Sri Meenakshi Government Arts College for Women
(An Autonomous Institution Affiliated to Madurai Kamaraj University)
Re-Accredited with 'B++' Grade by NAAC (4th Cycle)
Madurai - 625 002.

PG COURSE OUTCOMES

S.NO	Programme Code	Programme Name	Course Code	Course Name	PG Course Outcome
1	PTAT	M.A Tamil	P22CT1	Kavithaiyum Urainadaiyum	https://drive.google.com/file/d/1PyWUuUMmnY5v71gTyMfuG98qVLuH4DX0/view?usp=drive_link
			P22CT2	Punaikathai Izhakiyam	
			P22CT3	Thozhkappiyamum Mozhiyeiyalum Ezhuthu	
			P22CT4	Ara Izhakiyam	
			P22DST1A	Naadagaviyal	
			P22DST1B	Vaazhkai Varalatru Izhakiyam	
			P22SET1	Oodagaviyal	
			P22CT5	Samaya Izhakiyam	
			P22CT6	Sitrizhakiyam	
			P22CT7	Thozhkappiyamum Mozhiyeiyalum sol	
			P22CT8	Izhakiyathiranaivu	
			P22DST2A	Thozhiyeiyal	
			P22DST2B	Natupura Maruthuvam	
			P22SET2	Inaiyaththamizh	
			P22CT9	Kaappiyangal	
			P22CT10	Uraiyasiriyargal	
			P22CT11	Thozhkappiyam Porulathikaaram I	
			P22CT12	Penniyam	
			P22DST3A	Mozhipeyarpiyal	
			P22DST3B	Agaraathiyiyal	
			P22NMT1	Panitharu Tamil	
			P22CT13	Pandai Izhakiyam	
			P22CT14	Suvadiyiyal	
			P22CT15	Thozhkappiyam Porulathikaaram II	
			P22CTPW	Project	
			P22DST4A	Nigalthukalai	
			P22DST4B	Payana Izhakiyam	
			P22CV1	British Literature - I	UNIT 1 CO1: Trace, interpret, and evaluate the cultural and literary development of English literature, both in form and content, from the Anglo- Saxon period through the Pre-Romantic period.
					UNIT 2 CO2: Understand the distinguishing characteristics of various genres such as epic poems, sonnets, odes, and elegies.
					UNIT 3 CO3: Recognize and be able to enumerate the aesthetic, moral, and intellectual values of literature.
					UNIT 4 CO4: Interpret and evaluate a literary work through understanding of the theme, situation, tone, structure, and style.
					UNIT 5 CO5: Write logical, well-organised, well-supported critical responses to a literary work.
			P22CV2	American Literature	UNIT 1 CO1: identify the significant features of American poetry and the devices employed by the great American poets from the Native American period to the early 20th century
					UNIT 2 CO2: familiarise the marked shift in the evolution of thought and the stylistic features employed by the later poets
					UNIT 3 CO3: comprehend the nuances of American Prose and approaches of American thinkers like Emerson and Thoreau
					UNIT 4 CO4: appreciate the uniqueness of the early American drama as a representation of the socio-political and cultural turbulence of the period
					UNIT 5 CO5: recognize the magnitude of the American novel which reflects the multicultural tradition of American life
			P22CV3	Indian Writings in English	UNIT 1 CO1:Remember the early themesand styles in Indian Writing in English and define Indian perspectives on religion, nature and migration
					UNIT 2 CO2: Explain the important issues discussed in the texts and recognize the poetic devices applied in them.
					UNIT 3 CO3: Interpret the texts in their historical, social context and appreciate their significance.
					UNIT 4 CO4: Examine the components of drama and organize them through enacting the drama.
					UNIT 5 CO5: Defend the discourse in a text, evaluate it and develop logical skills.
			P22CV4	Languages and Linguistics	UNIT 1 CO1: Understand the origin of English and its growth
					UNIT 2 CO2: observe the process of language change and its evolution
					UNIT 3 CO3: understand the various approaches to linguistics
					UNIT 4 CO4: comprehend the nuances of Linguistics
					UNIT 5 CO5: comprehend the different branches of Linguistics and its purposes
			P22DSV1A	Green Literature	UNIT 1 CO1: 1. Make students aware of the role of literature in addressing contemporary issues such as environmental concerns
					UNIT 2-CO2: expose care and concern for the environment II 10
					UNIT 3-CO3: advocate a more thoughtful and ecologically sensitive relationship of man to nature.
					UNIT 4-CO4: assist students to know the relationship between Literature and Ecosystem.
					UNIT 5-CO5: provide insight on Eco system and the problems which the world is facing now.
			P22DSV1B	Aspects of Poetry	UNIT 1 CO1: be familiar with all the literary terms connected with poetry.
					UNIT 2 CO2: be familiar with all elements of poetry such as imagery,Oxymoron, and other literary devices.
					UNIT 3 CO3: Develop knowledge of the making of sonnets and its themes.
					UNIT 4 CO4: Distinguish and appreciate the meaning and functions of lyrics diverse nature of it.
					UNIT 5 CO5: Understand the concept of the Odes and its techniques
			P22SEV1	Travel Writing	UNIT 1 CO1: distinguish poetry from the other literary art forms
					UNIT 2 CO2: assess the language of poetry with regard to its words and meaning and develop the ability to write poems on their own.
					UNIT 3 CO3: examine the nuances of prose texts by interpreting the themes.
					UNIT 4 CO4: To familiarise the students with the literary trends of Drama
					UNIT 5 CO5: understand the development of novels as a literary genre.
			P22CV5	Brritish Literature - II	UNIT 1 CO1: critically evaluate British Poetry with focus on content and form
					UNIT 2 CO2: identify the various aspects of poetry and trace the evolution of various literary movements.
					UNIT 3 CO3: trace the different prose styles and associate them with the period
					UNIT 4 CO4: interpret drama as aesthetic records of their times
					UNIT 5 CO5: infer the different narrative techniques and themes of science fiction and other forms of novel.
			P22CV6	Transcultural Writing	UNIT 1 CO1: critically evaluate Transcultural Poetry with focus on content and form
					UNIT 2 CO2: identify the various aspects of transcultural elements in the writings of the prescribed authors
					UNIT 3 CO3: comprehend creative writing from a wide range of social and cultural contexts
					UNIT 4 CO4: evaluate the interrelationship between writing and social Change
					UNIT 5 CO5: synthesis the migrant, hybridised constantly shifting aspects of cultures.
					UNIT 1 CO1: understand how poetry has been a very popular medium of literary expression for women writers and how their focus has remained unchanged in certain ways and how it has altered in other ways as the selections in this unit trace a timeline that starts in the 3rd century BC and ends in the 21st century
					UNIT 2 CO2: understand and relate to the unique aspirations, problems and predicament of women as expressed in their prose writings
					UNIT 3 CO3: appreciate and analyse how dramatic devices and modes of narration have evolved in novel ways in the hands of women writers
					UNIT 4 CO4: compare and critically evaluate how women writers of different cultures have allowed their fictional worlds to highlight the women situation

2	PENE	M.A English	P22CV7	Women's Writing	UNIT 5 CO5: appreciate how the genre of short fiction has lent itself admirably to the versatile themes handled by women writers
			P22CV8	African American Literature	UNIT 1 CO1: acquire knowledge about all the poetical types of African American slave narratives, and express the problem of double colonisation and its manifestations. UNIT 2-CO2: comprehend the prose composition of Black Writing. UNIT 3-CO3: demonstrate the value of Black assertion through African American Plays. UNIT 4-CO4: acquire narrative skills of the writers of African American Literature UNIT 5-CO5: understand the creative power of Black voice through short fictions.
			P22DSV2A	Indian Rgional Literature in Translation	UNIT 1 CO1: UNIT- I: CO 1: Identify the themes in the southern regional literature of India. UNIT 2 CO2: Explain the discourse in the texts and recognize their Uniqueness. UNIT 3 CO3: Interpret the text in its historical background and relate it with similar texts. UNIT 4 CO4: Distinguish the element of modernity in the theme and style of the given text and infer the multiple layers of drama through enacting. UNIT 5 CO5: Defend the post-colonial aspects of the given novel, scrutinise caste discrimination and the predicament of the third gender and experiment with translation attempts.
			P22DSV2B	Aspects of Drama	UNIT 1 CO1: Develop knowledge of the conventions of drama UNIT 2 CO2: Distinguish and understand the diverse nature of drama and theatre UNIT 3 CO3: Appreciate the meaning and function of drama and understand the theatrical conventions UNIT 4 CO4: Understand the concept of the theatre of absurd and explore the dramatic techniques UNIT 5 CO5: Maximise their cognitive ability through the imaginative and dramatic experience / Evaluate the elements of drama and reflect on their techniques
			P22SEV2	Autobiography and Life Writing	UNIT 1 CO1: familiarise with the legendary leader and to understand the author's perception of the anti-apartheid struggle of South Africa. UNIT 2 CO2: understand howhistory is reflected in the specific contemporary Autobiographical writing. UNIT 3 CO3: comprehend the vision of an inspiring individual. 3 6 UNIT 4 CO4: develop the spirit of responsibility towards the upliftment of the society. UNIT 5 CO5: appraise interest both in the literary development of writing autobiographies and the way one's self defines, redefines and expands itself.
			P22CV9	British Literature - III	UNIT 1 CO1: gain a sense of appreciation for poetry as a genre in general UNIT 2-CO2: comprehend and analyse the elements of poems UNIT 3-CO3: apply skills and knowledge to explain the historical,social, political and religious significance of the modern age through the prose works UNIT 4-CO4: learn to understand, appreciate and interpret the author's creative genius through the dramatic works. UNIT 5-CO5: comprehend a working knowledge of Fiction ,plot, character, setting and various aspects present in the works .
			P22CV10	Shakespeare	UNIT 1 CO1: 1. gain a sense of appreciation for drama as a genre in general and tragedy in particular.2. develop their analytical skills by writing essays,reading and representation of ideas. UNIT 2-CO2: comprehend and analyse the elements of historical plays. UNIT 3-CO3: apply skills and knowledge to explain the historical, social, political and religious significance of the text. UNIT 4-CO4: learn to understand, appreciate and interpret the author's creative genius and the spontaneity in his works. UNIT 5-CO5: comprehend a working knowledge of drama and poetic use of images, symbols and the spatial aspects present in Shakespeare's work through the readings of criticism.
			P22CV11	New Literatures in English	UNIT 1 CO1: compare and estimate the influence of specific cultures on language use and choice of subject matter in the realm of poetry UNIT 2 CO2: appreciate through samples of slave narrative how plainer and weightier prose has emerged out of the pain of oppressive experiences, and how the language of theorising has evolved in new literatures. UNIT 3 CO3:understand how drama in English has been incorporated with music and varied dramatic techniques derived from different cultures UNIT 4 CO4: analyse how the writers have stamped their different cultures on fiction produced by them, in the form of language use, linguistic devices and themes chosen UNIT 5 CO5: appreciate how short fiction has been a favoured genre for writers in English, representing new literatures.
			P22CV12	Literary Criticism and Theory	UNIT 1 CO1: study the five approaches to literary criticism UNIT 2 CO2: comprehend the application of various approaches to literary texts. UNIT 3 CO3: understand the arguments of Structuralists and Post-Structuralists. UNIT 4 CO4: equip students to utilise and apply critical terms and theories to understand cultural texts. UNIT 5 CO5: apply the principles of Feminism and Ecocriticism to literary texts.
			P22DSV3A	Asian Literature in English	CO 1:- comprehend the prominent Asian literary trends and critical theories through the poetic sensibility expressed by different poets CO 2:- appreciate the aesthetic and literary value of different genres in Asian Literature and understand the relevance of Asian Literature CO 3:- interpret and experiment the social, political and cultural issues with which this literature engages through creative activities CO 4:- explore various themes, critical theories and trends used in modern fiction and get a better understanding of the social rubrics of Asian Countries. CO 5:- purview the multiethnic, multi linguistic and multicultural in Asian literature through modern short fiction and compare them with the Indian Scenario.
			P22DSV3B	Aspects of Fiction	UNIT 1 CO1: understand the meaning of fiction in the literary study and categorise them based on the theme, structure style plot ,type etc. UNIT 2 CO2: analyse the different styles of novel writing and the plot ,characterization etc of the famous novelists. UNIT 3 CO3: improve their analytical and communication skill by reading the short stories and would acquire management skills in life UNIT 4 CO4: develop their critical perspectives on novella and will get sensitization on culture, religion and other aspects of the society. UNIT 5 CO5:enhance their reading skill as well as their understanding of the society and the problems in it
			P22NMV1	Professional Ethics	Unit ICO1: discuss the values and characteristics of Ethics. UNIT 2 CO2: analyse the Ethical theories and implementation of theories in the workplaces. UNIT 3 CO3:acquire common qualities like confidentiality, Loyalty and Authority are analysed. Understand code of conduct and corporate social responsibilities. UNIT 4 CO4 define basic terms related to morals, values, and Ethics. Identify the different human values and understand its importance. UNIT 5 CO5 :understand the complexities of Multinational Companies. List the major issues arising out of Globalization
			P22CV13	British Literature - IV	UNIT 1 CO1: appreciate and analyze the aesthetic expression in poetic tradition UNIT 2 CO2: comprehend and interpret the selected poems UNIT 3 CO3: appreciate and analyze the genre of prose UNIT 4 CO4: perceive the significant features of Modern British drama UNIT 5 CO5: investigates the form of black comedy
			P22CV14	Rhetoric and Research Methodology	UNIT 1 CO1: Understand the intention of the different kinds of discourse UNIT 2 CO2: Analyze the subtle differences of the forms of discourse UNIT 3 CO3: Comprehend the fundamentals of research UNIT 4 CO4: Demonstrate mastery in the mechanics of writing UNIT 5 CO5: Apply the rules of documentation to write a research paper
			P22CV15	English Language Teaching	UNIT 1 CO1: gain a sound knowledge about the history of English Language Teaching UNIT 2 CO2: comprehend the Modern and Humanistic Approaches to language teaching UNIT 3 CO3: practise the various techniques of Teaching English UNIT 4 CO4: improve their task-oriented skills in English Language Teaching. UNIT 5 CO5: enhance their competence in teaching English prose, poetry,and grammar
			P22CVPW	Project	Based on the knowledge and understanding acquired from the prescribed syllabus, the students will be able to apply it in writing their research project following the approved methods.
			P22SV4A	World Literature in Translation	UNIT 1 CO1: learn and evaluate the great myths of the world UNIT 2 CO2: understand and to analyze the literary text and the way the writer has given contrasting themes UNIT 3 CO3: develop higher understanding of spiritual meditations and insights . UNIT 4 CO4: discuss the elements of absurd drama and explore the themes of fascism, mass movements, philosophy and ethics. UNIT 5 CO5: examine the themes of alienation and identity crisis and learn the existential theory.
			P22SV4B	Comparative Literature	UNIT 1 CO1: comprehend the definitions of Comparative Literature and trace its history. UNIT 2 CO2: study the principles of the French and American Schools of Comparative Literature. UNIT 3 CO3: become familiar with the different terminologies in Thematology and understand the concept of oneness of literature. UNIT 4 CO4: realize the need for the comparison of literature with various other spheres of human expression. UNIT 5 CO5: apply the principles of Comparative Literature to cultural texts.
				Socio-Economic History of India	**UNIT 1 CO1:** Understand the Pre historic and Vedic society **UNIT 2 CO2:** Analyse the economic development of Ancient India

