT-301	Plant Development And Reproduction, Economic Botany	Aim of the course is to educate students regarding differentiation of meristematic tissues, developmental biology, reproductive biology and economic botany of the flowering plants.	Students will learn about plant cell development, differentiation of apical meristems & vascular tissues, flower development and its genetic regulation. Students will gain knowledge on development of fruit, senescence and its regulation, development of male and female gametophyte, pollen-stigma interactions and double fertilization. Students will learn about centre of origin of plants and various economic uses of domesticated and wild plants.	Global
12.	BOT-302	Conservation Biology	Aim of the course is to educate students regarding biodiversity, resource conservation, biodiversity conservation strategies, intellectual property rights (IPR) and their protection.	Students will learn about importance of biodiversity and drivers of biodiversity change, convention of biological diversity, IUCN categories of plants, Biodiversity Act and rules, Strategies for resources conservation and management, *in situ and ex situ conservation.* Students will gain knowledge on various types of IPR and their protection strategies.	Global

13.	BOT-303 (A) / BOT-303(B)	Plants & Environment/ Environmental Studies	Aim of the course is to educate students regarding environment and the plants, plants for environmental protection, phytoremediation and phytomining, environmental pollution bioenergy and aerobiology. It also educates students regarding fundamentals of environmental studies and ecology, environmental pollution control and monitoring, natural resources and management, environmental hazards, risk and disaster management, environmental laws and awareness.	Students will learn about components of environment, biogeography and bio-geographical zones of India, mangroves and their role for environmental protection, phytoremediation and phytomining, methods. Students will gain knowledge on pollution of water, air and soil, remote sensing and its application in plants and environment, plants and pollution control, biomass and bioenergy, aerobiology and pollen allergy. Students will learn about components of the environment, Concept of ecosystem, Environmental protection and sustainable development, sources, monitoring and control of environmental pollution, renewable and nonrenewable resources, environmental hazards and disaster management, environmental laws, environmental education and awareness.	Global
14	BOT-304	Plant Physiology & Developmental Biology	Aim of the course is to educate students of allied subjects regarding fundamental of plant physiology and development.	Students will learn about physiology of photosynthesis, flowering and senescence, mechanism of action of plant growth regulators, development of male and female gametophyte and the process of fertilization.	Global
14.	BOT-305	Advanced Practical	Aim of the course is to impart knowledge on advanced practicals	Students will gain hands on training on Microtome, germination	Global

			relating to plant embryology, tissue culture, microbiology, molecular biology and biochemistry.	of pollen grains, isolation and Purification DNA, PCR , electrophoresis, commet assay, antimicrobial assay Quantification of protein, carbohydrate, chlorophyll, proline, sugar etc., phytochemical analysis by TLC/ HPTLC, micropropagation and synthetic seed preparation.	
15.	BOT-401 (A)	Biochemistry & Molecular Biology-I	The course educates students about various bio-molecules such as amino acid, proteins, enzymes, carbohydrate and lipid metabolism and basics of immunology.	Students will be learning about protein conformation, enzyme kinetics, regulation of enzyme activity, regulation of carbohydrate metabolism, oxidation of fatty acids, cell signaling and signal transduction. Students will gain knowledge on immunoglobulins, mechanism of immune response, vaccines and immunological techniques.	Global
16.	BOT-402(A)	Biochemistry & Molecular Biology-Ii	The course educates students on DNA replication, transcription, translation, gene regulation, genetic marker, antisense and ribozyme technology.	Students will be learning about DNA replication, DNA damage, repair and recombination, Prokaryotic and eukaryotic translation, regulation of gene expression in prokaryotes and eukaryotes, gene correction and editing, molecular makers in genome analysis, designing of ribozymes, applications of antisense and ribozyme technologies.	Global
17.	BOT-403	Dissertation	The course aims at developing the skill of experimental design, critical thinking and scientific writing.	Students will learn how to design experiments, think critically and write dissertation. The course will be a preliminary	Global

			It introduces students to ethics in research.	training to large-scale research.	
18.	BOT-404	Seminar Presentation	Objective of the course is to train students in public speaking and presentation of a scientific topic.	Students will acquire the skill of public speaking, content development for presentation and discussion with audience.	Global

Programme: Chemistry

Course Outcome

S.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
01.	CH401	Inorganic Chemistry- I	Bonding and stereochemistry of main group elements, formation and stability of metal complexes and their determination	Students will be able to learn mechanism of different types of reactions in coordination compounds and their applications in practical fields	Global
02.	CH402	Organic Chemistry- I	Aromaticity, stereochemistry, and substitution reactions in aliphatic compounds	Students will be able to learn origin of optical activity and stereo selectivity in asymmetric catalysis	Global
03.	CH403	Physical Chemistry- I	Concept of energy, the transfer of energy into work, capacity of energy to function, entropy, enthalpy, chemical potentials, thermodynamic laws, criterion for determination of the feasibility or spontaneity of a given transformation, partial molar properties, their determinations	Students will be able to learn underlying concepts and realization of quantum mechanics in solving problems at realistic atomic and molecular level	Global

04.	CH404	Practical	Qualitative analysis of inorganic salts	Students will be able to learn how to separate and identify different cations and anion from a mixture of inorganic Salts	Global
05.	CH405	Practical	Qualitative analysis of unknown organic compounds in a mixture	Students will be able to detect the presence of different functional groups	Global
06.	CH406	Spectroscopy-I	symmetry and group theory	Students will learn the importance of group symmetry and group theory in chemistry	Global
07.	CH407	Computer for Chemist	computer programmes	Students will have basic understanding about Computer, Computer programmes and languages	Global
08.	CH408	Inorganic Chemistry-II	Structure, bonding and electronic spectra of metal complexes	Students will learn about bonding in coordination and organometallic compounds	Global
09.	CH409	Organic Chemistry- I	Substitution, addition and rearrangement reactions of organic compounds	Students will learn about Structure and reactivity of various reactive intermediates	Global
10.	CH410	Physical Chemistry- I	surface tension, capillarity and adsorption	This course will introduce students to Utility of catalyst and nanochemistry	Global
11.	CH411	Practical	Multistep inorganic synthesis, separation and estimation of different metals from mixture.	Students will learn how to preparer coordination compounds in multi steps and separation of metals from mixture	Global
12.	CH412	Practical	organic synthesis	Students will learn how to synthesize	Global

				different organic compounds	
13.	CH413	Spectroscopy-I	nuclear and electron spin resonance spectroscopy	Students will learn how to Solve chemical structure analysis	Global
14.	CH414	Analytical Chemistry	analysis of thermal and electrochemical methods	Students will learn to operate different analytical techniques for analysis of sample and interpretation of analytical results	Global
15.	CH501	Pericyclic Reactions and Photochemistry	pericyclic reactions, photochemistry	Students will learn Interaction of organic compounds with light and subsequently trigger the reaction	Global
16.	CH502	Bioinorganic &Supramolecular Chemistry	structure, stereochemistry and biological functions of different metalloenzymes	To understand the effect of deficiency and toxicity of metals in human as well as plant systems	Global
17.	CH503	Practical	synthesis of polymers and their characterization	To prepare different polymers and characterize them	Global
18.	CH504	Practical	conductivity measurement, pH measurement and potential measurement	Handling the conductivity meter, pH meter and potentiometer	Global
19.	CH505	Application of Spectroscopy-I	NMR spectroscopy	To analyze NMR data of various biomolecules and their use in MRI studies	Global
20.	CH506	Organic Synthesis	oxidation and reduction, protection of organic compounds	To synthesis of various natural products using different oxidising and reducing agents.	Global
21.	CH507	Environmental Chemistry	air, water, soil and radiation pollution	To explain environmental issues and their remedies and to	Global