3	PHIE	M.A History	P22CH1	upto 1206 A.D (Excluding Tamilnadu	**UNIT 3 C03:** understand the Religious beliefs and Philosophy of India
					UNIT 4 CO4: Trace growth of Education, Liteature in ancient India
					UNIT 5 CO5: Examine the growth of Mauryan art and Rajputs sculptue and painting
			P22CH2	History of World Civilization upto 1453 A.D (Excluding India)	**UNIT 1 CO1:** Understand the Paleolithic and Neolithic culture
					UNIT 2 C02: Acquire the knowledge of Eastern Civilizations
					UNIT 3C03 Appreciate the Greek and Roman Civilizations
					UNIT 4 C04: Analyze the Chinese and American Civilizations
					UNIT 5 CO5: Evaluate the Various Religious Principles and Feudalism
			P22CH3	Socio-Economic History of Tamilnadu upto 1529 A.D	**UNIT I CO1:**Explain the Sources and Socio – Economic, Cultural aspects of ancient Tamil Nadu and Sangam Age.
					UNIT II CO2: Access and Role of Kalabhras, Pallavas and Early Pandyas in religion and literature
					UNIT III CO3: Generalize the Economic condition of Cholas and Later Pandyas
					UNIT IV CO4: Analyse the Cultural Heritage of Cholas and Pandyas 4 15
					UNIT V CO5: Evaluate the Malikafur invasion and Expansion of Vijayanagar over Tamil Nadu
			P22CH4	Tourism in India	**UNIT I CO1:**Acquire the knowledge of the physical features of India
					UNIT II CO2: To Know the Tourism potentials in India
					UNIT III CO3: Understand the importance of promoting Tourism in Nation Building
					UNIT IV CO4: Identify the Uniqueness of North Indian Culture
					UNIT V CO5: Embrace the magnificence of South Indian Tourist places
			P22DSH1A	Intellectual History of Modern India	**UNIT1 CO1** Acquire the basic knowledge of Reform Movement
					UNIT2 CO2 Evaluate the impact of Western Liberals
					UNIT3 CO3 To understand the Pan Islamic ideology
					UNIT4 CO4 Review the emergence of Dalit Movement
					UNIT5 CO5 To Cherish the Socialist ideology
			P22DSH1B	Constitutional History of England upto 1603 A.D	**UNIT I CO1:** Acquire the knowledge of the features of British Constitution
					UNIT 2 CO2: Know the significance of Magna Carta 2 21
					UNIT 3 CO3: Trace the origin and growth of British Parliament 3 21
					UNIT 4 CO4: Assess the nature of the Parliament under Lancastrian 4 21
					UNIT 5 CO5: Critically evaluate the Tudor dictatorship
			P22SEH1	Archaeology Theory and Method	**UNIT I CO1:** Recognize the basics and aims of Archaeology and different kinds of Archaeology
					UNIT II CO2: Explain the role of Archaeologists in historical research
					UNIT III CO3: Identify and understand the excavations and explorations on various archaeological sites
					UNIT IV CO4: Analyse the origin and nature of National and State Department of Archaeology in India.
					UNIT V CO5:Evaluate the dating methods and other techniques used in Archaeology
			P22CH5	Socio-Economic History of India from 1206 to 1707 A.D	**UNIT I CO1:** Obtain the knowledge of Social Conditions of Muslims Vijayanagar in Medieval India.
					UNIT II CO2: Evaluate the Economic life, Condition of Peasants,Industries, Merchants and Currency System.
					UNIT III CO3 : Understand the rise of Bhakti Movement , Knowledge of Religion and Philosophy.
					UNIT IV C04: Evaluate the growth of Arabic and Persian Literature ,Regional Languages.
					UNIT V CO5: Appraise the features of Art and Architecture in Medieval Period
			P22CH6	History of Freedom Struggle in India from 1885 to 1947 A.D	**UNIT I CO1:** Acquire the knowledge of rise of nationalism
					UNIT II CO2: Examine the role of Indian national congress and its struggles for freedom
					UNIT III CO3: Appraise the role of extremists of Indian freedom struggles
					UNIT IV CO4: Evaluate the Gandhi's principles and way of struggles
					UNIT V CO5: Review the final stage of the Indian National Movement
			P22CH7	Socio-Economic History of Tamilnadu from 1529 to 1956 A.D	**UNIT I CO1:** Acquire the knowledge of Nayak society and literature
					UNIT II CO2: Analyse the economic conditions under Marathas, Nevayats and Wallajahs
					UNIT III CO3: Understand the Reforms of British in Tamil Nadu 3 24
					UNIT IV CO4: Traces the growth of Dravidian, intellectual and Reform movement in TamilNadu.
					UNIT V CO5: Examine the growth of Mass media and film industry
			P22CH8	Women's Studies in India	**UNIT I CO1:** Understand the condition of women in the traditional Indian Society.
					UNIT I CO2: Review the role of women in the Freedom Movement.
					UNIT I CO3: Assess the contribution of Women Movement and Organization.
					UNIT I CO4: Evaluate the legal Protections of Women
					UNIT I CO5: Estimate the issues of Women
			P22DSH2A	Religions in India	**UNIT I CO1:** Understand and develop religious tolerance
					UNUT I CO2: Understand and develop religious tolerance
					UNIT I CO3: Evaluate the essence of all religions
					UNIT I CO4: Appreciate and follow the ethical and moral standards of religions
					UNIT I CO5: Evaluate the contribution of various religions.
			P22DSH2B	Constitutional History of England from 1603 A.D to the Present Day	**UNIT 1 CO1:** Acquire the knowledge of the Constitutional development in Stuart Period 1 21
					UNIT 2 CO2: Know the significance of the glorious revolution of 1688 AD and bill of Rights 2
					UNIT 3 CO3: Understand the origin and Development of Cabinet System 3 21
					UNIT 4 CO4: Analyse the Parliamentary reform acts in England 4 21
					UNIT 5 CO5: Critically evaluate the constitutional changes between two world wars
			P22SEH2	Tourism Potentials in Madurai	**UNIT I CO1:** Acquire the knowledge Tourism Potentials
					UNIT II CO2: Describe the Natural resources availability and its development
					UNIT III CO3: Identify the Tourism Circuits
					UNIT IV CO4: Understand the Manmade resources for Tourism promotions
					UNIT V CO5: Gain the knowledge of Major Tourism Destinations
			P22CH9	Socio-Economic History of India from 1707 to 1947 A.D (Excluding Tamilnadu)	**UNIT 1 CO1:** Understand the Social Transformation and reforms
					UNIT 2 CO2: Analyse the economic development during the time of the British
					UNIT 3 CO3: Evaluate the Reformist and Revivalist movements in India
					UNIT 4 CO4: Trace growth of Education, Literature and Press in India
					UNIT 5 CO5: Assess the western influence and synthesis in the field of Arts and Architecture
			P22CH10	International Relations from 1914 to 1945 A.D	**UNIT 1 CO1:**To acquire the knowledge of 1 World War and Peace Settlements
					UNIT 2CO2 : Analyze the functions of league of nations
					UNIT 3 CO3 : Examine the Reparation works and economic crisis
					UNIT 4 CO4 : Evaluate the rise and growth of Fascism and Nazism
					UNIT 5 CO5 : Assess the policy of appeasement and important foreign policies
			P22CH11	Research Methodology in History	**Unit 1Co1:** Define History and Scope and Its Nature
					Unit 2 Co2: Understand the Historicism, Determinism and Romanticism
					Unit 3 Co3: Evaluate the Works of Great Historians
					Unit 4 Co4: Appraise the Works of Herodotus , Thucydides and So On
					Unit 5 Co5: Understand the Requisite of a Research Scholar And The FrameWork Of Research
			P22CH12	History of the United States of America from colonization to 1865 A.D	**UNIT I: CO1**: Describe the American War of Independence in America
					UNIT II: CO2: Describe the American War of Independence and is Effects
					UNIT III: CO4 : Analyse the confederation and the new Republic
					UNIT IV: CO4: Evaluate the role of Republican Presidents
					UNIT V: CO5: Estimate the westward expansion and its influence
			P22DSH3A	History of the Far East from 1841 to 1945 A.D	**UNIT ICO1**:Understand the Opium wars- Treaties and results
					UNIT IICO2: Analyse the Formation of the Republic and role of Sun-Yat-Sen
					UNIT IIICO3: Evaluate the contributions of Kaomingtang and the Communists
					UNIT IVCO4: Understand the Meiji Restoration and its impacts
					UNIT VCO5: Assess the impact of World War II and Peace Treaties on Japan
			P22DSH3B	History of Russia	**UNIT 1 CO1**: Understand the Constitutional Monarchy 1906-1914
					UNIT 2 CO2: Analyse the Economic and Political developments in Russia 1861
					UNIT 3 C03: Evaluate the Bolsheviks and Mensheviks
					UNIT 4 CO4: Understand the War communism 1917 – 1921 4
					UNIT 5 CO5: Assess the impact of II World War and peace treaty on Russia
			P22NMH1	Constitutional Safeguards for Women in India	**UNIT 1 CO1:** Understand the definition and terminologies of Feminism
					UNIT 2 CO2: Understand the laws of women during the colonial period
					UNIT 3 CO3 Analyse the confederation safeguards of Women
					UNIT 4 CO4: Evaluate the problems of women in the contemporary world
					UNIT 5 CO5: Review functions of Women Commission in India
			P22CH13	Socio-Economic History of India from 1947 to 1997 A.D (Excluding Tamilnadu)	**UNIT 1 CO1:** Analyse the social welfare schemes, Housing and sanitation
					UNIT 2 CO2: Obtain the meticulous knowledge of Five year Plans industrial growth, trade and commerce.
					UNIT 3 CO3 : Appreciate the role of religious life in the independent India
					UNIT 4 CO4: Evaluate the growth of language and literature in the contemporary India
					UNIT 5 CO5: Recognize the development of Art and Architecture in the modern India
			P22CH14	International Relations from 1945 to the present day	**UNIT 1 CO1:** Assess the impact of World War II and the functions of UNO and its specialized agencies.
					UNIT 2 CO2: Acquire the Knowledge of Middle East conflicts and oil diplomacy.
					UNIT 3 CO3: Evaluate the Far East and Southeast EastAsian Problems
					UNIT 4 CO4: Understand the Latin American , Afro-Asian problems
					UNIT 5 CO5: Understand the foreign policies of various countries

			P22CH15	History of the United States of America from 1865 to 1945 A.D	**UNIT I: CO1:** Assess the impact of Labour Movements in USA I
					UNIT II: CO2: Acquire the knowledge of Emergence of U.S.A. as world power
					UNIT III: CO3:Evaluate the Foreign policy of USA during early 20th century
					UNIT IV: CO4: Understand the Role of U.S.A. in 1 World War
					UNIT V: CO5:Understand the rise of America as superpower
			P22CH16	Project	
			P22DSH4A	General Studies	**UNIT 1 CO1:**To develop knowledge and understanding about the general concept & ancient history of India.
					UNIT 2 CO2: To create critical their king about the basic components of British scale and Indian national movements
					UNIT 3 CO3: Assessing empirical political theory, structure of the bureaucracy and center- state relation.
					UNIT 4 CO4: Conducting an intensive study 8th physical features, vegetation , soil and economic geography & India
					UNIT 5 CO5: Evaluating certain basic concepts like non alignment ,aids control development programme and effects & globalization on India.
			P22DSH4B	History of Rome	**UNIT1 CO1** Acquire the basic knowledge of Roman Republic
					UNIT2 CO2 Evaluate the Expansion of Italy and Punic wars
					UNIT3 CO3 Understand the era of revolutions and reforms
					UNIT4 CO4 Review the rule of Augustus Caesar and spread of Christianity
					UNIT5 CO5 Acquire the knowledge legacy of Rome
4	PECE	M.A Economics	P22CE1	ADVANCED MICRO ECONOMICS I	**CO1:** understand the economic models and the concept of equilibrium
					CO2: analysis the different theories of consumer behavior
					CO3: describe the different modern utility analysis
					CO4: illustrate how micro economic concepts can be applied in real life situations
					CO5: explain the properties of ISO – Quants and the theory of production under Modern Approach
			P22CE2	ADVANCED MACRO ECONOMICS I	CO1: discuss the Concepts and Nature of Macro
					Economics
					CO2: describe the Concepts and Estimate the National
					Income
					CO3: summarize the Basic Theoretical Aspects of
					Macro Economics
					CO4: describe the Important Variables and underlying
					Theories of Macro Economics
					CO5: understand the Theoretical Aspects and Estimate the Effects of Investment on the whole economy
			P22CE3	MOENTARY ECONOMICS	CO1: describe the Fundamental Theories of
					Monetary Economics
					CO2: analyse the Demand for Money,
					Supply of Money and its determinants.
					CO3: explain the structure and functions of
					Commercial Bank
					CO4: describe the Capital Market, Money Market and differentiate between Money Market, Capital Market.
					CO5: discuss the Central Bank and Its functions and analyse the role of Monetary Policy in developing economy.
			P22CE4	AGRICULTURAL ECONOMICS	CO1: describe the role of agriculture in the economic development and explain the new agricultural policy 2000
					CO2: define the concept of agricultural labour and explain the causes of low
					productivity in agriculture
					CO3: discuss the meaning of agricultural pricing and analyse the objectives, needs of agricultural marketing
					CO4: examine the causes of rural indebtedness and list out the types of credit institution to the farmers
					CO5: evaluate the New Economic Policy and Agriculture
			P22DSE1A	LABOUR ECONOMICS	CO1: Understand the characteristics of labour problems and recruitment procedures
					CO2: Analyse the theories of trade union and Justification of Strikes
					CO3: Discuss about the Consequences of Industrial Disputes and the function of ILO
					CO4: Examine the significance – Classification – Principles of Labour
					Welfare Programmes and Labour Welfare Legislation in India
					CO5: Social Security measures and State Insurance Act in India
			P22DSE1B	ECONOMICS OF ONFRASTRUCTURE	CO1: describe the different aspects of infrastructure and economic development
					CO2: analyse the structure of Transport
					Cost and Functions in the transport sector
					CO3: discuss the energy scenario in India
					CO4: synthesis the status of thermal Hydro and Nuclear Power Plants in India
					CO5: explain the achievement of social services and the factors determining Health
			P22SEE1	MARKETING MANAGEMENT	CO1: understand the modern concept of marketing, types of markets and explain the marketing functions
					CO2: analyse the macro and micro market environment and their impact on marketing decision.
					CO3: explain the concept of product mix, product line, branding, packaging and labeling.
					CO4: enable the students to know the channels of distribution and to understand the determinants of distribution channel
					CO5: analyse the promotion methods and its importance
			P22CE5	ADVANCED MICRO ECONOMICS II	CO1: Understand the features, equilibrium conditions and price determination of perfect competition and monopoly
					CO2: examine the Price output determination of monopolistic competition and Bilateral Monopoly
					CO3: describe the different models of duopoly
					CO4: analyse the collusive and non collusive oligopoly
					CO5: examine the theories of factor pricing and product Exhaustion theorem
			P22CE6	ADVANCED MACRO ECONOMICS II	CO1: discuss the theoretical aspects and analyse the causes for Business Cycle in the Economy.
					CO2: summarize the importance of rate of interest demand for money, supply of money, saving and investment in changing income in the economy.
					CO3: analyse the nature of inflation existing in the economy.
					CO4: compare the effectiveness of Monetarism and Keynesianism
					CO5: understand the difficulties in achieving Macro Economic Policy objectives at a time.
			P22CE7	INTERNATIONAL ECONOMICS	CO1: understand the modern theories of international trade and list out factors determining the international trade.
					CO2: analyse the mechanism of Balance of
					Payment and distinguish between Balance of
					Trade and Balance of Payment
					CO3: interpret the determination of foreign exchange rate
					CO4: discuss the terms of trade and compare trade policies, the Free trade and Protection & foreign aid.
					CO5: evaluate the International Monetary
					Institutions in international trade
			P22CE8	INDUSTRIAL ECONOMICS	
			P22DSE2A	RURAL DEVELOPMENT	CO1: Explain Nature and Scope of Rural Economics, Interdisciplinary approach of Rural Economics Components – Structure and Characteristics – Pre and Post -independence
					CO2: Discuss Rural Resources – Nature Types and Magnitude
					– Rural Resources Management and Development,
					Application of Technology in Rural Development Problems and Prospects.
					CO3: Discribe population size – Sex and Age composition – Density of population – population problems and challenges family welfare measures in rural india.
					CO4: Analyse Nature of rural occupations – occupational distribution in rural India – The Concept of Work Participation Rates.
					CO5: List out rural poverty – meaning, estimates, causes and consequences, unemployment – meaning, types, magnitude of rural unemployment causes and consequences.
			P22DSE2B	QUANTITATIVE TECHNIQUES IN ECONOMICS	CO1: understand classification of Quantitative Techniques and its Role
					CO2: analyse the Types and process of Matrix and Input Output Models
					CO3: evaluation of Production functions and cost curves
					CO4: synthesis of Linear Programming and simplex method
					CO5: Elucidate the Game theory Basic Concepts, problems, Pay Off Matrix and Graphical Method

			P22SEE2	FINANCIAL ECONOMICS	CO1: understand the theoretical aspects of financial economics
					CO2: acquiring knowledge about the structure and functions of financial system
					CO3: interpret financial portfolios in both money and capital markets for sustainable economic growth
					CO4: analyse the different types of risk, security market analysis and derivatives
					CO5: describe the organization and management of indian stock exchanges and explore the recent financial sector reforms.
			P22CE9	DEVELOPMENT ECONOMICS	CO1: Describe the Economic growth and Economic Development, obstacles and factors of economic development
					CO2: Identify the Investment criteria and examine the project evaluation
					CO3: Understand the theories of Development
					CO4: Discuss the various approaches of Development
					CO5: Analyse the various Growth Models
			P22CE10	STATISTICAL METHODS	CO1: discuss the probability concepts and theorems
					CO2: explain theoretical distribution concepts, features and properties
					CO3: understand statistical hypothesis and its Estimation
					CO4: Solve the test of significance x2 test, F-test, Difference between mean of two samples
					CO5: Apply the 't' –Distribution and its properties
			P22CE11	RESEARCH METHODOLOGY	CO1: understand the basics of Research Methods and
					Methodology
					CO2: describe the techniques of Research Design and to select the Research Topic for the Project
					CO3: understand to formulate hypotheses and to apply the test of hypotheses
					CO4: decide the methods of data collection for their projects
					CO5: acquire knowledge about the techniques of thesis writing
			P22CE12	ENVIRONMENTAL ECONOMICS	CO1:provide focus on the significance of
					Environmental Economics
					CO3: connect the various sources of pollution acquires in day to day activities
					CO4: realize the human values, provide environmental education and environmental awareness to become a responsible citizen
					CO5: acquire skill knowledge necessary for conservation of resources and waste reduction effectively with team work to bring necessary outc ome
			P22DSE3A	HUMAN RESOURCE MANAGEMENT	CO1: Distinguish Personal Management from HRM
					CO2: Define Job Description and Job
					Specification
					CO3: Explore the selection methods and steps in Training Programmes
					CO4: Justify the Methods of Performance
					Appraisal
					CO5: Elucidate the theories of Motivation
			P22DSE3B	WELFARE ECONOMICS	CO1: Enhance their Knowledge on Welfare
					CO2: Understand the Concepts of social welfare.
					CO3: Estimate the responsibility of all the firms in the society
					CO4: Create awareness on the social cost & benefits in the modern economy
					CO5: Analyse Risk and uncertainty in the Welfare Economics
			P22NME1	GLOBALISATION AND ECONOMICS REFORMS	CO1: define the concepts of Globalization and explain its Advantages and disadvantages of Globalization
					CO2: describe the concept of Liberalization and analyse the Advantages and Disadvantages of Globalization
					CO3:discuss the concept of Privatization and Examine the Methods of Privatization
					CO4: evaluate the Economic Reforms and analyse the impact of Economic Reforms in various sectors
					CO5:Examine the measures of Globalization and interpret the impact of Globalization in various field.
			P22CE13	INDIAN ECONOMY	CO1: describe the nature of the Indian
					Economy and its basic characters
					CO2: discuss the concept of Green
					Revolution and explain its achievements
					CO3: interpret the Industrial Development during Plan Period and New Industrial
					Policy
					CO4: predict the Power of Various transport system and its impact
					CO5: evaluate the trends in revenue and expenditure of Central government and examine the measures to correct it.
			P22CE14	PUBLIC ECONOMICS	CO1: understand the role of Government in economic activity and differentiate the concept of private goods, public goods and merit goods.
					CO2: analyse the causes for the growth of public expenditure and explain different theories of public expenditure.
					CO3: describe the different theories of taxation and summarise the theories affecting incidence of taxation.
					CO4: examine the causes and effects of public debt and explain the objectives and effects of deficit financing
					CO5: define the budgetory procedure in India and the role of federal finance and finance commission
			P22CE15	BASICS ECONOMETRICS	CO1: describe the basic concepts of Econometrics
					CO2: apply simple linear regression model and ANOVA to find economic variables
					CO3: examine the uses of multiple linear regression model in Economics
					CO4: discuss the basic concepts of Multicollinearity, hetroscedasticity and auto correlation
					CO5: mention the importance of dummy variables in research work
			P22CEPW	CORE COURSE XVI (PROJECT)	
			P22DSE4A	COMUTER APLICATION IN ECONOMICS	CO1: explain the operating system and understand the fundamentals of computer
					CO2: describe the various features of MS-word and applying for the Project and explain table menu and mail merge
					CO3: discuss the application of Excel and use of charts
					CO4: understand the fundamentals of SPSS
					CO5: describe and give an overview of the internet
			P22DSE4B	POLITICAL ECONOMY OF GLOBALISATIOM	CO1: define the concepts of Globalization and with its Advantages and
					disadvantages of Globalization
					CO2: explain the concept of Liberalization and its Advantages and Disadvantages of
					Liberalization
					CO3:discuss the concept of Privatization and Examine the Methods of Privatization
					CO4: evaluate the Economic Reforms and analyse the impact of Economic Reforms in various sectors
					CO5: synthesis the measures of
					Globalization and interpret the impact of Globalization in various field.
			P22CA1	Business Environment And Ethics	CO1: Understand the internal and external factors affecting business environment and explain the various dimensions of social responsibility of business environment
					CO2: Know about economic policies - Pre 1991 and Post 1991
					CO3: Have knowledge about the responsibilities of the government towards business environment.
					CO4: Understand the dimensions of global environment.
					CO5: Know about the Concepts of Business Ethics.
			P22CA2	Financial Markets and Services	CO1: Describe the concepts and functions of financial system in India.
					CO2: Know the composition of money market and its instruments.
					CO3: Comprehend the guidelines of SEBI.
					CO4: Understand the functions of primary market and services of stock exchange
					CO5: Describe the theoretical concepts about merchant banks, venture capital and mutual funds.
			P22CA3	Marketing Management	CO1: Understand the concept of Marketing Mix.
					CO2: Understand about four P's.
					CO3: Identify the structure of retailing.
					CO4: Understand the role of logistic and Supply chain management.
					CO5: Describe the importance of E-Marketing..
			P22CA4	Applied Costing	CO1: Define the different concepts in cost accounting.
					CO2: Acquire the knowledge in integral accounting.
					CO3: Evaluate the process cost.
					CO4: Ascertain the operating cost in service sectors.
					CO5: Analyse the aspects of cost control and cost reduction.
			P22DSA1A	Entrepreneurial Development	CO1: Know the various aspects of entrepreneurship.
					CO2: Understand the evolution of MSME.
					CO3: Understand various aspects for initiating Start-ups.
					CO4: Know about the institutions providing assistance.
					CO5: Outline the problems and challenges of women Entrepreneurship

5	PCOE	M. COM	P22DSA1B	Organisational Behaviour	
			P22SEA1	Soft Skills-Art of Communication	
			P22CA5	Legal Aspects of Business	CO1: Familiarise with the provisions of Right to Information Act.
					CO2: Comprehend the features of Indian Competition Act and Consumer Protection Act.
					CO3: Know about the Intellectual Property Rights Act
					CO4: Understand about Cyber Law and Cyber Crimes.
					CO5: Familiarise with FEMA and Environment Protection Act.
			P22CA6	Humam Resource Management	CO1:Understand the importance of Human Resource management and Planning
					CO2:Know the methods and process of Recruitment.
					CO3:Familiarise with the methods of training.
					CO4: Understand the methods of Job Evaluation.
					CO5: Gain in-depth knowledge in motivation, communication and leadership.
			P22CA7	Banking Theory Law and Practice	CO1: Understand the banking system in India
					CO2: Describe law relating to Banking Regulation Act.
					CO3: Explore the banker - customer relationship
					CO4: Perceive duties and rights of paying and collecting banker
					CO5: Explain the evolution of banking technology in India
			P22CA8	Accounting for Decision Making	CO1:Understand the objectives and functions of management accounting
					CO2:Acquire skills in analyzing and interpreting the financial statements
					CO3: Apply marginal costing in decision making
					CO4: Prepare different kinds of budget
					CO5: Apply the standard costing in business
			P22DSA2A	Services Marketing	CO1: Understand the concept of services marketing.
					CO2: Know the bank marketing services.
					CO3: Acquire the knowledge in insurance marketing
					CO4: Familiarize the tourism marketing
					CO5: Know the emerging trends in Medicare services.
			P22DSA2B	Managerial Economics	CO1: Understand the basic elements of managerial economics.
					CO2: Understand the law of demand.
					CO3: Know the law of supply.
					CO4: Develop the knowledge of demand forecasting.
					CO5: Understand the concept of Market Morphology.
			P22SEA2	Soft Skills-Career Planning	
			P22CA9	Taxation-I	CO1:Determine the Residential status of the Assessee
					CO2: Compute the Income from Salary
					CO3: Calculate the income from house property and profits and gains from business or profession.
					CO4: Assess the capital gains and income from other sources.
					CO5: Understand e-filing procedures.
			P22CA10	Insurance Management	CO1: Know the nature and functions of Insurance.
					CO2: Understand the nature of Life Insurance Contract.
					CO3: Know the different types of general insurance.
					CO4: Describe the impact of privatization of insurance.
					CO5: Familiarise with the provisions of IRDA.
			P22CA11	Advanced Corporate Accounting	CO1: Acquaint with the accounting procedure relating to issue and Redemption of shares and debentures.
					CO2: Work out the accounting problems arising from acquisition of business and also to deal with profit or loss prior to incorporation in the books of accounts of a company.
					CO3:Apply (i) the relevant provisions of companies Act in the preparation of the profit and loss account and balance sheet of a Joint stock company and (ii) ascertain the value of goodwill and shares under various methods of valuation
					CO4:Analyse the different forms of take overs, their legal position and the accounting treatment
					CO5:Describe (i) the legal formalities involved in the internal reconstruction (ii) different ways of altering share capital and (iii) the modes of winding up along with the accounting process of realization of assets, payment of debts and distribution of surplus to the contributories
			P22CA12	Research Methodology	CO1:Have basic knowledge in the field of Research
					CO2:Have better knowledge in the selection and formulation of Research problem.
					CO3: Enrich the knowledge in Sampling and Data Analysis
					CO4:Enhance the knowledge in application of statistical tools
					CO5: Prepare the Project Report.
			P22DSA3A	Quantitative Techniques	CO1: Solve mathematical formulation of the linear programming problem.
					CO2: Solve transportation problem and assignment problem.
					CO3: Apply formulae in single channel queuing models.
					CO4: Analyse the replacement problem under different situations.
					CO5: Apply the aspects of decision making.
			P22DSA3B	Advanced Business Stattistics	CO1: Calculate correlation co-efficient and analyse regression equations
					CO2:Learn theorems of probability and develop theoretical distribution
					CO3: explain procedure of testing hypothesis and calculate standard error and evaluate hypotheses
					CO4: apply chi-square test
					CO5: demonstrate t- test, f- test and ANOVA
			P22NMA1	NME-Marketing of Services	CO1:Characterise the financial services.
					CO2: Acquire the knowledge in marketing of insurance services.
					CO3:Know the services rendered by health care industry.
					CO4: Familiarisewith marketing of tourism services.
					CO5:Understand the marketing mix of telecommunication services.
			P22CA13	Taxation-II	CO1:Comprehend the scope of Customs Act
					CO2: Understand Goods and Services Tax (GST).
					CO3:Know the registration procedure for GST
					CO4:Learn about the levy and collection of GST
					CO5:Know the procedure for filling returns and assessment
			P22CA14	Financial Management	CO1: Analyse various financial decisions.
					CO2: Understand the various concepts of capital structure.
					CO3:Evaluate capital investment decisions.
					CO4: Estimate working capital requirements.
					CO5: Understand the significance of dividend policy.
			P22CA15	Higher Accounting	CO1: Acquaint with the procedure relating to the preparation of the Consolidated Balance Sheet
					CO2: Apply the provisions and procedures in the presentation of final statement of accounts of Banking Companies.
					CO3: Apply the provisions and procedures in the presentation of final statement of accounts of Insurance Companies.
					CO4: Distinguish the capital and revenue expenditure while replacing assets in public utility concerns and prepare accounts under Double Accounting System
					CO5: Describe the limitations of historical accounting and importance of inflation accounting with illustrations. Understand (i) the value of human resource accounting (ii) financial reporting practices and (iii) responsibilities of business units towards the society.
			P22CAPW	Project Work	
					CO1: Understand the classification strategy and Registration formalities.