				understand the applications of green chemistry principles	
22	CH508	Bioorganic Chemistry	biological catalysts, enzyme action	to understand how enzyme catalyzes the reaction with outmost efficiency	Global
23	CH509	Organo transition Metal Chemistry	methods of synthesis, properties and reactivity of organometallic compounds with metal-carbon multiple bonds	Describe the important applications of organometallic homogeneous catalysis in the production of organic chemicals	Global
24	CH510	Polymer Chemistry	fundamental concepts of polymer chemistry	To build up small scale industry for developing endogenous plastic production	Global
25	CH511	Solid State Chemistry	solid state reactions, chemical synthesis methods	Structure, properties and the synthesis of solid materials to interpret of crystal structure by X-ray diffraction	Global
26	CH512	Practical	determination of indicator constant, stoichiometry of a metal complex by Job's method	Handling UV Visible spectrophotometer	Global
27	CH513	Project work	Project work	To search literature and write the dissertation, to learn the skill for presentation	Global
28	CH514	Application of Spectroscopy-II	spectroscopic technique for structural elucidation of organic compounds	To analyze the structural details of organic compounds, and predict different unknown compound	Global
29	CH-ADD1	Techniques of Chemical Analysis	Techniques of Chemical analysis	To applyappropriate analytical method for chemical analysis of a specific sample	Global

Programme: Computer Science

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
1.	CS 1.1	Data Structure And Algorithms	Effective writing of Algorithms and storage of data	• Learn the basic types for data structure, implementation and application. • Know the strength and weakness of different data structures. • Use the appropriate data structure in context of solution of given problem. • Develop programming skills which require solving given problem.	Global
2.	CS 1.2	Computer System Architecture	Design and Development of Hardware	• To understand the structure, function and characteristics of computer systems. • The student will be able to understand the major architectural styles and appreciate the compromises that they encapsulate. • They will be able to read outline descriptions of real processors and understand in which way their designs fit into the frameworks described in the course. • They will be also able to understand the impact of design choices in programming in the context of a specific architecture.	Global
3.	CS 1.3	Database Systems & Implementation	Effective data storage and retrieval	• Identify advance database concepts and database models.	Global

				• Apply and analyze various terms related to transaction management in centralized and distributed database. • Produce data modeling and database development process for object–oriented DBMS. • Analyze and Implement the concept of object- relational database in development of various real time software.	
4.	CS 1.4	Discrete Mathematical Structures	Study of Mathematical Structure	• Express a logic sentence in terms of predicates, quantifiers, and logical connectives. • Apply the rules of inference and methods of proof including direct and indirect proof forms, proof by contradiction, and mathematical induction. • Use tree and graph algorithms to solve problems. • Evaluate Boolean functions and simplify expressions using the properties of Boolean algebra.	Global
5.	CS 1.5	Data Analysis Using Python	Programming and Artificial Intelligence	• Understanding basics of python for performing data analysis • Understanding the data, performing preprocessing, processing and data visualization to get insights from data. • Use different python packages for	Global

				mathematical, scientific applications and for web data analysis. • Develop the model for data analysis and evaluate the model performance.	
6.	CS 2.1	Computer Networks	Effective Data Communication	• Describe how computer networks are organized with the concept of layered approach. • Describe how signals are used to transfer data between nodes. • Implement a simple LAN with hubs, bridges and switches. • Describe how packets in the Internet are delivered.	Global
7.	CS 2.2	Advanced JAVA	Programming	• Know some concepts of advanced programming and practice on reusing components. • Write sophisticated Java applications. • Use the Java language for writing well-organized, complex computer programs with both command line and graphical user interfaces. • Learn how to write, test, and debug advanced-level Object-Oriented programs using Java.	Global
8.	CS 2.3	Operating System Design	System Design	• Identify the low-level structure and internal mechanism of operating system. • Describe the main responsibilities of a contemporary operating system (OS). • List the most fundamental	Global

				subsystems of an OS and the functions that each subsystem is responsible. • Recognize and give examples of conflicting goals and compromises necessary in implementing an OS and configuring its run-time parameters	
9.	CS 2.4	Theory Of Computation	Theoretical model of Computer	• Model, compare and analyse different computational models using combinatorial methods. • Apply rigorously formal mathematical methods to prove properties of languages, grammars and automata. • Construct algorithms for different problems and argue formally about correctness on different restricted machine models of computation. • Identify limitations of some computational models and possible methods of proving them	Global
10.	CS 2.5	Data Mining	Artificial Intelligence	• Perform the data preparation tasks and understand the implications. • Demonstrate an understanding of the alternative knowledge representations such as rules, decision trees, decision tables, and Bayesian networks. • Demonstrate an understanding of the basic machine learning algorithmic methods that support knowledge	Global

				discovery. • Identify alternative data mining implementations and what might be most appropriate for a given data mining task.	
11.	CS 3.1	Artificial Intelligence	Artificial Intelligence	• Have fundamental understanding of the basic concepts of artificial intelligence (AI). • Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning. • Have knowledge of current scope and limitations, and societal implications of AI. • Have basic foundation of machine learning.	Global
12.	CS 3.2	Software Engineering	Development of Software	• Identify, formulate, and solve complex problems by applying principles different principles of software engineering. • Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors • Communicate effectively with a range of audiences and recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must	Global

				consider the impact of engineering solutions in global, economic, environmental, and societal contexts. • Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	
13.	CS 3.3	Compiler Design	System Design	• Realize basics of compiler design and apply for real time applications. • Understand the importance of code optimization • Know about compiler generation tools and techniques • Construction of a Compiler for a simple programming language	Global
14.	CS 3.4	Information Security	Security	• Understand cryptography and network security concepts and application • Apply security principles to system design • Identify and investigate network security threat • Analyze and design network security protocols	Global
15.	CS 3.5	Machine Learning	Artificial Intelligence	• Understand decision tree learning algorithm. • Understand neural network, hypothesis accuracy estimation. • Understand supervised Learning to obtain a predicted output.	Global

				• Understand unsupervised Learning on data.	