			P22DSA4A	Export Procedure and Documentation	CO2: Understand the export documentation and the procedures.
					CO3: Know about Export finance.
					CO4:Understand the Import documentation and the procedures.
					CO5: Know the institutional framework for Foreign trade.
			P22DSA4B	Corporate Social Responsibility	
6	PBAE	MBA	P22CB1	Management Theory and Practice	UNIT- 1 CO1: Debate whether management is an art or science, to understand the footsteps of legendary business gurus such as F.W.Taylor, Fayol, Drucker and Weber
					UNIT- 2CO2: Understand the importance of Planning, its premises and how the superior and subordinate can jointly identify their common goals for overall goal achievement
					UNIT - 3 CO3: Know the bases of organising function, understand the difference between Line & Staff, the need for departmentation and the pros & cons of Centralization and Decentralization.
					UNIT - 4 CO4: Know the principles of Direction function, the techniques in motivation, leadership and how the communication leads successes.
					UNIT - 5 CO5:Check the current performance against the pre-determined standards to bridge the gap.
			P22CB2	Managerial Economics	UNIT- 1 CO1: Summarize the basic concepts of managerial economics various aspects of demand analysis and predict the demand and compare the various methods o forecasting.
					UNIT- 2CO2: Summarize the concept of supply, various laws related to supply, utility and consumers equilibrium.
					UNIT - 3 CO3: Describe Laws of production and differentiate short run and long run cost.
					UNIT - 4 CO4: Describe the characteristics of different market structureand estimate price and output under various market forms.
					UNIT - 5 CO5: Explain the macroeconomic aspects affecting business
			P22CB3	Organisational Behaviour	UNIT- 1 CO1: Summarize the Hawthorne studies as the foundation organisational Behaviour. Relate the diverse disciplines that serve as a base for the study of organisational behaviour. Provide an outline of the major challenges and the paradigm shift facing management now and in the future.
					UNIT- 2CO2: Define the overall meaning of personality. Describe the perceptual process and its major dimensions. Discuss the major theories of work motivation
					UNIT - 3 CO3: Describe the basic nature of groups: the dynamics of group formation and the various types of groups. Identify the various classifications of power. Identify the sources of emotions and moods.
					UNIT - 4 CO4: Describe the common characteristics of organizational culture. Compare the functional and dysfunctional effects of organizational culture on people and the organization. Describe ways to overcome resistance to change. Describe individual and organizational approaches to managing stress at work.
					UNIT - 5 CO5: Enhance critical thinking in work situations through analysis of case studies in organisational behaviour.
			P22CB4	Accounting for Business	CO1: Explain and apply accounting concepts, principles and conventions; record basic accounting transactions and prepare annual financial statements.
					CO2: Analyse, interpret and communicate the information contained in basic financial statements.
					CO3: Develop and understand the nature and purpose of Management Accounting.
					CO4: Evaluate financial results through budgets.
					CO5:Demonstrate understanding of Cost accounting principles.
			P22CB5	Business Environment	CO1: Familiarize with the nature of business environment and its components.
					CO2: Analyse the Economic Environment of a business firm
					CO3: Assess the various components of the Political Environment for a business firm.
					CO4: Identify the main features of a business firm's Legal Environment.
					CO5:Apply an understanding of the different modes of engagement with international markets and explore the interconnectedness in which expanding companies operate
			P22SEB1P	Practical: Computer Application in Business	CO1: Gain practical knowledge on Computer Hardware, Operating System-Windows
					CO2: Gain hands on training on MS-Word, Creating, Editing and Formatting Documents , inserting Tables and Pictures in a Document and Mail Merge system
					CO3: Gain practical knowledge on Components of MS-Excel, Entering Data and Formula in work sheet, Creating Charts using Excel
					CO4: Gain practical knowledge on creating power point presentation, applying multimedia, transition effects and animation effects, run slide show.
					CO5: Gain practical knowledge on Internet, websites, Online formsblogs, E-Mail ,Search engine and E-commerce Applications
			P22CB6	Researching Methodology	CO1 :To apprehend the knowledge of research design
					CO2 To understand the purpose of sampling and sampling techniques in the process of research design.
					CO3 :To be able to collect primary source of data and understand scaling methods.
					CO4: To be able to understand as how to do data processing , testing of hypothesis in the process of research.
					CO5: To be able to write a report of research.
			P22CB7	Marketing Management	CO1: Find and use relevant information required to solve marketing problem using controllable factors, environmental factors and marketing research.
					CO2: Examine the importance of studying consumer behaviour and the segmenting, targeting and positioning strategies.
					CO3: Apply knowledge related to product life cycle, product development and pricing for formulating winning marketing strategies
					CO4: Evaluate different channel strategies and communication mix strategies in the digital era.
					CO5: Apply the marketing concepts and to enhance critical thinking in real life marketing situations through analysis of case studies in marketing.
			P22CB8	Financial Management	CO1: Describe the financial objectives and Critically evaluate the various financial decisions in an organisation.
					CO2: Evaluate the various Sources of capital and types of securities.
					CO3: Assess the importance of Time value of money and Investment evaluation methods.
					CO4: Analyze the concept of dividend decisions.
					CO5:Discuss the function techniques in managing working capital Management, Cash Management, Receivables and Inventory Management.
			P22CB9	Human Resource Management	CO1: Understand the functions of HRM and the importance of HR planning
					CO2: Know the process of conducting job analysis and importance of Human Resource Development.
					CO3: Compare and contrast performance appraisal and job evaluation, the need for Training & Development
					CO4: Get an exposure of trade union movements and the recent trends in it.
					CO5:Compare different factors involve in Industrial Relations and the recent trends in Human Resource Management.
			P22CB10	Quantitative Methods	CO1: Understand the role of statistics in business, the stages in statistical methods, understanding of mass data.
					CO2: Simplify the mass data and to analyse the unwieldy data, to measure the principal characteristics of a distribution.
					CO3: Indicate the extent of variations in a distribution of a research and its interpretation.
					CO4: Study the relationship between two variables and finding the unknown variable through known variable.
					CO5: Disclose whether a particular variable is going up or down over a period of time and analyze the data based on its occurrences
			P22SEB2P	Practical: Statistical Tools for Business Research	CO1: Illustrate the steps in creating and editing a dataset
					CO2: Introducing descriptive statistics, cross tabulation and chi square test
					CO3: To learn to compare means using one sample t test and one Way ANOVA using computer based statistics package
					CO4: To calculate correlation and regression using computer based statistics package
					CO5: To learn factor analysis and discriminant analysis
			P22CB11	Operation Research	CO1: Formulate linear programs and apply graphical and simplex methods to solve business problems.
					CO2: Develop and enhance the skills of making optimum allocation of scarce resources to various alternative uses by applying transportation and assignment models."
					CO3 :Apply decision theory and decision making tools and techniques for making business decisions at different environments.
					CO4:Assign different jobs to different machines and control production operation through PERT / CPM.
					CO5:Show the operation of a queuing system and mathematical application for replacement of equipments and machineries in a plant.
			P22CB12	Production Management	
			P22CB13	Management Information System	CO1: Apprehend the knowledge on Information system, Components of Data processing.
					CO2: Demonstrate and use of computer Hardware and Information Technology.
					CO3: Understand and apply Information support for Managerial Decision Making and Data Base Management System.
					CO4: Acquire knowledge on Methodology, Design and Implantation of Information System.
					CO5: Develop knowledge on MIS organization, Evaluation, Audit and Future Development in MIS.
			P22DSBH1	Industrial Relations	
					CO1 : Understand the basic concepts of investment management .

			P22DSBF1	Security Analysis & Portfolio Management	CO2 : Evaluate the risk return analysis of investments. CO3 : Find valuation of Bond, Equity and Preference share . CO4 : Apprehend the knowledge of fundamental and technical analysis. CO5 : Select portfolio , evaluate and revise.
			P22DSBM1	Advertising & Sales Promotion	CO1: Articulate the knowledge on concepts of advertisement and clear idea on various advertisement CO2: Demonstrate the knowledge on using advertisement as strategic tools by advertising agencies. CO3: product and institution using specific media. CO4: Develop skills to Evaluate advertisement effectiveness. CO5: Acquire and access use of sales promotions
			P22DSBH2	Competency Mapping	CO1 : Understand the basic concepts of investment management . CO2 : Evaluate the risk return analysis of investments. CO3 : Find valuation of Bond, Equity and Preference share . CO4 : Apprehend the knowledge of fundamental and technical analysis. CO5 : Select portfolio , evaluate and revise.
			P22DSBF2	Indian Capital Market & Financial System	CO1: Understand the conceptual framework of Indian Financial System. CO2 : Understand the concepts of Indian Security Market. CO3 : Apprehend the knowledge on new issue market, IPO, Bonus shares,bouncher CO4 : Be familiar with the SEBI Guidelines and the role of merchant bankers in the secutity market CO5 : Understand Futures, Swaps, Options, Warrants and other financial derivetive
			P22DSBM2	Customer Relationship Management	CO1: Identify and understand and apply basic concept of CRM CO2: Demonstrate how can CRM concepts can be applied in acquiring and retaining customers related to business CO3: Develop CRM plan for business CO4: Evaluate CRM implementation strategies and assess strategic operational and tactical CRM decisions. CO5: Apply the principles of E-CRM strategies and tactics to provide solution.
			P22CBPS	Summer Training	CO1 :Describe the features, role and problems of Organisation Development. CO2 :Explain the Organisation Development process and organisational change. CO3 :Discuss various Organisation Development intervention strategies. CO4 :Analyse the role of different people in Organisational Development and the concept of Organisation Climate. CO5 :Assess Organisational Effectiveness.
			P22CB13	Strategic Management	CO1: Acquire knowledge on basic concepts of strategy and levels of strategy CO2: Understand the strategic options and formulate realistic strategies to formulate vision mission and Analyze a firm's internal strengths and weaknesses based on available resources and capabilities using various techniques CO3: Develop Knowledge on firm's external environment including competitive forces in the industry environment, forces in the macro environment, and competitors. CO4: Demonstrate the knowledge on the strategic approaches to manage a business successfully in a firm with a sustainable competitive advantage. CO5: Evaluate the challenges faced by managers in implementing and evaluating strategies based on the nature of business and industry
			P22CB15	Entrepreneurship	CO1: Describe the personality characteristics of an entrepreneur and their role in economy. CO2 : Importance of EDP and EDP Institutions. CO3 :Understand the problems and challenges of women entrepreneur ,Institutions to support women entrepreneurs. CO4: Identify business opportunities and preparation of project report. CO5: Knowledge of various funding agencies in India.
			P22DSBH3	Organizational Development and Change Management	CO1 :Describe the features, role and problems of Organisation Development. CO2 :Explain the Organisation Development process and organisational change. CO3 :Discuss various Organisation Development intervention strategies. CO4 :Analyse the role of different people in Organisational Development and the concept of Organisation Climate. CO5 :Assess Organisational Effectiveness.
			P22DSBF3	Management of Financial Service	CO1: Understand the financial system of our country CO2: Describe and differentiate the leasing and hire purchasing. CO3: Integrate the role of factors and venture capitalist. CO4: Identify the importance of merchant bankers and asset management companies for the economic development of a country. CO5: Interpret laws relating to securitization and recent trends in Indian financial system
			P22DSBM3	Services Marketing	CO1 : Understand the nature of services and evolution of Services Marketing. CO2 : Explain the components of service marketing mix. CO3 : Develop an effective service mission. CO4 : Know market segmentation, positioning and differentiation of services. CO5 : Develop marketing plan for services and examine the performance of various services in Indian context.
			P22DSBH4	Labour Legislation & Administration	
			P22DSBF4		CO1: Interpret various laws relating to factories and describe them CO2: Analyze various laws relating to unorganized sector labourers and commercial establishment CO3: Understand the laws relating to social security and women laws so as to appley in practice. CO4: Identify the impact of labour laws on organized functioning with special reference to personal functions. CO5: Acquire knowledge on national and international affairs on law laws and its administration.
			P22DSBM4	Buyer Behaviour	CO1 : Understand consumer decision process. CO2 : Identify the social and cultural factors influencing buyer behaviour. CO3 : Recognise the problems and identify the sources of information. CO4 : Process available information and alternative evaluation. CO5 : Describe the organisational buyer behaviour.
			P22CBPW	Major Project	
			P22CM1	ABSTRACT ALGEBRA	CO1. Deeply analyse the Sylow's Theorem CO2. Acquire the knowledge of Polynomial Rings CO3. Gain the knowledge of Extension fields, roots of polynomials CO4. Identify the concept of fixal fields CO5. Study the concept of Galois theory and solvability by radicals, Galois groups over the rationals
			P22CM2	Real Analysis-I	CO1. Recall the concepts metric spaces, compact sets and connected sets CO2. Demonstrate limits, Continuity and connectedness of functions CO3. Interpret derivative of a real function and apply L'Hospital's rule and Taylor's theorem CO4. Analyse Sequences and Series of functions and apply the Stone Weirestrass theorem.. CO5. Recall power series and analyse Fourier series.
			P22CM3	Ordinary Differential Equations	CO1. Acquire Knowledge about Linear differential homogeneous equations . CO2. Solve the homogeneous equations CO3. Solve the Non-homogeneous Equations and Legendre Equations CO4. Know about Regular Singular Points and Bessel Equations CO5. Apply the method of successive approximations and Lipschitz condition.
			P22CM4	Data Structure Using 'C'Lab	CO1. Learn about Abstract Data Types, Linked List concepts CO2. Study about Implement stacks and queue CO3. Acquire knowledge about Implementation of trees CO4. Learn the algorithms of Insertion sort, Merge sort, Quick sort and its Analysis CO5. Study about Dijikstras shortest path algorithm
			P22DSM1AP	DATA STRUCTURES USING C (LAB)	CO1. Describe lists CO2. Implement stacks and queues CO3. Implement trees CO4. Analyse sorting CO5. Study different methods of finding shortest path
			P22DSM1BP	DATA STRUCTURES USING C++ (LAB) DS ELECTIVE	
			P22SEM1	LOGIC AND REASONING	CO1. Gain the Knowledge of Mathematical Operators & Mathematical Problems CO2. Develop increase their cognitive capabilities CO3. Acquire knowledge to complete a series

					CO4. Understand the Direction Sense Test – Numbers Test and Time Sequence Test
					CO5. Learn about Blood relation
			P22CM5	TOPOLOGY	CO1. Have a sound knowledge of some of the elementary concepts associates with topological spaces viz, open and closed sets limit points and continuous functions etc.,
					CO2. Master in Product topology, Metric topology and its relation.
					CO3. Define and briefly study in compactness
					CO4. Understand the concept of countability Axioms, Seperation axioms
					CO5. Understanding the concept of Urysohn lemma and Urysohnmetrization Theorem
			P22CM6	COMPLEX ANALYSIS	CO1. Have adequate knowledge of complex integration using Cauchy's theorem and integral formula
					CO2. Have a strong knowledge of Harmonic Functions
					CO3. Have a deep knowledge of Partial Fractions and Entire Functions
					CO4. Familiar with Riemann Mapping Theorem
					CO5. Have a strong knowledge of conformal mappings and elementary Riemann Surfaces
			P22CM7	Partial Differential Equations	CO1. Grasp thoroughly the fundamentals of first order partial differential Equation
					CO2. Solve quasi linear and non linear partial differential equation
					CO3. Classify second order partial differential equation and solve the wave Equation
					CO4. Apply Wave Equations
					CO5. Solve the Diffusion Equations
			P22CM8	Mathematical Methods	CO1. Grasp thoroughly the fundamentals of Calculus of variations
					CO2 Solve Volterra and Fredhlom Integral Equations
					CO3. Solve Fredhlom Integral Equations of the second Kind
					CO4. Equip with the methods of finding Fourier Transforms
					CO5. Get the knowledge about Hankel Transforms
			P22DSM2A	MECHANICS	CO1. Recall the elementary principles of mechanics
					CO2. Demonstrate Lagrange's equations.
					CO3. Analyse Hamilton's principle
					CO4. Demonstrate and apply Hamilton-Jacobi Theory
					CO5. Define and solve problems on canonical transformations.
7	PMAE	M.Sc Mathematics	P22DSM2B	DISCRETE MATHEMATICS	CO1. Study about the Foundations of Logic and Proofs.
					CO2. Learn about Counting and Advanced Counting Techniques specific outcomes
					CO3. Acquire a good foundation in Boolean Algebra and Modelling computation
					CO4. Acquire a Knowledge about Coding Theory
					CO5. Study about applications of algebra and automata semi groups
			P22SEM2	MATHEMATICAL SCIENCES	CO1. Gain the Knowledge of Mathematical Operators & Mathematical Problems
					CO2. Develop increase their cognitive capabilities
					CO3. Acquire knowledge to complete a series
					CO4. Understand the Direction Sense Test – Numbers Test and Time Sequence Test
					CO5. Learn about Blood relation
			P22CM9	Real Analysis II	CO1. Demonstrate functions of bounded variation
					CO2. Analyse and apply Riemann Stieltjes Integral.
					CO3. Explain functions of several variables
					CO4. Define and Evaluate Lebesgue measure.
					CO5. Evaluate the Lebesgue integral of a bounded function over a set of finite measure
			P22CM10	Graph Theory	CO1. Understand network applications and apply short route algorithms, PERT& CPM
					CO2. Demonstrate Parametric Linear Programming
					CO3. Understand state EOQ Models, Classic EOQ Model Dynamic EOQ, Model and solve EOQ problems
					CO4. Understand unconstrained problems & apply Newton Raphson Method,Solve constrained problems
					CO5. Demonstrate unconstrained nonlinear algorithms and apply constrained algorithms, separate programming & quadratic programming
			P22CM11	Differential Geometry	CO1. Basic definitions of space curve
					CO2. Understand intrinsic equation, Fundamental existence theorem for space curve and Helics
					CO3. Gain the knowledge of metric, local intrinsic properties of a surface and Geodesics
					CO4. Present the knowledge of Geodesic parallels, Geodesic curvature and Gauss Bonnet theorem
					CO5. Get the knowledge of local non-intrinsic properties of a surface.
			P22CM12	Numerical Analysis	CO1: Understand the Number Systems and compute its error
					CO2: Compute interpolating polynomial and estimate its error
					CO3. Solve Non linear equations
					CO4: Solve Systems of Linear Equations
					CO5. Gather knowledge about numerical integration and differentiation
			P22DSM3A	LINEAR ALGEBRA	CO1: Define Linear Transformation, find the representation of linear transformation by matrices
					CO2: Understand the Algebra of polynomials, find the prime factorisation of a Polynomial
					CO3: Derive the Inverse of an invertible matrix using determinants
					CO4 : Explain about Diagonalization
					CO5 : Find the minimal polynomials, Jordan forms and the rational forms of real matrices.
					CO2. Master operators and imbeddings of N and its double conjugate
					CO3. Have a strong knowledge of Hilbert spaces and ortho normal bases
					CO4. Have a good knowledge of operators
					CO5. Have a sound knowledge of spectral theory and theorem and determinants
			P22CM14	Mathematical Statistics	CO1. Recall discrete and continuous types of random variables
					CO2. Describe two dimensional random variables.
					CO3. Interpret Binomial, Poisson, Normal, Gamma and Chi-square distributions
					CO4. Construct probability density function of given functions of the random variables.
					CO5. State and demonstrate Central Limit Theorem
			P22CM15	Optimization Techniques	CO1. solve the Integer programming problem
					CO2. study about Dynamic integer programming Algorithm
					CO3. understand EOQ Models and solve Inventory Deterministic problems
					CO4. understand the Queuing Models and solve the related problems
					CO5. apply Kuhn-Tucker conditions with Non-Negative Constraints in Non linear programming
			P22CMPW	Project	CO1. Acquire knowledge about the topic
					CO2. Understand the topic
					CO3. Demonstrate the topic
					CO4. Develop the topic
					CO5. Analyse and apply the topic
			P22DSM4A	FUZZY SETS AND THEIR APPLICATIONS	CO1. Remember basic concept of fuzzy sets and extension principle.
					CO2. Understand the knowledge of operation on fuzzy sets.
					CO3. Explain fuzzy relations, its operations properties, tolerance and equivalence relation.
					CO4. Analyze decision making in fuzzy environment, fuzzy ranking methods and fuzzy linear programming.
					CO5. Apply fuzzy concept in medicine, economics, interpersonal communication and also other applications.
			P22DSM4B	FORMAL LANGUAGES AND AUTOMATA THEORY DS ELECTIVE	CO1. Master in deterministic and non-deterministic Finite Automata
					CO2. Master regular expressions and criteria to test not to be a regular language.
					CO3. Have a sound knowledge on context free grammars and closure properties
					CO4. Acquire mastery in parse trees and push down automata.
					CO5. Master in PDA & CFG's and its equivalence.
			P22CP1	Mathematical Physics-I	CO1: describe the vector analysis and vector spaces
					CO2: solve the problems using Matrices
					CO3: apply the Special functions – I
					CO4: interpret the Special functions – I
					CO5: solve the problems using Group theory
			P22CP2	Classical Mechanics	CO1: Describe prerequisite concepts to the inadequacy in classical mechanics so that we can transit from classical to quantum mechanics this gives an insight into the interesting correlation and Lagrangian Formulation.
					CO2: Study Hamilton's Principle and Lagrange's equation and the kinematics of the rigid body through Euler equation.
					CO3: Explain The Hamilton-Jacobi equations and normal coordinates.
					CO4: Obtain the Orthogonal transformation and Angular Momentum and Kinetic Energy of Motion about a Point.
					CO5: Get knowledge in central force field and relativity
			P22CP3	Advanced Electronics	CO 1: Differentiate various semiconducting diodes by comparing their principles and working and its applications.
					CO 2:understand thecharacteristics and applications of operational amplifier
					CO 3: describe the design concepts of counters and shift registers
					CO 4: explain the various techniques to develop A/D and D/A converters
					CO 5:understand and explain the function of data processing circuits and their applications
			P22CP4P	Physics Practical-I	CO1 : acquire knowledge about the usage of electronic and non-electronic devices
					CO2 : determine various physical parameters
					CO3 : construct different types of bridges and circuits.

			P22CP4P	Physics Practical-I	CO4 : analyze Hartmann's interpolation formulae, self and mutual inductance , refractive index of various prisms , first and second order spectrum. CO5 : develop their skills in handling the instruments
			P22DSP1A	Microprocessor and Micro controller	CO1:list the basics of microprocessor 8085, architecture, memory and input/output CO2: classify the languages and instruction sets in microprocessor and design a counter with time delay using subroutine and develop programming skill CO3: discuss the interfacing of microprocessor CO4: know the basics of microprocessor 8086 CO5:discuss about the microcontroller
			P22DSP1B	Microprocessor and Embedded microcontroller	CO1:understandthe architecture of microprocessor 8085 and its timing diagramarchitecture, memory and input/output CO2: describe the memory interface and input/output CO3: discuss about the microcontroller CO4: enhance the knowledge about microcontroller CO5: apply the concepts of microprocessor and microcontroller in the field of communication and industry
			P22SEP1	Solar Energy and is Applications	CO1: Impart the knowledge of Solar energy measuring instruments. CO2: Impart the knowledge of understanding the function of solar collectors. CO3: Impart the knowledge of application of solar energy Heaters CO4: Impart the knowledge of solar energy to produce Hydrogen. CO5: Impart the knowledge about, how to design simple solar cells.
			P22CP5	Mathematical Physics-II	CO1: analyze differential equations CO2: predict the partial differential equations CO3: define tensor analysis CO4: apply the complex variable CO5: solve the problems using integral transforms
			P22CP6	Quantum Mechanics-I	CO1: Study the fundamentals of wave mechanics. List the Bohr's postulates and exhibit the main characteristics features of quantum system with the aid of simple examples and to show how these features arise from the conditions on the Schrodinger wave function. CO2: Study the stationary state and Eigen spectrum of systems using time dependent Schrodinger equation CO3: Solve the exactly soluble Eigen value problems. CO4: Know the matrix formulation of quantum theory and how it can be used to understand the equation of motion. Know quantum states, the Hilbert space of state vectors and wave functions, degeneracy and transformations and symmetries. CO5: Understand the theory of identical particles and Angular momentum. To obtain spin angular momentum and Clebsch –Gordan Coefficients.
			P22CP7	Electromagnetic Theory	CO 1 : understand the fundamental principles and laws of electrostatics and their applications CO 2: know the principles of magnetostatics and their applications CO 3: explain the phenomenon of electromagnetic induction and apply Maxwell's equations to specific physical situations CO 4: acquire knowledge in deriving wave equations and discuss the propagation of electromagnetic wave in different media CO 5: discuss the importance of scalar and vector potentials
			P22CP8P	Physics practical-II	CO1: Construct electronic circuits using logic gates & ICs CO2: Perform arithmetic operations using ICs CO3: Construct different types of waveforms CO4: Understand the theoretical concepts by doing experiments CO5: Understand applications of ICs by doing experiments
			P22DSP2A	Programming in C++	CO1: identify the basic concepts needed to develop a program CO2: list the features of object oriented programming CO3: discuss the concept of object oriented programming. CO4: use array and structure to handle volume of data CO5: apply advanced programming concepts
			P22DSP2B	Computational Physics	CO1: understand the basic methodology of computational physics CO2: gain the practical skills and a key objective to solve problem in physics object oriented programming CO3: apply the physics concepts using MATLAB CO4: acquire knowledge about various mathematical methods CO5: enhance the program writing skill
			P22SEP2	Nanoscience and Nano technology	CO 1 : know the history of nano science and Nanotechnology CO 2: understand the different types of nano particles CO 3:Gain knowledge in various methods used for synthesis ofnano particles CO 4:Explain the various characterization techniques used for analysis of nano materials CO 5:Understand the application of nano materials in various fields
			P22CP9	Condensed Matter Physics-I	CO1 : explain about the crystal structure and crystal binding CO2 : predict about diffraction of waves and particles by Crystals CO3 : demonstrate about crystal imperfections CO4 : explain about phonon, heat capacity of phonon and anharmonic effects CO5 : interpret the theory of electrons
8	PPHE	M.Sc Physics	P22CP10	Quantum Mechanics-II	CO1 :Acquire knowledge about perturbation theory for discrete levels, differentiate degenerate and non- degenerate, understand stark effect in hydrogen atom. CO2 : Know transition probability of first order transition , interpret constant perturbation, harmonic perturbation, understand interaction of atoms with electromagnetic field , dipole approximations CO3: Know variation method , determine asymptotic solution of Schrodinger equation , analyse solution near a turning point , understand Bohr-Sommerfeld quantum condition. CO4 : Get knowledge about central field approximation , interpret residual electrostatic interaction and spin orbit interaction , determine central field by Thomas Fermi method and Hartree method , understand Born Oppenheimer approximation and LCAO approximation . CO5: Derive Klein – Gordon equation, Dirac equation , determine charge and current density from Klein – Gordon equation , position probability density from Dirac equation , find plane wave solutions of Dirac equation , determine spin of Dirac particle , understand significance of negative energy states.
			P22CP11	Molecular Spectroscopy	CO1: understand the theory of rotational spectra of a rigid diatomic molecule and Stark effect. CO2: classify the vibrating diatomic molecule on the basis of its type of vibration and IR spectrometer. CO3: discuss Raman Scattering with the effect of rotation and vibration of molecules. CO4: understand NMR and ESR with its applications. CO5: explain Mossbauer effect and magnetic hyperfine interaction.
			P22CP12P	Physics Practical-III	CO1: Apply the various procedures and techniques for the experiments CO2: Discuss the basic principle of the experiments CO3: learn the usage of electrical and optical systems for various measurements CO4: Apply the analytical techniques and graphical analysis to the experimental data. CO:5 Apply the mathematical concepts to obtain quantitative results
			P22DSP3A	Crystal Growth and Thin Films	CO 1 : know the theories of nucleation and derive equations for various types of nucleus CO 2: understand various methods of crystallization CO 3:explain the principle and working of vapour, melt and gel growth techniques CO 4:gain knowledge in various methods used for synthesis of thin films CO 5:Understand the various characterization techniques used for materials
			P22DSP3B	Plasma Physics	CO1:define fundamental concepts about plasma CO2: explain about the motion of charged particles CO3: interpret the plasma oscillations and waves CO4: predict about plasma diagnostics techniques CO5: explain about the applications of plasma physics
			P22NMP1	Batteries and their Applications	CO1 : To describe the Working Principles of batteries CO2 : To Impart the knowledge RECHARGEABLE BATTERIES CO3 : To Analyse the Material used C04 : To understand the. Primary and Secondry batteries CO5 : To understand the Theory of Batteries Installation.
			P22CP13	Condensed Matter Physics-II	CO1: interpret the theory of dielectrics CO2: explain about the theory of ferroelectrics and piezoelectrics CO3: define the magnetic properties of the materials