Programme: Mathematics

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
1	MTC101	Real Analysis	The aim of this course is to learn the basic elements of Measure Theory, with related discussions on applications in probability theory.	After the course the students are expected to beable to: • define and understand basic notions in abstract integration theory, integration theory on topological spaces and the n dimensional space • describe and apply the notion of measurable functions and sets and use Lebesgue monotone and dominated convergence theorems and Fatous' Lemma • describe the construction of and apply the Lebesgue integral • describe the construction of product measures and use Fubini's theorem • describe the notion of absolute continuity and singularities of measures and apply Lebesgue decomposition and the Radon-Nikodym theorem apply Hölder's and Minkowski's inequalities and describe Riesz representation theorem • describe the notion of extended real valued and complex measures	Global
2	MTC102	Complex Analysis	The objective of this course is to introduce the fundamental ideas of the functions of complex variables and developing aclearunderstandingofthe fundamentalconcepts of Complex Analysis such asanalytic functions, complex integrals andarangeofskillswhichwill	After the course the students should be able to • Represent complex numbers algebraically and geometrically, • Define and analyze limits and continuity for complex functions as well as consequences of continuity, • Apply the concept and consequences of analyticity	Global

			allowstudentstoworkeffectivelywiththe concepts.	and the Cauchy-Riemann equations and of results on harmonic and entire functions including the fundamental theorem of algebra, • Analyze sequences and series of analytic functions and types of convergence, • Evaluate complex contour • integrals directly and by the fundamental theorem, apply the Cauchy integral theorem in its various versions, and the Cauchy integral formula and Represent functions as Taylor, power and Laurent series, • classify singularities and poles, • find residues and evaluate complex integrals using the residue theorem.	
3	MTC103	Topology	Thisisanintroductorycourseintopologyofmetricspaces. The objective of thiscourse is to impart knowledge on opensets,closedsets,continuousfunctions,connectednessandcompactnessin metricspaces. • Workwithtopologicaldefinitionsand theorems related to thecontentdescribed. • Readandevaluatethecorrectnessoftopological proofs. • Produce examples andcounterexamples that illustratewhy theorem hypotheses arenecessaryorwhyastatementisuntrue. • Drawpicturestorepresenttopologicalideas. • Formulate conjectures abouttopologicalconcepts,andtestthese conjectures. • Provetopologicalstatements. • Use topological ideas (e.g.,homeomorphisms,	On successful completion of the coursestudents will learn to work with abstracttopological spaces. This is a foundationcourseforallanalysiscoursesin future.	Global

			fundamentalgroup)toclassifyspaces. • Presentmathematicalargumentsbothorallyandinwriting.		
4	MTC104	Advanced Abstract Algebra	Group theory is one of the building blocks of modern algebra. Objective of this course is to introduce studentsto basic concepts of grouptheory and examples of groupsand their properties. Thiscourse will lead to future basiccourses in advancedmathematics, such as Grouptheory-II and ring theory.	A student learning this course gets idea on • concept and examples of groups and their properties. • He understands cyclic groups, permutation groups, normal subgroups and related results. • After this course he can opt for courses in ring theory, field theory, commutative algebras, linear classical groups etc. and can be apply this knowledge to problems in physics, computer science, economics and engineering.	Global
5	MTC105	Data Processing and Numerical Computing Lab	This course provides an introduction to Computer Algebra System (CAS) viz. C++ that are widely used in scientific computing. The major objective of this course is to enable students to make use of symbol tools of these CAS and also develop programming skills for solving problems of real world more efficiently and accurately	At the end of the course, the students will be able to : • Apply the knowledge of mathematical software viz. MATLAB and C++ to solve real world problems efficiently • Utilize the symbolic tools of these CAS for handling different mathematical problems for example, solution of equations, differentiation, integration etc. • Design and analyze their own computer codes of mathematical methods.	Global
6	MTC201	Functional Analysis	Learn the fundamental structures of Functional Analysis. Get familiar with the main examples of functional spaces, in particular with the theory of Hilbert spaces and Lebesgue spaces. Get familiar with the basic notions of operator theory. Be able toframe a functional equation in an abstract functional setting.	After the course the students are expected to be able to: • recognize inner product spaces • Identify duals of some normed spaces. • Identify whether a real valued function defined on Cartesian product of a vector space is inner product or not and an inner product space is Hilbert space or not. • explain the normed space which is not an inner product space	Global

				• identify orthogonal sets • identify orthogonal sets • understand the notion of orthogonal complement and the decomposition of the space • explain total sets • explain main theorems for normed spaces • explain Hahn –Banach theorem identify open mapping theorem • explain closed graph theorem	
7	MTC202	Differential Equation	The objective of this course is to familiarize the students with various methods of solving differential equations and to have a qualitative applications through models. The students have to solve problems to understand the methods.	A student completing the course is able to: • solve differential equations and is able to model problems in nature using Ordinary Differential Equations. • This is also prerequisite for studying the course in Partial Differential Equations and models dealing with Partial Differential Equations.	Global
8	MTC203	Linear Algebra	linear algebra helps the student understandgeometric concepts such as planes, in higher dimensions, and perform mathematical operations on them. It can be thought of as an extension ofalgebra into an arbitrary number of dimensions. Rather than working with scalars, it works with matrices and vectors.	A student completing the course is able to: • analyze the solution set of a system of linear equations. • express some algebraic concepts (such as binary operation, group, field). • doelemantary matrix operations. • express a system of linear equations in a matrix form. • do the elementary row operations for the matrices and systems of linear equations. • investigate the solition of a system usingGauss elimination. • apply Cramer's rule for solving a system oflinear equations, if the determinant of thematrix of coefficients of the system is notzero. • generalize the concepts of a real (complex)vector space to an arbitrary finite-dimensionalvector space. • definite a vector space and	Global

				subspace of avector space. • explain properties of R^n and subspaces ofR^n. • determine whether a subset of a vectorspace is linear dependent. • describe the concept of a basis for a vectorspace. • investigate properties of vector spaces andsubspaces using by linear transformations. • express linear transformation betweenvector spaces. • represent linear transformations bymatrices. • explain what happens to representingmatrices when the ordered basis is changed. • describe the concepts of eigenvalue,eigenvector and characteristc polynomial. • determine whether a linear transformation is diagonalizable or not.	
9	MTC204	Numerical Optimization	• find acceptable approximate solutions when exact solutions are either impossible or so arduous and time-consuming as to be impractical; • devise alternate methods of solution better suited to the capabilities of computers; • formulate problems in their fields of research as optimization problems by defining the underlying independent variables, the proper cost function, and the governing constraint functions.	A student completing the course is able to: • understand how to assess and check the feasiblity and optimality of a particular solution to a general constrained optimization problem; • use the optimality conditions to search for a local or global solution from a starting point; formulate the dual problem of some general optimization types and assess their duality gap using concepts of strong and weak duality; • understand the computational details behind the numerical methods discussed in class, when they apply, and what their convergence rates are. • master the main numerical methods; • understand the bases of linear programming, unconstrained optimization, constrained optimization; • be able to analyze the	Global

				behaviour of these numerical methods and in particular to be able to discuss their stability, their order of convergence and their conditions of application; • be able to apply these methods to academic and simple practical instances; • demonstrate the abilities to – apply knowledge of mathematics and computing to the design and analysis of optimization methods, – analyze a problem and identify the computing requirements appropriate for its solution, – design and conduct experiments and numerical tests of optimization methods, and to analyze and interpret their results	
10	MTC205	Data base and C++ Lab	• This course is designed to provide understanding of implementation of basic optimization methods for solving different problems • Further, this course will develop programming skills in the students in order to write and implement their own computer programs for solving problems arising in science, engineering and economics. • Understanding the relational database design principles	At the end of the course, the students will be able to • Master the basics of SQL and construct queries in SQL • Understand and modify existing codes in scientific computing based on the use of different loops and conditional structures. • Identify the challenging problems in mathematics and find their appropriate solutions accurately and efficiently using Computer Algebra System. • Apply their knowledge of computer programming to develop and implement their own computer codes of optimization methods for solving different types of complex problems	Global
11	MTC301	Numerical Analysis-I	To provide the numerical methods of solving the non-linear equations, interpolation, differentiation, and integration. To improve the student's skills in	At the end of the course, the students will be able to • Apply numerical methods to find our solution of algebraic equations using different methods under different conditions, and	Global

			numerical methods by using the numerical analysis software and computer facilities.	numerical solution of system of algebraic equations. • Apply various interpolation methods and finite difference concepts. • Work out numerical differentiation and integration whenever and wherever routine methods are not applicable. • Work numerically on the ordinary differential equations using different methods through the theory of finite differences. • Work numerically on the partial differential equations using different methods through the theory of finite differences.	
12	MTC302	Number Theory and Cryptography-I	The main objective of this course is to build up the basic theory of the integers, prime numbers and their primitive roots, the theory of congruence, quadratic reciprocity law and number theoretic functions, Fermat's last theorem, to acquire knowledge in cryptography specially in RSA encryption and decryption.	At the end of the course, the students will be able to • know the basic definitions and theorems innumber theory, to identify order of an integer, primitiveroots, Euler's criterion, the Legendre symbol, Jacobi symbol and their properties, to understand modular arithmetic number theoretic functions and apply them to cryptography.	Global
13	MTC303	Statistical Methods	1. Studentsshouldbefamiliarwiththeterminologyandspecial notation of statistical analysis. The terminologyconsistsofthefollowing: a. StatisticalTerms i. Population ii. Sample iii. Parameter iv. Statistic v. DescriptiveStatistics vi. InferentialStatistics vii. SamplingError b.MeasurementTerms i. Operationaldefinition ii. Nominal	A student completing the course is able to: • Distinguish types of studies and their limitations and strengths, • Describe a data set including both categorical and quantitative variables to support or refute a statement, • Apply laws of probability to concrete problems, • Perform statistical inference in several circumstances and interpret the results in an applied context, • Use mathematical tools, including calculus and linear algebra, to study probability and mathematical statistics and in the description and	Global

			iii. Ordinal iv. Interval v. Ratio vi. Discretevariable vii. Continuousvariable viii. Real limits c. Research Terms i. Correlationmethod ii. Experimentalmethod iii. Independentvariable iv. Dependent variable v. Non-experimentalmethod vi. Quasi-independentvariable 2. Students should learn how statistical techniques fitintothegeneralprocessofscience 3.Studentsshouldlearnthenotation,particularlysummationnotation. 4. Students should understand the concept of afrequencydistribution asanorganizeddisplayshowingwhere all of the individual scores are located on thescaleofmeasurement. 5. Studentsshouldbeabletoorganizedataintoaregularor a grouped frequency distribution table, andunderstanddatathatarepresentedina table.	development of statistical procedures, • Use a statistical software package for computations with data, • Use a computer for the purpose of simulation in probability and statistical inference, and • Communicate concepts in probability and statistics using both technical and non-technical language	
14	MTC304	Discrete Mathematics	This is a preliminary course for the basic courses in mathematics and all its applications. The objective is to acquaint students with basic counting principles, set theory and logic, matrix theory and graph theory.	The acquired knowledge will help students in simple mathematical modeling. They can study advance courses in mathematical modeling, computer science, statistics, physics, chemistry etc.	Global
15	MTC305	Computational Fluid	A tool that allows the	A student completing the	Global

		Dynamics-I	student to visualizecomplexflowphenomena ina virtualenvironmentcan significantly enhance the learning experience.Such a visualization tool allows the student toperform open-ended analyses and explore cause-effectrelationships.Computationalfluiddynamics(CFD) bringsthesebenefitsintothelearningenvironmentforfluidmechanics.	course is able to: solvehydrostaticproblems. • describethephysicalpropertiesofafluid. • calculatethepressuredistributionforincompressiblefluids. • calculatethehydrostaticpressureandforceonplaneandcurved surfaces. • demonstratetheapplicationpointofhydrostatic forces on plane and curvedsurfaces. • formulatetheproblemsonbuoyancyandsolve them. describethemotionoffluids. • describetheprinciplesofmotionforfluids. • describe the areasofvelocityandacceleration. • formulatethemotionoffluidelement. • identifyderivationofbasicequationsoffluidmechanicsandapply • identifyhowtoderivebasicequationsand knowtherelatedassumptions. • applytheequationoftheconservationofmass. • applytheequationoftheconservationof momentum • applytheequationoftheconservationofenergy. • makedimensionalanalysisandsimilitude. • use the dimensional analysis and derivethe dimensionless numbers apply the similitude concept and set uptherelationbetweenamodelandaprototype.	
16	MTC401	Numerical Analysis-II	To design and analysis of techniques to give approximate but accurate solutions to hard problems, the variety of which is suggested by the following: Advanced numerical methods are essential in making numerical weather prediction feasible.	Student can Derive numerical methods for various mathematical operations and tasks, such as interpolation, differentiation, integration, the solution of linear and non linear equations, and the solution of differential equations. Analyse and evaluate the accuracy of common numerical methods.	Global
17	MTC402	Number Theory and Crptography-II	• To discover interesting and unexpected	• To implement and analyze cryptographic and number-	Global

			relationships between different sorts of numbers and to prove that these relationships are true. • To understand fundamental number theoretic algorithms such as the Euclidean algorithm, the Chinese Remainder algorithm, binary powering, and algorithms for integer arithmetic. • To understand fundamental algorithms for symmetric key and public-key cryptography. • To understand the number-theoretic foundations of modern cryptography andthe principles behind their security.	theoretic algorithms. • To be able to use Maple to explore mathematical concepts and theorems.	
18	MTC403	Computational Fluid Dynamics-II	The objective of CFD is to model the continuous fluids with Partial Differential Equations (PDEs) and discretize PDEs into an algebra problem (Taylor series), solve it, validate it and achieve simulation based design.	Thestudentwillhaveknowledge on:-Classificationofthebasicequatio nsoffluiddynamics.-Basicspaceandtime discretization methods.-Numericalsolution of advection, diffusion andstationaryproblems.-Numericalsolutionofconservatio nlaws.-Analysisofaccuracy and stability of finite differencemethods for model equations. Skills:After completion of this course, thestudent will have skills on: -Practical useand programming of numerical methodsin fluid dynamics.-Checking andassessing the accuracy of numericalresults. - Assessing the efficiency ofnumericalmethods.-Consistencyanalysis and von Neumann stabilityanalysisoffinitedifferenc emethods.-Choosingappropriate boundaryconditions for model problems. Generalcompetence: After completion of thiscourse, the student will have	Global

				generalcompetence on: - Numerical solution ofmodelproblemsinfluid dynamics.-Checking and assessing basic numericalmethodsforfluidflowproblems.	