					CO4: predict about Superconductivity and its types
					CO5: explain about the Plasmons, Polaritons and Excitons
			P22CP14	Nuclear and Particle Physics	CO1: explain general properties of nucleus, central and non central nuclear forces.
					CO2: describe the theories and models of nucleus.
					CO3: list out the types of nuclear reactions and transmutations.
					CO4: discuss radioactive decays
					CO5: explain the concept of elementary particles.
			P22CP15P	Physics Pratical-IV	CO1: construct electronic circuits using ICs
					CO2: simplify arithmetic Expression using K maps
					CO3: construct parity generator and checker using ICs
					CO4: understand the theoretical concepts by doing experiments
					CO5: understand the applications of 555 Timer & IC 741
			P22CPPW	Project	
			P22DSP4A	Laser and non linear optics	CO1- LASERS Acquire knowledge about various types of lasers, understand the basic principles and working of lasers , predict the type of laser that can be used in various applications.
					CO2- BASICS OF NONLINEAR OPTICS Know about nonlinear optics , understand harmonic generation, phase matching , optical mixing , differentiate linear and nonlinear optics , determine the length at which self focusing occurs.
					CO3-MULTIPHOTON PROCESS Know about multi quantum photoelectric effect, understand the production of two photons ,three photons, parametric generation of light, apply frequency mixing in frequency up conversion, analyse Raman scattering
					CO4- NON LINEAR OPTICAL MATERIALS Know basic requirements of non linear materials, interpret various nonlinear materials, use of various nonlinear materials
					CO5-FIBER OPTICS Know different types of fibres, understand wave propagation and fibre modes, determine numerical aperture, fibre losses, attenuation, determine role of band width , differentiate fibre modes and dispersion
			P22DSP4B	Introduction to Bose - Einstein Condensation (BEC), Superfluidity and Superconductivity	CO1 Acquire knowledge about density of states, understand transition temperature, differentiate condensed phase and normal phase
					CO2 Know about coherent states , understand bosonic quantum fields , analyse gross-Pitaevski equation
					CO3 Know about elementary excitations, understand quasi particle spectrum, apply Hartree-Fock theory.
					CO4 Know basic requirements , interpret classical and quantum fields nonlinear materials, determine thermal de Broglie wavelength
					CO5 Know basic properties of superconductors, understand mean field Hamiltonian, discuss BCS ground state and excited state, interpret BCs theory at non-zero temperature
			P22CD1	INORGANIC CHEMISTRY I	CO1: discuss the theories of Bronsted, Lewis and Lux concepts of acids and bases, Pearson and HSAB concepts and its applications.
					CO2: explain the fundamental knowledge of lattice energy, radius ratio of different geometries, calculation of lattice energy, miller indices, symmetry in crystals and various types of crystals.
					CO3: discuss band theory of solids, electrical and optical properties of solids.Compare neutron diffraction and X-ray diffraction, discuss the application of XRD.
					CO4: demonstrate the principle of coordination compound, describe the stability of metal complexes by the use of different methods and parameters, and illustrate the stereoisomerism in inorganic complexes.
					CO5: draw the splitting of d-orbitals under various geometries, discuss the factors affecting splitting, explain Jahn-Tellar distortion and chelation, identify the complexes using ORD and CD, draw the energy level diagrams of various complexes, compare CFT and MOT of bonding in octahedral complexes.
			P22CD2	ORGANIC CHEMISTRY I	CO1: discuss the concepts of electron displacement, resonance, H-bonding and aromaticity.
					CO2: describe optical activity of organic compounds, projection formulae-Newman, Sawhorse and Fischer Configuration, nomenclature, Geometrical isomerism - types and determination by physical and chemical methods.
					CO3: explain various organic reaction intermediates, types of reactions, collision theory and Transition state theory-Hammond postulate-microscopic reversibility, kinetic and non-kinetic methods of determining reaction mechanisms.
					CO4: explain aliphatic nucleophilic and electrophilic substitution reactions-their mechanisms, stereo chemistry of these reactions.
					CO5: explain aromatic electrophilic and nucleophilic substitution reactions and their mechanisms, effect of substrate structure, leaving group and attacking nucleophile.
			P22CD3	PHYSICAL CHEMISTRY I	CO1: discuss the basic aspects of quantum chemistry and derive Schrodinger wave equation.
					CO2: explain symmetry elements and symmetry operations and point grouos, and able to construct group multiplication table.
					CO3: discuss General laws of enthalpy, entropy, free energy concepts, Partial molar quantities, chemical potential, fugacity, activity coefficientsand Third law of thermodynamics.
					CO4: describe the concepts of conductometric titrations and solubility products.
					CO5: explain Overvoltage, Corrosion and Prevention of Corrosion, Butler Volmer and Tafel equation & Different types of Storage batteries.
			P22CD4P	INORGANIC CHEMISTRY PRACTICAL	CO1: demonstrate the method of analyzing a mixture of basic radicals.
					CO2: prepare crude and recrystallized samples of few inorganic complexes.
			P22DSD1A	MOLECULAR SPECTROSCOPY & ANALYTICAL CHEMISTRY I	CO1: demonstrate the fundamentals of molecular spectroscopy and UV spectroscopy.
					CO2: demonstrate the fundamentals of vibrational spectroscopy, the selection rules, Instrumentation and the interpretation of IR spectra.
					CO3: explain the underlying principle of Rayleigh and Raman scattering, differentiate stokes and antistokes lines, Raman and IR spectra and its applications in the structural determination of compounds.
					CO4: demonstrate the fundamentals of mass spectrometry and mass spectra of important functional groups.
					CO5: explain the principle, instrumentation and applications of Gas liquid chromatography, HPLC and Electrophoresis.
			P22DSD1B	INDUSTRIAL CHEMISTRY	CO1: gain knowledge on basics of Commercial manufacturing process technology of various chemicals.
					CO2: identify and analyze the raw materials and source of energy for chemical industries.
					CO3: appreciate the chemistry of selected industrial processes including cement, ceramics glass and fertilizers.
					CO4: recognize employment opportunities in areas of small chemical enterprisers which manufacture goods of personal or household services with the help of relatively smaller machines and a few workers and employees.
					CO5: identify and discuss the basics of sugar and agrochemicals like insecticides, fungicides, herbicides and various pesticides.
			P22SED1	ANALYSIS OF SOIL, FOOD AND COSMETICS PRACTICAL	CO1: demonstrate the analysis of soil.
					CO2: analyse the food adulterants, proteins, estimation of benzoic acid in food items and isolate casein and lactose from milk.
					CO3: determine Ca2+ and Zn2+ in talcum powder and sulphates in deodorants.
			P22CD5	INORGANIC CHEMISTRY II	CO1: discuss electron transfer reactions, various types of ligand substitution reactions and mechanisms in different geometries and its applications.
					CO2: identify the organometallic compounds and explain the different catalytic reactions.
					CO3: derive the spectroscopic term symbols, draw the orgel diagram for weak field Oh and Td complexes. Explain Tanabe-Sugano diagram for d3 complexes, discuss charge transfer spectra.
					CO4: discuss nuclear spin and movements, modes of radioactive decay, nuclear stability, detection and determination of radioactivity, nuclear reactions.
					CO5: discuss artificial transportation, methods of producing projectiles, activation, analyses and radiometric titration, radio isotopes and disposal of radioactive wastes.

9	PCHE	M.SC CHEMISTRY	P22CD6	ORGANIC CHEMISTRY II	CO1: explain various reactions of addition to c-c multiple bond and c– hetero multiple bond (carbonyls only). CO2: explain elimination and free radical reactions with their detailed mechanism, stereochemistry and Bredt's rule. CO3: classify the rearrangements into electrophilic and nucleophilic with suitable examples and to identify the rearrangements involving C-C and C-N migrations. CO4: Draw the conformations of ethane, propane, n-butane halo alcohols, glycols, butane-2,3-diols and explain the physical methods of conformational analysis, reactivity of acyclic compounds and conformational analysis and reactivity of cyclohexyl systems. CO5: discuss the preparation, properties of pyrazole, oxazole, thiazole, synthesis of benzofuran, thianaphthene, pyridazine, barbituric acid, pyrimidine, thymine and cytosine.
			P22CD7	PHYSICAL CHEMISTRY II	CO1: Apply the Schrodinger wave equation to various systems. CO2: discuss the hybridization of atomic orbitals and representation of vibrational modes in non linear molecules and able to construct the character table for point groups C2V and C3V. CO3: explain the laws of thermodynamics and apply the phase rule for various system. CO4: explain the various theories of chemical kinetics and kinetics in solution. CO5: describe double layer model and Electrokinetic phenomena.
			P22CD8P	ORGANIC CHEMISTRY PRACTICAL	CO1: analyze the given mixture of organic compounds CO2: synthesize organic compounds (double Stage) &Separate the mixture of organic compounds into individual componentsby paper/ TLC techniques.
			P22DSD2A	MOLECULAR SPECTROSCOPY & ANALYTICAL CHEMISTRY II	CO1: demonstrate the fundamentals of Nuclear Magnetic Resonance Spectroscopy CO2: demonstrate the fundamentals of 13C NMR, 2D NMR and ESR Spectroscopy. CO3: explain the underlying principle of Mossbauer &Photoelectron spectroscopy. CO4: explain the fundamentals of Thermoanalytical & Spectroanalytical techniques. CO5: explain the principle, instrumentation and applications of Gas liquid chromatography, HPLC and Electrophoresis.
			P22DSD2B	POLYMER CEMISTRY	CO1: identify the repeat units of particular polymers and specify the isomeric structures which can exist for those repeat units and account for reaction mechanisms during radical, ionic and condensation polymerization. CO2: describe the general method of preparation and uses of various industrially important polymers. CO3: indicate how the properties of polymeric materials can be exploited and estimate the number- and weight-average molecular masses of polymer samples given the degree of polymerisation and mass fraction of chains present. CO4: place emphasis on how the various synthetic techniques that are used to control structural features of polymer along with methods of degradation of polymers. CO5: describe various processing methods of polymers.
			P22SED2P	(Practical)COMPUTATIONAL SOFTWARE IN CHEMISTRY	CO1: use computational software.
			P22CD9	INORGANIC CHEMISTRY-III	CO1: identify the structural features, properties, correlation and applications of inorganic polymers, polyacids of Vanadium, Chromium, Molybdenum and Tungsten. CO2: appreciate the chemistry of low molecularity metal clusters, examine the synthesis, structures, bonding and chemistry of specific boron hydrides. CO3: demonstrate an understanding of chemistry of „f' block elements their properties and separation of lanthanides and actinides. CO4: develop an appreciation for the structure and function of metal ions in the biological systems and explain how metal ions function as catalytic and structural centers in biological systems. CO5: describe the flow and transformation of nitrogen through biological and physical process, gains insight into cutting edge developments that utilizes metal ions for medical purposes.
			P22CD10	ORGANIC CHEMISTRY-III	CO1: discuss the methods of oxidation in different environmental conditions CO2: explain reduction reactions using different reducing agents. CO3: select types of reagents used in various organic synthesis. CO4: identify organic name reactions and their mechanisms. CO5: plan new organic synthesis and carry out effectively.
			P22CD11	PHYSICAL CHEMISTRY-III	CO1: discuss the advance concepts of Quantum Chemistry. CO2: explain the Kinetics of fast reactions CO3: express the objective of Statistical Thermodynamics. CO4: explain the properties of Polymers CO5: discuss Surface phenomena applying adsorption method.
			P22CD12P	PHYSICAL CHEMISTRY PRACTICAL	CO1: do the non-electrical experiments skillfully. CO2: do the electrical experiments confidently.
			P22DSD3A	NANOCHEMISTRY	CO1: discuss the fundamentals of nanoscience and able to update the fundamentals to new nanomaterials. CO2: extend the learnt methods for the synthesis of nanomaterials to new systems. CO3: demonstrate the properties of nanomaterials. CO4: explain characterization of nanomaterials by various techniques. CO5: practice implication of nanotechnology to help the society and environment.
			P22DSD3B	ENVIRONMENTAL CHEMISTRY	CO1: Gain the knowledge about the toxic chemicals in the environment. CO2: discuss about causes, effects and control measures of pollution. CO3: Demonstrate the air monitoring techniques. CO4: define various methods of managing and recycling of solid wastes. CO5: explain the instrumental techniques in environmental chemical analysis.
			P22NMEC1	COSMETOLOGY (Offered to other programmes)	CO1: describe the types of cosmetics, skin types, skin care products and role of calcium in the regulation of skin barrier homeostasis skin pH and skin flora. CO2: explain skin aging, new trends in anti-aging cosmetic ingredients and treatments and skin tolerance principles of skin irritation. CO3: discuss the skin base materials, baby care products, antiperspirants, deodorants and perfumes. CO4: discuss the hair Conditioners, nail cosmetics, lips cosmetics and eye cosmetics. CO5: discuss Cosmetology occupations, training and licensing requirements, General concepts of Ethics in human testing, Safety and Trends in cosmetic regulations in the U.S.A. and European Union.
			P22CD13	ORGANIC CHEMISTRY IV	CO1: to apply Photo chemistry to new systems. CO2: gain-in-depth knowledge in Pericyclic reactions CO3: able to plan the new synthesis of Steroids and Hormones. CO4: Chemistry of Carbohydrates and Flavonoids. CO5: Chemistryof Terpenoids and Alkaloids.
			P22CD14	SELECTED TOPICS IN CHEMISTRY	CO1: identify the structure of carbonyls, nitrosyls and identify various reactions of organometallic compounds. CO2: appreciate the importance of newmaterials like dielectrics, composites, aerospace, light emitting diodes and magnetic materials with interesting properties leading to newer applications. CO3: recognize the basic concept of Voltammetry, amperometry and Polarographic techniques in electroanalytical chemistry. CO4: illustrate the fundamentals of spectrophotometry, turbidimetry and fluorimetry and their instrumentation, explain the separation and quantification of ions using electro gravimetric method.