Department: Physics

Programme Name: PG

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
1	PHY-101	Classical Mechanics	To study classical mechanics and solve the problems in physics.	Students will be able to: 1. Know the physical concepts and am familiar with classical mechanics and its mathematical form. 2. Solving problems of different systems using classical mechanics. 3. To demonstrate the knowledge and understanding of the following fundamental concepts in: The dynamics of system of particles, Motion of rigid body, Lagrangian and Hamiltonian formulation of mechanics Transformations and Hamilton Jacobi theory Small oscillation problems 4. Develop equations of motion using Lagrangian and Hamiltonian formulation for complicated mechanical systems.	Global
2	PHY-102	Mathematical Methods in Physics	To study mathematical tool to solve physical	1. It will provide students with basic	Global

			problems.	skills necessary for the application of mathematical methods in physics. 2. Introduction of various existing mathematical methods in order to analyses theories, methods and interpretations. 3. Develop understanding among the students how to use methods within his/her field of study of research and in the field of scientific knowledge to work independently.	
3	PHY-103	Quantum Mechanics	To understand the concept of quantum mechanics to solve physics problems.	Students will be able to: 1. Study postulates and formalism of quantum mechanics 2. Study operator formulation of quantum mechanics 3. Study time evolution of a state and operator and apply Schrodinger equation to 1D harmonic oscillator. 4. Study operator algebra of orbital angular momentum and spin angular momentum operator. 5. Study motion in spherical symmetric potential and apply Schrodinger equation to solve hydrogen	Global
4	PHY-104 lab	Modern Physics and Optics	To understand optics phenomena it application.	1. To analyze various situations or phenomena associated with modern physics and optics physics using basic principles.	Global

				2. This course will introduce the student to a broad range of physical phenomena involving optics, and modern physics.	
5	PHY-201	Quantum Mechanics-II(Application to Atomic and Molecular Physics)	To apply the concept of quantum mechanics to solve advanced physics problem	Students will be able to: 1. Understand the importance of perturbation theory in quantum mechanics. 2. Study time independent and time dependent perturbation theory and apply those to various physical problem 3. Understand fine structure of hydrogen atom, Stark effect, Zeeman effect, 4. Understand interaction of radiation with matter, selection rules 5. Understand quantum mechanical description of scattering. 6. Understand variational principle and its application	Global
6	PHY-202	Classical Electrodynamics	To apply the concepts of electro dynamics to solve physics problems.	Students will be able to: 1. Study the Maxwell's wave equation in different dielectric media and free space 2. Understand vector and scalar potential and their importance in electromagnetics	Global

				3. Study electromagnetic energy transport and Poynting vector 4. Understand Lorentz and Coulomb gauge conditions, covariant form of Maxwell's equation. 5. Study laws of geometrical optics using Maxwell's equation 6. Study Kramer Kronig relation on reflection and absorption of electromagnetic wave 7. Study and understand propagation of electromagnetic waves in different types of waveguides. 8. Study of retarded potential and solving it by Green's Function techniques for different types of charge distributions 9. Study electric, magnetic dipole and quadrupole radiation 10. Study electromagnetic radiation due to moving point charge and accelerated charge	
7	PHY-203	Basic Condensed Matter Physics	To apply the concept of quantum mechanics to solve problems in solid state physics.	Students will be able to: 1. Know the diffraction condition in reciprocal space. 2. Understand the crystal bonding types in solid. 3. Understand the specific heat of solid and metals. 4. Know Kramer Kronig-penny model of electron ion interaction.	Global

				5. Know the properties of semiconductor materials. 6. Know the properties of superconductor and high Tc superconductor	
8	PHY-204	Computational Methods in Physics	To learn computer programs to solve physics problems.	Students will be able to: 1. To learn computer programming using FORTRAN 90 and C, 2. To solve physics problems through different numerical techniques 3. Use computer programming for simulation and data analysis	Global
9	PHY-301	Advanced Quantum Mechanics	To study advanced quantum mechanical problems.	1. Understand the importance Covariant form 2. Understand Klein-Gordon equation, Dirac equation in relativistic quantum mechanics 3. Understand Lagrangian and Hamiltonian Formulations, Noether's theorem 4. Understand Quantization of free fields	
10	PHY-302	Electronics	To understand the electronic circuits and its application in digital electronics.	1. Understand Different type of Amplifiers using Hybrid parameters 2. Understand operational principle, model and analysis of various operational amplifiers 3. Understand operation model and analysis of various oscillators 4. Understand the working, model and analysis of various	Global

				digital circuits 5. Understand model and analysis of radio communication and antenna 6. Understand working principles of fiber optics	
11	PHY-303b	Advanced Condensed Matter Physics- I			
12	PHY-401	Basic Nuclear and Particle Physics	To understand the concepts of nuclear physics an d its application.	1. The students gather advanced knowledge in Nuclear physics. 2. The different nuclear interactions and the corresponding nuclear potentials and its dependence on the couplings are learned. 3. The knowledge helps to choose for an Advance course in Nuclear and particle Physics.	Global
13	PHY-402	Statistical Mechanics	To study problems on advanced statistical mechanics and it applications in phase transition.	1. Understand postulates of classical and quantum statistical mechanics 2. Study different formalism of statistical physics such as microstate, macrostate and ensembles 3. Understand Boltzmann and Gibb's interpretation of entropy. 4. Study Fermi-Dirac statistics and Bose-Einstein statistics 5. Understand phase transitions and Ising model to study ferromagnetism	Global
14	PHY-403b	Advanced Condensed Matter Physics- II			

Programme:Zoology

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
1	ZOO-101	Biosystemetic, bioinformatics and Nonchordates	To provide basic idea about classical and modern taxonomic approaches. To provides methodological background and quantitative skills in morphological and molecular phylogeny of taxonomy and systematics. To obtain a thorough understanding of the processes in invertebrates.	The students will be able to gain basic taxonomic and computational skills of systematics and phylogeny. Besides, fundamental processes in variety of invertebrates can be ascertained.	Global
2	ZOO-102	Cell Biology and genetics	To understand the structures and purposes of basic components of prokaryotic and eukaryotic cells, especially macromolecules, membranes and organelles. To be familiar with the various genetic and molecular changes occur in a normal cell during malignant transformation. To provide the fundamental knowledge on classical genetics, genetic disorders and the methods of gene transfer.	At the end of this course, Students will be acquainted with the membrane structure and functions, the cytoskeleton, cell division and their regulation through different check points. The association between defect in cell cycle, apoptosis, signal transduction and cancer will help in understanding cellphysiology. Students will learn working of genes in a complex manner in biological system.	Global
3	ZOO-103	Physiology,Histology and Histochemistry	To learn and understand the fundamental scientific concepts relating to a broad range of topics in animal physiology and their interactions to maintain body Homeostasis. To improve the student's perspective of health and biology through in-depth study of human physiology. To understand the basics of histochemistry.	The students will be able to explore an original query in animal physiology. Influence of the environmental factors in respective niches can be established. Students after completion of this course areexpected to learn basic histological features of important tissues and organs.	Global
4	ZOO-104	Instrumentation and Biostatistics	To provide basic idea about working principles and application of different instruments and methods used in biological sciences. To equip the learner to use the tools, techniques and statistical methods for project work/ research in biology	The course enables the students learn applications of statistical methods in solving biological problems. Students after completion of this course are expected to handle and operate basic instruments for their experimental purposes and interpret the data through appropriate statistics.	

5	ZOO-201	Biophysics and Biochemistry	To understand the biophysical properties and chemical foundation of life processes. To understand the structure and metabolism of biologically significant molecules. To explain the role of catabolic and anabolic pathways in cellular metabolism.	At the end of the course, the student will be able to demonstrate knowledge of the fundamental concepts in physics and chemistry that underlie biological processes. On completion of the course, the students will understand the fundamental energetic of biochemical processes and chemical logic of metabolic pathways.	National
6	ZOO-202	Microbiology And Immunology	To help students develop skills necessary for critical analysis of microbes, microbial processes and diseases including host-parasite interaction. To learn the organization, malfunctioning and disorders of the immune system. To get a broad understanding of antigens, antibodies and vaccines.	At the end of the course, the students should be able to understand the role of microbes in human health and diseases. They will be able to identify the cellular and molecular basis of immune responsiveness and understand how the innate and adaptive immune responses coordinate to fight invading pathogens.	Global
7	ZOO-203	Endocrinology and Reproductive physiology	To impart knowledge on structure, function and regulation of different endocrine glands of vertebrates. To give the basic concepts on hormone signaling and role of endocrine organs in different reproductive phases of animals. To provide basic idea about structure, function and physiological role of endocrine system during reproduction including different aspects of fertility and contraception.	The role of endocrine glands in different physiological processes and regulation of body homeostasis can be better understood by the students.	Global
8	ZOO-204	Evolutionary Biology And Animal behaviour	To understand the evidence that living species share descent from common ancestry. To provide basic idea about different aspects of animal behavior and their regulation.	The students are expected to develop a solid foundation on processes of evolutionary processes responsible for bringing about variation in gene frequency. They would be able to suggest beneficial alterations in agricultural crops and livestock through variability studies. Study of animal behavior will enable the students to understand the physiological processes for	Global

				beneficiation processes.	
9	ZOO-301	Chordates,Comparative Anatomy And economic Zoology	To be familiar with the anatomical design and evolutionary affinities of chordate phyla, their general and distinguishing characters. To understand the biology and culture of various animals of economic importance.	The students can be entrepreneurs by utilizing the skills of economic zoology.	Global
10	ZOO-302	Developmental Biology	To understand the basic concept and experimental aspect of developmental biology using model organisms. To study the developmental aspects including metamorphosis and regeneration. To elucidate the interaction of genes and environment during development.	To understand the basic concept and experimental aspect of developmental biology using model organisms. To study the developmental aspects including metamorphosis and regeneration. To elucidate the interaction of genes and environment during development.	Global
11	ZOO-303	Environmental Biology and wildlife conservation	To provide a holistic idea populations, their interactions and communities. To understand the processes associated with climate change, carbon budget and related environmental processes. To generate idea on wildlife, its conservation and related laws.	Students will be exposed to the fundamental aspects of ecology, climate change and related aspects. They are expected to know wildlife laws and various technological developments for their conservation.	Global
12	ZOO-304	Animal Physiology And Developmental Biology	To study the mechanism of working of different organs and their role in maintenance of body homeostasis. To learn the mechanism of development of animal embryo.	Students will be familiarized with physiological processes of animals and basic concepts on development of animals.	Global
13	ZOO-401A	Molecular Biology, Genetic Engineeringand applications	To study the central dogma of molecular biology in modern perspectives. To study regulation of genes, manipulation of genes for production of transgenic animals, rectification of defects in genes using advanced molecular techniques	The course will acquaint the students with versatile tools and techniques employed in genetic engineering and allow them for innovative application of these in basic and applied fields of biological research. The course may be deemed as a foundation course serving as a platform for introduction of more advanced cutting-edge technologies.	Global
14	ZOO-402A	MICROBIAL ECOLOGY AND BIOTECHNOLOGY,	To study the ecosystem of microbes in varied habitats. To understand the use of microbes	The learners will be familiarized about the application of nanotechnology	Global

		AND NANOBIOLOGY	in the production of biofuels, antibiotics, decomposition of waste products. To apply the concept of nanoscience in biological research.	in biological research.	
15	ZOO-403A	Animal development and neurobiology	To provide basic idea about different aspects of animal behavior and their regulation.	Study of animal behavior will enable the students to understand the physiological processes for beneficiation processes.	Global
16	ZOO-404A	Project Work	To inculcate scientific temper like conceptualisation, visualisatin and framing of ideas into applications.	In depth experience of social, economical, scientific challenges and absorbed involvement to accomplish them.	Global

Programme: IMBA

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
1	IMBA101	Business Organization		• Foundational knowledge in accounting, economics, finance, management, and marketing in application of concepts and theories. • Understand the basic knowledge of business	National
2	IMBA102	Principles of Management		• Helps to manage organizations using effective practices of management. Helps to learn planning, decision making, organizational structure, culture, leadership, motivation, and communication.	National
3	IMBA103	Business Economics		• Helps to identify various market structures . • commercial transactions and their	National

				impact on business decisions	
4	IMBA104	Basic Financial Accounting		• Prepares accounting information for planning and control • Evaluation of products, projects and divisions.	National
5	IMBA105	Business Statistics		• It provides an understanding of the data in business • Helps to make decisions based on historical data and ongoing trends.	National
6	IMBA201	Organizational Behavior		• Helps to analyze different models to explain individual behaviour • Understanding of motivation, rewards, developing communication and resolving conflicts.	National
7	IMBA202	English Language		• improve their speaking ability in English&comprehensibility	National
8	IMBA203	Cost and Management Accounting		• It gives an improved perception of business, finance, and accounting • Accurate forecasts of impending expenditures.	National
9	IMBA204	Fundamentals of Marketing Management		• Identify ethical and legal implication of marketing decisions. • Analyze global business opportunities and its implications on a firm's marketing strategy.	National
10	IMBA205	Computer Fundamentals		• It helps to know Computer fundamentals such as input devices, output devices, memory, CPU,	Global

				motherboard, computer network, virus, software, hardware etc.	
11	IMBA301	Business Law		• To know rights and duties under various legal Acts • Develop critical thinking through the use of law cases	National
12	IMBA302	Human Resource Management		• It helps to know effectively management and plan key human resource functions within organizations.	National
13	IMBA303	Fundamentals of Financial Management		• Perform analytical reviews of financial results, proposals, and plans. • Identify funding sources, instruments, and markets.	National
14	IMBA304	Quantitative Methods		• To study research problems, where data is controlled and measured • To address the accumulation of facts, and to determine the causes of behaviour.	National
15	IMBA305	Communicative English		• Develop vocabulary and improve the accuracy in grammar • Confidence to speak in public.	National
16	IMBA401	Management of Financial Services		• It helps to understanding of the various functions of the management • understanding of the goals of the finance manager	National
17	IMBA402	Human Resource Development		• It helps to improve the skills, knowledge, and abilities of employees, which leads to improved performance and	National