					CO5: acquire knowledge of physical & chemical characterization of catalyst and appreciate the vibrant role of catalyst in chemical reactions.
			P22CD15P	INORGANIC & ORGANIC QUANTITATIVE ANALYSIS PRACTICAL	CO1: do the volumetric and gravimetric estimation skillfully.
					CO2: do the complexometric titrations confidently.
					CO3: do the organic estimation skillfully.
					CO4: do the colorimetric estimation skillfully.
			P22DSD4A	GREEN CHEMISTRY	CO1: gain knowledge about the principles of green chemistry and about the green solvents.
					CO2: discuss the organic reactions in solid-state
					CO3: demonstrate alternative energy sources for the organic synthesis
					CO4: choose appropriate reagents and catalysts for organic synthesis
					CO5: realize the significance of green synthesis
			P22DSD4B	MEDICINAL AND PHARMACEUTICAL CHEMISTRY	CO1: Gain knowledge about the fundamentals of medicinal chemistry, pharmacokinetics, concepts of prodrug and soft drug and drug design. To understand the development of QSAR.
					CO2: To describe the structural features and SAR of penicillin G, cephalosporin, streptomycin, terramycin, erythromycin and chloramphenicol.
					CO3: To classify chemotherapeutic agents and design the synthesis of antineoplastic agents and antitubercular drugs.
					CO4: To employ the synthesis and therapeutic action and SAR of antihypertensive drugs.
					CO5: Analysis of pharmaceutically important compounds using UV-vis, NMR, mass spectroscopy, TLC, HPLC and GC techniques.
			P22CDPW	CORE PROJECT	
			P22CZ1	Animal Phsiology	CO1: impart knowledge on various types of nutrition anddistinguish the heterotrophic mode of nutritional types such as Saprotrophic, Parasitic, Holozoic nutrition and heterotrophs such as decomposer, omnivore, Herbivore andDetrivore and describe process of digestion.
					CO2: explain breathing, ventilation, and understands the process of gaseous exchange, respiratory pigments. Hemoglobin as oxygen carrier, respiratory quotient, analyse the reasons for respiratory problems and apply the knowledge in caring lungs and prevent respiratory dieases.
					CO3: gain knowledge on the structure and fuctions of heart, understanding of composition of blood and role of blood and blood cells,analyse the causes and applying this with reference to cardiac diseases.
					CO4: associate the structure and functions of Muscular system , compare and contrast CNS, PNS and ANS and discover the role of photo and phonoreceptors,analyse the reasons for neuraldiseaes and apply the knowledge in preventing muscular , neural phonoand photo receptor diseases
					CO5: list the excretory organs in animals and summarise the structure and functions of kidney, understanding the mechanism of urine formation and analyse hypertension with Kidney disorders.
			P22CZ2	Environmental Biology	CO1: acquire knowledge in basic ecosystem
					CO2: understand the principles of community ecology
					CO3: analyse the significance of natural resources
					CO4: understand effect of pollution
					CO5: create awareness about environmental laws and disasters
			P22CZ3	Molecular Biology	CO1: Explain concepts such as gene structure and function and obtain an understanding of genetics and molecular biology principles.
					CO2: Define, Analyze and explain the characteristics of codon and gene expression at the level of Transcription.
					CO3: Describe the mechanism of gene expression at the translation level and compare between Prokaryotes and Eukaryotes
					CO4: Explain and demonstrate the gene regulation using examples.
					CO5: Define, explain and generalize the mutation and oncogenes.
			P22CZ4P	Animal Phsiology, Environmental Biology and Molecular Biology-Practical	CO1: Enumerate the RBC,WBC, estimate Haemoglobin content
					CO2: Apply clinical procedures for blood, urine and semen analysis
					CO3: Isolate DNA from the sample, analyse the potein sample content using Paper and Thin layer chromatography
					CO4: Evaluate COD, BOD, alkalinity, salinity and polluting factors from various samples
			P22DSZ1A	Clinical Lab Technology	CO1: To understand the laboratory designing and safety methods of First Aid in laboratory
					CO2: To analyses the human blood regarding types of blood groups (A,B, AB,O)
					CO3: To understand theoretical knowledge about the specimen collection and Transportation of urine
					CO4: To describe the chemical and microscopic examination of stool
					CO5: To Explain the chemical, microscopic examination of sputum and analysis the semen.
			P22DSZ1B	Climate Change and Sustainability	CO1: Identify, understand and list the causes of climate change, external climate forces and interpret evidences
					CO2: Comprehend and illustrate environmental consequences and challenges on ecosystem vulnerability
					CO3: Develop technical skills to implement environmental conservation and sustainability
					CO4: Predict and compute mitigation approaches in climate change
					CO5: Compare and analyze new developments in sustainability metrics and reporting tools
			P22SEZ1	Vectorborne Diseases	CO1: Define, describe and write about the details of vector habitats, interaction in the food chain, biotic and abiotic factors
					CO2: Explain and paraphrase Anthroponotic vector diseases and its health impact on humans
					CO3: Discuss and summarize Zoonotic vectors diseases and its health impact on humans
					CO4: Include & prepare themselves and prepare the community on the awareness about arthropods of public importance
					CO5: Correlate and apply vector control strategies in household and at community level
			P22CZ5	Applied Microbiology	CO1: Perform microbial analysis of water ,presumptive test, confirmed test and complete test and gain the knowledge of water born pathogens and prevent the diseases
					CO2: Gain knowledge on treatment of sewage water for microbes and apply biodegradation and bioremediation in day today life
					CO3: Analyse and explain role of microbes in soil fertility , Nif genes nitrogen fixation and apply the knowledge of biofertilizers andVAm fungi in Agriculture
					CO4: Apply the knowledge of food and dairy microbiology in day today life
					CO5: Analyse the role of microbes in industrial microbiology , fermentors and its types and knowing the process of production of wine and citric acid
			P22CZ6	Biochemistry	CO1: Understand basic biochemical systems in the biological systems
					CO2: To learn the fundamental biochemical principles such as structure of bio molecules
					CO3: To gain ideas regarding metabolic pathways
					CO4: To understand the regulations of biological and biochemical processes
					CO5: Analyze the mechanism and involvement of the key factor of metabolism, the enzymes.
			P22CZ7	Human Genetics	CO1: Gain basic knowledge on mendelian principles, Analyse and interpret the characteristics of autosomal dominant and recessive inheritance with examples.
					CO2: Describe the preparation of karyotype and chromosomal aberrations.

			P22CZ7	Human Genetics	CO3: Incorporate the fundamentals of cancer especially in leukemia and bone marrow transplantation.
					CO4: Interprete and evaluate the prenatal and post natal diagnosis.
					CO5: Understand and apply the principles of genetics in crime and law.
			P22CZ8P	Applied Microbiology, Biochemistry and Human Genetics and Proteomics	CO1: Analyse and interpret the quantity of protein, carbohydrate and lipid. Evaluate the quality of protein, carbohydrate and lipid from biological samples
					CO2: Understand the concepts of bacterial enumeration and apply the concepts to test water quality or potability and milk quality. Demonstrate and interpret the bactericidal action of antibiotics by Kirby-Bauer method.
					CO3: Calculate and participate in the preparation of buffer, Molar and Normal solutions; describe the structure of amino acids and gain knowledge on Microbiology instruments.
					CO4: Demonstrate gene frequency pattern. Apply Pedigree chart to evaluate human traits and syndromes
			P22DSZ2A	Genomics and Proteomics	CO1: Gain knowledge about recent developments in 'OMICS' technology
					CO2: Understand various types of genes, their functions and expression pattern in prokaryotes and eukaryotes.
					CO3: Elucidate various separation and expression techniques of protein and their applications in proteomics.
					CO4: Gain knowledge on various gene prediction techniques and protein structure prediction methods and apply them to predict structure of protein
					CO5: Apply and analyse various computational methods in drug designing.
			P22DSZ2B	Computational Biology	CO1: understand descriptive statistical methods effectively.
					CO2: acquire knowledge on the methods of hypothesis testing, statistical inference and designing experiments
					CO3: analyse and interpret the biological data in a statistical perspective correctly and contextually
					CO4: carryout correlation and regression analysis and recognize theoretical distributions
					CO5: apply principles of demonstrate the mastery of concepts of skills for biological data management and analysis
10	PZOE	M.Sc Zoology	P22SEZ1	Climate Change and Human Health	CO1: Define, describe and write about the details of Climate Change, Global warming, variability, natural disasters and IPCC
					CO2: Explain and paraphrase Water and Air quality , pollutants and related disease impact on humans
					CO3: Discuss and summarize Climate change impact on food quality, security and Food borne diseases
					CO4: Include & prepare themselves and prepare the community on the awareness about the Physiological impacts influenced by climate change
					CO5: Correlate, recognize and distinguish mental health related issues impacted by disasters and climate change
			P22CZ9	Immunology	CO1: Acquire knowledge in basic immune system
					CO2: Understand the principles of various immunological techniques and apply them in immunodiagnosis of diseases
					CO3: Develop in depth knowledge on activation of immune system
					CO4: Understand the immune response in major health issues such as transplantation and cancer
					CO5: Analyse the immune reactions against various pathogens, allergens, self antigens and vaccines
			P22CZ10	Developmental Biology	CO1: Demonstrate knowledge of the fundamental concepts in development of an organism.
					CO2: Describe the mechanism of fertilization and its significance
					CO3: Demonstrate an understanding of cleavage and blastulation
					CO4: Acquire knowledge in morphogenetic movements during gastrulation
					CO5: To understand theoretical aspects of organogenesis and the techniques in IVF and birth control measures.
			P22CZ11	Biophysics and Biostatics	CO1: Demonstrate knowledge of the fundamental concepts in Physics and Biology.
					CO2: Describe the principles that govern bio molecular interactions and understand the application of Radio isotopes in Biology
					CO3: Demonstrate an understanding of the central concepts of modern statistical theory
					CO4: Acquire knowledge in data collection and its presentation.
					CO5: Elucidate the results of statistical analysis accurately and effectively; Make appropriate use of statistical software.
			P22CZ12P	Immunology, Developmental Biology Biophysics and Biostatistics Practical	CO1: Carry out immunodiagnostic techniques
					CO2: Demonstrate immunological techniques used in research
					CO3: Carry out mounting of chick embryo
					CO4: Apply statistical techniques in research
					CO5: Acquire practical knowledge on developmental biology and biophysics
			P22DSZ3A	Research Methodology and Bio-techniques	CO1: Understand the basics if research, types and process
					CO2: Elucidate the research problem, design and techniques of literature survey 2 17 K2 CO3: Formulate res
					CO3: Formulate research hypothesis and list out various components of a thesis and also to understand how to apply ethical aspects in writing a thesis
					CO4: Gain knowledge on basic principles of centrifuge and Chromatography and apply them in experimental work
					CO5: Enumerate basic principles of spectrometry and electrophoresis and apply them in experimental work
			P22DSZ3B	Economic Zoology	CO1: gain knowledge on beneficial insects such as silkworm , honey bee and lac insects and their significance in Indian economy
					CO2: understand various methodology used in vermi technology practices and apply them in various fields
					CO3: gain knowledge about various cattle breeds and their diseases
					CO4: understand and apply knowledge about poultry industry and their products
					CO5: to understand about various fishes, fishery industry and their significance
			P22NMZ1	Brain and Human Behaviour	CO1: Acquire knowledge about the structure and functions of brain and describe it with basic understanding
					CO2: Distinguish and explain the types of neurons, neurotransmitters and its functions
					CO3: Understand the process of learning and associate with individuals' behavior patterns
					CO4: Integrate the concepts of thought process and motivation through self-understanding
					CO5: Interpret emotions and relate it with behavior changes, recognize stress and its effect on human body and mind; Practice Stress management
			P22CZ13	Animal Biotechnology	CO1: Acquire knowledge on the tools of genetic engineering
					CO2: Understand the principle and methodology of basic techniques in genetic Engineering
					CO3: Learn advanced techniques in genetic Engineering
					CO4: Apply skills to develop genetically modified organisms
					CO5: Apply skills to develop recombinant vaccines and to assess the biosafety and other regulations of biotechnology
			P22CZ14	Entomology	CO1: Acquire the knowledge about insect classification with examples
					CO2: Compare the morphology of insect organ systems.
					CO3: Understand the physiology of insects in a comparative manner.
					CO4: Identify the insect pests, their control methods and pesticide applications and to develop the skills in rearing beneficial insects.

					CO5: Enhance the productivity of agricultural crops through insect pest management.
			P22CZ815	Biodiversity and Conservation Strategies	CO1: Understand, describe the concepts of biodiversity
					CO2: Outline the sources and values of biodiversity and list down the benefits.
					CO3: Explain and analyze the megadiversity zone in India and discuss the threats.
					CO4: Discuss the methods and types of biodiversity conservation
					CO5: Understand and describe the Biodiversity Act - organizations involved
			P22CZPW	Project Work	
			P22DSZ4A	Forensic Biology	CO1: List & categorize forensic evidences and crime scene identity; analyze and relate socio economic offences to the present societal scenario
					CO2: Classify finger prints, describe post mortem changes, understand and interpret blood group and DNA paternity test
					CO3: Generalize and explain about insects of forensics, venoms and poisons. Discuss and summarize related medico-legal issues
					CO4: Classify narcotic drugs and cosmetics; Associate the symptoms and explain its effects on humans
					CO5: Distinguish and apply information technology and legal aspects related to forensics; gain knowledge about Enforcement agencies
			P22DSZ4B	Animal Behaviour	CO1: Acquire knowledge of fundamental concepts in animal behavior and to know about the pioneers and significance of animal behavior relating inheritance and relationships
					CO2: Explain and integrate thinking skills in communication and ecological aspects of orientation ,habit selection and aggression of Animal behavior
					CO3: Relate habituation, conditioning and reasoning behavior of Animals
					CO4: Understand the proximate control of hormones of animal behavior and to gain depth knowledge in motivation and aggregation of animals
					CO5: To relate theory and practical knowledge , emphasizing animal communication and social behavior to solve problems in society
			P22CF1	Plant Diversity-I Algae, Fungi, Lichens and Bryophytes	CO1: understand the different systems of algal classification and recognizes the habitat of algae.
					CO2: realize the application of algae in human welfare.
					CO3: understand the general features of fungi, its classification and identifies its economic importance.
					CO4: develop an understanding of the role of lichens in the environment
					CO5: analyse the phylogenetic relationship of bryophytes with other higher groups of plant kingdom.
			P22CF2	PLANT DIVERSITY II - PTERIDOPHYTES, GYMNOSPERMS	CO1: relate to the forms they study in theory and lab and hence shall be comfortable in describing and adopting strategies in conserving and managing plant resources.
					CO2: aesthetically connect with the plant group to identify and develop skills in dealing with economically important taxa among this studied plant group subscribing to floristic and horticultural significance
					CO3: visualize and gain holistic knowledge of gymnosperms, especially on anatomical aspects of wood and seed development, and appreciate rationalization of using the resource for their own use and commercial purposes
					CO4: conceive the idea of seeing gymnosperms as dominant elements of biota of the past and capture the inside stories of their survival for analysing factors that had led to their depletion and extinction that they may effectively apply the knowledge in current situation to stem the loss of similar and related elements
					CO5: comprehensively use the knowledge of handling and studying fossils, entrain with cross disciplinary approaches that shall enable them to go for career opportunities in contemporary avenues in connected fields of geology, earth sciences, geography, sociology and anthropology.
			P22CF3	GENETICS AND EVOLUTION	CO1:Point out the rationale behind the study of genetics and understands the heredity of life
					CO2: differentiate between independent assortment and linkage.
					CO3: Explain the sex determination in plants
					CO4: Analyse the cause and effect of mutation
					CO5: Appreciate the gradual change that took place on earth
			P22CF4P	PRACTICAL PAPER I	CO1:analyse ,characterize and identify the different types of Algae
					CO2:understand to differentiate the types of Fungi
					CO3:identify the Lichens.
					CO4:identify Bryophytes, Pteridophytes, Gymnosperms & gain knowledge of the fossil forms.
					CO5:have problem solving ability in genetics and acquire deep understanding of Mendelian genetics and its application
			P22DSF1A	ECOLOGY AND BIODIVERSITY	CO1: Understand the ecology and dynamics of ecosystem elucidate critical connection between living and non living things. Apply knowledge to measure productivity in ecological studies.
					CO2: Understand the ecological principles and their relationship among population and communities.
					CO3:Understand geology, differentiate renewable and non renewable resources, assess the importance of forest ,changing climate and loss of biodiversity.
					CO4:Develop knowledge to use GIS and GPS to study biodiversity in relation to measurements, understanding the value of biodiversity
					CO5:Understand the importance of phytogeographical relationship origin and development of species and different types of vegetation in India.
			P22DSF1B	SEED TECHNOLOGY	CO1: To understand the morphology, characters and structure of seeds
					CO2: To learn the concepts related to seed germination studies
					CO3: To be aware of the process involved in seed processing and seed quality techniques.
					CO4: To acquire the knowledge on seed certification practices
					CO5: To develop the entrepreneurial skills in seed storage and marketing
			P22SEF1	PHYTOCHEMISTRY	CO1: understand the importance, structure and types of common phytochemicals
					CO2: Comprehend the properties and functions of phytoconstituents
					CO3: Indentify the useful plant parts and their therapeutic uses
					CO4: Analysis the types of solvents and method used in the preparation crude drugs
					CO5: Evaluate the active components of plant constituents through qualitative and qualitative analysis
			P22CF5	PLANT ANATOMY AND EMBRYOLOGY OF ANGIOSPERMS	CO1: acquire a holistic understanding of plant development that the learner will have skills to experimentally deal with plants and involve in entrepreneurial ventures
					CO2: understand and appreciate the nuances in internal organization of plant organs that they shall develop perspective to experimentally manipulate growth
					CO3: gain knowledge to describe and understand microsporogenesis, megasporogenesis and syngamy, and apply the learning to pursue experiments in plant breeding and pomology with a conceptual clarity
					CO4: understand concealed events like embryogenesis and endoderm formation and in the process hone skills in microscopy and plant microtechnique to turn into a competent technician or an independent researcher
					CO5: interpret the technical details they had learnt in the course to skilfully manipulate the developmental process for seed and fruit production and preservation
			P22CF6	CELL AND MOLECULAR BIOLOGY	CO1: Understand and distinguishes various functions of the cell organelles.
					CO2: Gain knowledge about chromosomal functions, its replication and its role in heredity.
					CO3: Understand and pictures the process of transcription in prokaryotes.
					CO4: Differentiate prokaryotic and eukaryotic transcription and recalls the enzymes involved in transcription.
					CO5: Analyze the different steps involved in translation and the organelles involved in the process.
			P22CF7	MICROBIOLOGY AND PLANT PATHOLOGY	CO1: Understand the conceptual frame work of operations research
					CO1: understand the general characters of microbes and its ultrastructure
					CO2: understand the bacterial culture techniques and the economic importance
					CO3: understand the microbes causing food spoilage and water spoilage
					CO4: know the defense mechanism performed by plants and classifies the plant diseases
					CO5: identify the plant diseases and understands remedial measures to prevent the disease
			P22CF8P	PRACTICAL PAPER II	1. Analyse, characterize and identify Dicot and Monocot primary and secondary structures.
					2. Understand to differentiate the stages of embryo.
					3. Identify the cell division stages.
					4. handle microbiological techniques
					5. Develop the ability to analyze plant diseases and identify remedial measures.
			P22DSF2A	HORTICULTURE AND PLANT BREEDING	CO1: Identify various plants and tools used in horticulture and comprehend vegetative propagation techniques
					CO2: Understand the Greenhouse farming methods and indoor and outdoor gardening.
					CO3: Appreciate the art of flower arrangement and cultivation of flower, vegetables and fruit crops.
					CO4: To Understand the concepts of plant breeding and crop improvement.
					CO5: Develop knowledge on Hybridization techniques Heterosis and Mutation breeding.