				productivity.	
18	IMBA403	Environment Management		• Enhancement of environmental performance, fulfilment of compliance obligations and achievement of environmental objectives.	National
19	IMBA404	Research Methodology		• To know the methods appropriate to research objectives • enhance the skill in qualitative and quantitative data analysis and presentation.	National
20	IMBA405	IT in Business		• It helps to know the use of technology in a business that can advertise that brings marketing tactics to the internet, print and other companies.	Regional
21	IMBA501	Indian Society and Culture		• understanding of societal and cultural dimensions of the dynamic nature of society and the environment	National
22	IMBA502	E-Commerce		• Understand the basic concepts and technologies used &know how to develop and implement information systems.	National
23	IMBA503	Introduction to Financial Markets		• Understand the role and importance of the Indian financial market • Know the vauation of stocks, bonds, and securities are calculated.	National
24	IMBA504	Banking Concepts		• To gain knowledge about banking sector, insurance sector, investment and	National

				merchant banking activities, capital markets, share Broking and derivatives market.	
25	IMBA505	Organization Study Report and Presentation (Internal)		• Student is able to test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship period.	National
26	IMBA601	Service Marketing		• Aims to know the concepts and techniques that help in taking decisions relating to various services marketing situations.	National
27	IMBA602	Introduction to Banking and Insurance		• Helps to learn about different activities of Chartered Accountant, Investment Banker, Investment Analysts, Budget Analysts, Business Consultants, business Operation Manager.	National
28	IMBA603	Production and Operations Management		• Understand the various production and operations design decisions and how they relate to the overall strategies of organizations. • Understand the importance of product and service design decisions and its impact other design decisions and operations.	National
29	IMBA604	Entrepreneurship Development		• Increase the knowledge and skill of existing entrepreneurs &encourage people to be an entrepreneur	National
30	IMBA605	Project Report, and		• It is included to enhance professional	National

		Viva Voce		skills • Practical knowledge on work system.	
31	IMBA701	Introduction to Management Functions		• Exercise critical judgement in creating new understanding • Advance reasoned and factually supported arguments effectively in written work and oral presentation	National
32	IMBA702	Organizational Development and Change		• Gaining knowledge about organizational development process. • How to change and develop organizations.	National
33	IMBA703	Accounting for Decision Making		• Understand, manage and track capital flow and record business revenue. • Analyze the impact of business decisions on the overall financial performance & understand business operations and accounting to make financial decisions.	National
34	IMBA704	Financial Management		• Evaluate leadership style to anticipate the consequences of each leadership style • Demonstrate the techniques for controlling and coordination	National
35	IMBA705	Managerial Economics		• Concretize economic problems and understand theoretical framework and actual empirical conditions are connected. • They can use them in various economic concepts and models and find out and compare the	National

				economic situations of the country.	
36	IMBA706	Marketing Management		• Develop strategies with clients, customers, and consumers to maintain relationships. • Apply entrepreneurial strategies for new career opportunities that might include contract employment, and self-employment initiatives.	National
37	IMBA707	Computer For Management		• Gain professional skills of Desk Top Publishing Tools • Develop vital communication skills which are integral to their personal, social and professional interactions	Global
38	IMBA801	Business Environment		• Analyze the relationships between Government and business • Analyze current economic conditions in developing emerging markets, and evaluate present and future opportunities.	National
39	IMBA802	Human Resource Management & Strategy		• Competency to recruit, train, and appraise the performance • Handle employee issues and evaluate the new trends	National
40	IMBA803	Business Regulatory Framework		• Career opportunity in corporate sector relating to business law in India& understand the emerging issues relating to e-commerce, e-	National

				transaction issues and E Contracts	
41	IMBA804	Quantitative Techniques		• Identify different types of decision-making • Develop critical thinking to improve decision making.	National
42	IMBA805	Business Ethics & Corporate Governance		• Analyze CSR initiatives • Analyze the Employees conditions and Business Ethics	National
43	IMBA806	Managerial Communication Skill		• Imbibe the mechanics of writing To draft effective business correspondence with brevity and clarity	National
44	IMBA807	Business Policy & Strategic Management		• Enhanced ability to identify strategic issues and design appropriate courses of action. • Understand the importance of motivation in building a strong and competitive Business Organization.	National
45	IMBA901	Under Study Report / SIP & Viva		• Student is able to test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship period. • Student is able to apply various soft skills such as time management, positive attitude and communication skills during performance of the tasks assigned in internship organization.	National
46	IMBA902	International Business		• Students will demonstrate the ability to communicate	Global

		Management		effectively, critical thinking skills & will have an understanding of global perspectives.	
47	IMBA903	Retail Management		• Understand the financial implication of strategic retail decisions • key drivers of retail supply chain and how to select a retail store location	National
48	IMBA904	Decision Support System		• Ability to analyze, investigate and evaluate a decision model. • Ability to locate and select appropriate data to support decision models.	National
49	IMBA905	Human Resource Planning		• Develop employability skills for the Canadian workplace • Examine current issues, trends, practices, and processes	National
		Security Analysis & Portfolio Management		• Value financial assets such as stocks and bonds & Measure the risk and return of a stock or a portfolio position	National
		Advertising & Sales Promotion		• The course helps to develop an understanding on the various aspects Advertising which includes its objectives, classification, creative aspect, role in the economy and society.	National
50	IMBA906	Industrial Relation & Labor Laws		• Illustrate the role of trade union in the industrial setup. • Able to summarize the important	National

				provisions of Social Security Legislations role of trade union.	
		Financial Derivatives		• Demonstrate knowledge of all aspects of derivative market theory and the roles they play in the financial markets.	National
		Product & Brand Management		• Develop product sales tools and collateral. Understand product launch process. Develop a sustainable Product Management Framework to grow revenue and gain market share.	National
51	IMBA907	Compensation Management		• Strengthen the pay-for-performance link. • Understand the Legally required employee benefits & concepts of Payment and employee benefits issues for contingent workers.	National
		Management Of Financial System		• To develop an understanding of the various functions of the management. To gain basic knowledge of branches of Functional Management: personnel, marketing, strategic management and production management.	National
		Consumer Behaviour		• Able to analyze the effects of psychological, socio-cultural and demographic factors on the consumer decision process with their results. Able to distinguish the relationship between consumer behavior	National

				and marketing practices.	
49	IMBA 1001	Corporate Social Responsibility		• Demonstrate a multi-stakeholder perspective in viewing CSR issues. • Analyze the impact of CSR implementation on corporate culture, particularly as it relates to social issues.	National
50	IMBA 1002	Rural Marketing and Management		• Know the concept of rural marketing research and examine the differences between rural, semi – urban and urban markets • Recognize the role and importance of government in developing rural agriculture marketing	National
51	IMBA 1003	Dissertation		• Student is able to apply various soft skills such as time management, positive attitude and communication skills during performance of the tasks assigned in internship organization. • Student is able to test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship period.	National
52	IMBA 1004	Comprehensive Viva		• demonstrating students' ability to reflect and think critically in real time.	National
56	IMBA 1005	Performance & Appraisal Management		• Performance appraisals are utilized in an attempt to measure employee performance in	National

				organizations. Often times the outcome of these appraisals affect the employees retention, promotion, or salary	
		International Accounting		• To provide you with the key technical issues in international accounting area and their impact on financial reporting	Global
		Customer Relationship Management		• CRM is improved relationships with your customers. A CRM system manages all your business contacts and stores important information about them across all channels, including demographics, purchase history, and previous communications.	National
57	IMBA 1006	International Human Resource Management		• Be able to advance well reasoned and factually supported arguments in both written work and verbal/oral presentations. Work effectively with colleagues with diverse skills, experience levels and way of thinking.	Global
		International Finance		• Students will be aware of the different kinds of foreign exchange management techniques including hedging, currency arbitrage, etc. Also to manage multinational working capital in an efficiently and effectively.	Global

		Marketing Research		• Use marketing information and research to develop marketing strategies for organizations.	National
58	IMBA 1007	Management Of Training & Development		• Understand the need and process of training need analysis in organizations	National
		Project Planning & Analysis		• Understand the current state of the project management profession	National
		Sales & Distribution Management		• Understand the basic concepts and techniques of selling and their applications to managerial decision makings in the field	National

Programme: MCOM (F &C)

Course Outcome

Sl.No	Core Paper	Course Name	Thrust Area/Objective	Outcome	Relevance
1	MFC1.1	Business Environment		• Analyze the relationships between Government and business. • Analyze current economic conditions in developing emerging markets, and evaluate present and future opportunities.	Global
2	MFC 1.2	Financial Accounting		• Know and apply accounting and finance theory & evaluate financial statement information.	Global
3	MFC 1.3	Principle of Management		• Helps to manage organizations using effective practices of management.	Global

				• Helps to learn planning, decision making, organizational structure, culture, leadership, motivation, and communication.	
4	MFC 1.4	Business Statistics		• It provides an understanding of the data in business • Helps to make decisions based on historical data and ongoing trends.	Global
5	MFC 1.5	Quantitative Techniques		• To study research problems, where data is controlled and measured • To address the accumulation of facts, and to determine the causes of behaviour.	National
6	MFC 1.6	Computer for Management		• It helps to know Computer fundamentals such as input devices, output devices, memory, CPU, motherboard, computer network, virus, software, hardware etc.	Global
7	MFC 1.7	Business Communication		• Discuss best practices in workplace etiquette. • Discuss the role and types of teams in workplace communication.	Global
8	MFC 2.1	Business Economics		• Concretize economic problems and understand theoretical framework and actual empirical conditions are connected. • They can use them in various economic concepts and models	Global

				and find out and compare the economic situations of the country.	
9	MFC 2.2	Financial Management		• Describe the planning process to make managerial decisions • Apply economic analysis for developing managem ent policy	National
10	MFC 2.3	Business & Corporate Law		• To know the legal framework of business & Advice the company legal procedure	National
11	MFC 2.4	Marketing Management		• Develop strategies with clients, customers, and consumers to maintain relationships. • Apply entrepreneurial strategies for new career opportunities that might include contract employment, and self-employment initiatives.	National
12	MFC 2.5	Cost Accounting		• Evaluate cost and expenses of manufacture • Cost ascertainment of business &Manage cost	Global
13	MFC 2.6	Research Methodology		• To understand the implications of research • Helps in preparing research papers& apply the methods in academics	National
14	MFC 2.7	SIP			
15	MFC 3.1	Human Resource Management		• It helps to know effectively management and plan key human resource functions within organizations.	Global
16	MFC 3.2	Banking & Financial		• Understand the	National

		Institution		banking concepts • To know the financial sources and its effective utilization.	
17	MFC 3.3	Seminar Presentation		• looks at what has been accomplished, what has happened for the learner as a result of their participation in the activity	National
18	MFC3.4	Advance Financial Accounting			
		Security Analysis & Portfolio Management		• Manage the risk of investment • Knowledge of being stock broker , Economic , Technical Analysis	National
		Advertising & Sales Promotion		• The course helps to develop an understanding on the various aspects Advertising which includes its objectives, classification, creative aspect, role in the economy and society.	National
19	MFC3.5	Corporate Tax Planning		• To plan the taxation of an assessee&Manage the tax of business • To fill tax return and refund	National
		Financial Derivatives		• Manage the risk of investment • Knowledge of being stock broker&To get the knowledge of Options and Future	
		Product & Brand Management		• Develop product sales tools and collateral. Understand product launch process. Develop a sustainable Product Management	

				Framework to grow revenue and gain market share.	
20	MFC3.6	Corporate Accounting		• This course helps in understanding the procedure of calculating holding company accounts and to calculate the company accounts •	National
		Financial Systems		• Understand the financial systems of India& know various sources of finance	National
		Consumer Behavior		• Able to analyze the effects of psychological, socio-cultural and demographic factors on the consumer decision process with their results. • Able to distinguish the relationship between consumer behavior and marketing practices.	National
21	MFC 3.7	Financial Statement & Analysis		• To make analysis of financial reports & Manage the cash flow of the concern. • Analysis of budgets and standard cost	National
		Advance Financial Management		•	National
		Retail Management		•	National
22	MFC 4.1	Organizational Behavior		• to analyze and compare different models used to explain individual behaviour related to motivation and rewards. to identify the processes used in developing communication and resolving conflicts	National
23	MFC 4.2	Dissertation		• Understand and apply theoretical frameworks to the	National

				chosen area of study. • Identify, analyse and interpret suitable data to enable the research question to be answered.	
24	MFC 4.3	viva		•	
25	MFC 4.4	Management Accounting		• Critically analyse and provide recommendations to improve the operations of organisations through the application of management accounting techniques; • Demonstrate mastery of costing systems, cost management systems, budgeting systems and performance measurement systems.	National
		Financial Markets		• Understand the financial systems of India • To know various sources of finance	National
		Sales & Distribution Management		• Understand the basic concepts and techniques of selling and their applications to managerial decision	National
26	MFC 4.5	Accounting Standard		• Know and apply accounting and finance theory. • Critically evaluate financial statement information &Evaluate and compare different investments.	National
		Project Planning Analysis & Management		• Understand project and project management as a way of working. • Explain different	National

				project management concepts related to project planning and project success. • Interpret challenges and analyse scenarios when managing projects, and propose solutions.	
		Service Marketing		• To develop an understanding of the state of the art service management thinking.	National
27	MFC 4.6	International Accounting		• Explain and apply international accounting standards. • Evaluate and compare different investments in International market	Global
		International Business Finance		• Discuss and illustrate transaction and operating (economic) currency exposures and their management using external (derivatives and money markets) and internal techniques and policies.	Global
		Rural Marketing		• Know the concept of rural marketing research and examine the differences between rural, semi – urban and urban markets • Recognize the role and importance of government in developing rural agriculture marketing	National
28	MFC 4.7	Auditing		• Gain an understanding of clients business and industry. Assess client's business risk. Describe the	National

				objectives of audit programs of asset accounts.	
		Strategic Financial Management		• Understand the limitations of traditional accounting models in an increasingly dynamic and fast changing world. • Contribute more effectively to corporate strategy by taking a more proactive and forward looking approach.	National
		Logistic and Supply Chain Management			National

Prabuddha Chandra Rout 13/7/24.
ACADEMIC BURSAR

13/7/24.
PRINCIPAL

Principal
Govt. Auto. College, Angul