11	PBOE	M.Sc Botany	P22DSF2B	ENVIRONMENTAL BIORESOURCE MANAGEMENT	CO1: To understand the basic concepts of ecosystem
					CO2: To preserve the depleting bioresources and prepare action plans to conserve the bioresources.
					CO3: To handle issues that are considered threat to the environment
					CO4: To understand the values and uses of biodiversity
					CO5: Involve in focussed efforts directed in saving nature and biodiversity.
			P22SEF2	TECHNIQUES IN MUSHROOM CULTIVATION	CO1: To understand the basic knowledge of edible and non edible mushroom
					CO2: Learns the techniques of mushroom cultivation
					CO3: Understand the raw materials used for a growing mushroom
					CO4: Enable the student know the cultivation of different mushroom
					CO5: Understand the harvesting and storage of mushroom
			P22CF9	TAXONOMY OF ANGIOSPERMS	CO1:Define the term taxonomy and understands the history of taxonomy.
					CO2: know about the various taxonomic resources and Develops an aesthetic sense to appreciate the various botanical gardens (Royal botanical garden Kew)
					CO3: appreciate how the various branches of botany help in solving taxonomical problems
					CO4: Correlate the evolutionary relationship between various groups of plants
					CO5: Develop practical knowledge about phytochemical analysis and economically important plants
			P22CF10	PLANT PHYSIOLOGY	CO1:impart an insight into the various water relationship in plants.
					CO2: Take students to higher levels of learning about the mineral nutrition in plants and mechanism of nitrogen fixation in plants.
					CO3: Understand the mechanism of photosynthetic process in plants and various metabolic activities in Plants.
					CO4: Acquire basic knowledge about growth and respiratory pathways in plants
					CO5: Gain knowledge in biochemical activities of plants.
			P22CF11	BIOINSTRUMENTATION AND BIOSTATISTICS	CO1: Understand and analyze the principle, operation and applications of various instrumentation techniques used in the field of biological research.
					CO2: Differentiate the principle, instrumentation and working mechanism of chromatographic and spectroscopic instruments
					CO3: Elucidate the various separation techniques, its instrumentation and applications in biology.
					CO4: Describe the principle and working mechanism of various radiation detectors and gas analyzers.
					CO5: Apply statistical tools and techniques to biological data for testing different hypothesis in their research works and understand the technical experimental statistics.
			P22CF12P	PRACTICAL PAPER III	CO1: understand technical description of plants and construct and use keys for identification of the respective plant groups.
					CO2: identify common plant families based on the morphological features.
					CO3: independently work on various instruments by understanding its principle and apply statistical tools in their research.
					CO4: analyze biochemical and physiological phenomenon and carry out experiments in biological research pertaining to physiology.
					CO5: Impart skill to students to be able to work in R & D and quality control laboratories and to to use modern instrumentation and classical techniques.
			P22DSF3A	PLANT TISSUE CULTURE	CO1: Understand the basic knowledge about tissue culture techniques, medium, sterilization and able to analyse the requisite for tissue culture Laboratory organization.
					CO2: isolate single cells from plant tissue and and gain knowledge to grow single cells by various techniques based on the requirement.
					CO3: Understand the fundamentals of totipotency plant tissue culture techniques and apply the technique of micropropagation such as somatic embryogenesis, organogenesis and the production of synthetic seeds and its significance.
					CO4: gain theoretical and practical knowledge about in vitro production of plants.
					CO5: design and develop the protocols for enhanced production of bioactive compounds in cell suspension culture.
			P22DSF3B	RESEARCH METHODOLOGY	CO1: Training the students to participate in active research activity
					CO2: Acquire knowledge in research and learning to write thesis by their own
					CO3: Creating novel ideas and techniques in biology
					CO4: Training the students in academic and professional levels
					CO5: Defining and formulating the research problem
			P22NMF1	GARDENING	CO1: understand the concept of gardening, knowledge ,different features and techniques of gardening (types, methods and tools)
					CO2: perceive the gardening skills , as well as personal, social and work-related skills
					CO3: understand the various methods of propagation of plants and appreciates the development of self confidence
					CO4: develop a keen understanding of home garden , growing fresh and vegetables without use of any pesticide.
					CO5: appreciate the importance of embarking on employment, create awareness to the society about the role of organic farming
			P22CF13	PLANT BIOTECHNOLOGY AND BIOINFORMATICS	CO1: understand different tools in biotechnology.
					CO2: know various types of vector used during gene transfer in plants.
					CO3: Understand the processes involved in plant genome organization.
					CO4: Understand Gene cloning in eukaryotes and cloning strategies.
					CO5: Understand and explain about databases and bioinformatics tools.
			P22CF14	BIOCHEMISTRY AND BIOPHYSICS	CO1: Mention the five classes of polymeric biomolecules and their building blocks, able to differentiate various kinds of bonds.
					CO2: List and name the 20 amino acids that commonly occur in proteins and classify them. Describe the various bonds and forces that contribute to the conformation of proteins.
					CO3: Explain the structure of lipids and how they are metabolized.
					CO4: Explain Michaelis-Menton kinetics and be able to apply the Michaelis-Menton equation to calculate velocity, maximum velocity (Vmax) and the Michaelis-Menton constant Km.
					UNIT 5 CO5: Define and explain briefly the role of entropy, and enthalpy in biochemical reactions demonstrate knowledge and understanding of the molecular machinery of living cells.
			P22CF15P	PRACTICAL PAPER IV	CO1: Analyze structural-functional relationships of tissue culture lab techniques that are basic fundamentals to biotechnology.
					CO2: Develop analytical and critical thinking skills in biological phenomena through scientific methods.
					CO3: Acquire advanced knowledge in biotechnological experiments.
					CO4: Use current biochemical and molecular techniques to plan and carry out experiments.
					CO5: Understand quantification and estimation of carbohydrates, Proteins and Fats.
			P22DSF4A	APPLIED BOTANY	CO1: Learn the scope and importance of various biofertilizers.
					CO2: Recognise the characteristics, identification, cultural methods and maintenance of Rhizobium, Azospirillum, Azotobacter and Phosphobacter.
					CO3: Know about Mycorrhiza – VAM association, types, occurrence, collection, isolation and inoculum production.
					CO4: Gain knowledge about the nutritional, medicinal and cultivation aspects of edible mushrooms.
					CO5: Get acquainted with method of large scale production of biopesticides and its importance.
			P22CFPW	PROJECT	
			P22CG1	Geomorphology	CO1:Understand the basic concept and development of geomorphology.
					CO2: Acquire knowledge about geomorphic process.
					CO3: Explains about Gradational process.
					CO4: Analyse the concept of normal cycle of erosion and development of slopes
					CO5: Familiar with climatic geomorphology and applied geomorphology
			P22CG2	Climatology	CO1: Understand the nature and scope of climatology, know the mechanism of monsoon and climatic classification.
					CO2: Analyze the nature and pressure of the atmosphere.
					CO3: Understand the temperature changes and precipitation.
					CO4: Acquire knowledge about hazards and atmospheric disturbances
					CO5: Explain about the climatic standard classification and weather observation , forecasting.
			P22CG3	Environmental Studies	C01: Understand the nature & scope: To interact between role of geography with ecological factors and human begins.
					CO2: Know the structure and functioning of Eco System: method of relating nutrient cycles and natural events.
					CO3: Observe the human interference through eco system and geographical distribution
					CO4: Identify the relationship between geographical location and environment.
					CO5: Evaluate the interaction between environment and man.
			P22CG4P	Practical - Representation of Terrain and Climatic Data	C01: Understand method of representation of relief. Acquire knowledge of preparation of drawing of slope maps.
					CO2: Understand different methods of slope analysis
					CO3 Demarcation of drainage basin of watershed estimation of basin area. Drainage frequency, bifurcation ratio.
					CO4: Skill of drawing of map, graphs, diagrams scale

					CO4: Skill of drawing of map, grapes, diagrams scale.
12	PGEE	M.Sc Geography	P22DSG1A	Disaster Studies	C01: Knowledge about concepts and terminologies. Disaster, hazard, Catastohes, types Impacts - Resilience.
					CO2: Understand Natural disasters. Geophysical, Meteorological and Biological disasters.
					CO3: Anthropogenic Disasters: Atmospheric Disasters, Industrial Disasters, Biological Disasters- conflicts, terrorist, transport accidents.
					CO4: Knowledge about the Disaster Risk Management, mitigation and management.
					CO5: Examine the awareness about the disaster management in India. Disaster Management Act - Policy and Guidelines,
			P22DSG1B	Social Geography	C01: Know the nature and development of social geography realm of social sciences..
					CO2:Elements of Social Geography: Ethnicity, Tribe, Dialect, Language, Religion and caste
					CO3:Understand the space and society- structure and process to social theory; power relations and space.
					CO4:Explain the social well-beings and human development
					CO5:Understand the public policy and social planning in India
			P22SEG1	Quantitative Techniques in Geography	C01: Knowledge about Geography and statistics, significance of statistics in geography, types of data and measurements.
					CO2: Understand the measures of Central Tendency, dispersion
					CO3: To know to construct and understand the meaning of scatter diagram of Spearman's Rank difference, and Karl Pearson's correlation coefficient.
					CO4: Know about Regression analysis
					CO5: Examine the Hypothesis Testing. Understand the needs of Hypotheis and its types. Can understand Chi-square test, t-test, and Analysis of Variance.
			P22CG5	Geographical Thought	C01: acquire knowledge about different school of thought
					CO2: Understand the traditions in geography
					CO3: analyse explanation description and regional concepts in geography
					CO4: know the inter disciplinary trends in geography
					CO5: explain the recent trends in geographical studies
			P22CG6	Agricultural Geography	C01: understand nature, scope and significance of agricultural geography
					CO2: acquire knowledge about agricultural determinants modernization of agriculture- green revolution
					CO3: know the significance von thunen's theory and land use and land capability classification
					CO4: evaluate the agricultural productivity
					CO5: understand the regionalization of agriculture
			P22CG7	Advanced Cartography	C01: Nature & scope: Thematic cartography is the study of map making with ancient to modern period
					CO2: Symbolization: Examine the coding of map features to communicate meaning
					CO3: compilation & Generalization of maps: To understand the imperceptibility of consistency>
					CO4: Survey instruments: to identify the distance/ height with faster and precise methods.
					CO5: Mapping Techniques: To recognize the mapping functions and organization through computer techniques.
13	PHSE 1	M.Sc HOME SCIENCE	P22CN1	APPLIED PHYSIOLOGY	CO1: Connect the functions of blood components with disorders of blood and immune system
					CO2: Differentiate the phases of cardiac cycle and demonstrate measurement of blood pressure.
					CO3: Explain mechanism of respiration, lung capacities, digestive and absorption of food
					CO4: Illustrate structure and functions of nervous and excretory systems.
					CO5: Integrate mechanism of hormonal secretion, action and regulation.
					CO6: Describe role of hormones in fertilization
			P22CN2	ADVANCED FOOD SCIENCE	CO1: Analyze the constituents of foods and their physical properties
					CO2: Apply the classification and properties of carbohydrates in food products
					CO3: Familiarize with need, types and scope of novel proteins and protein substitutes.
					CO4: Discuss the role of enzymes in food fermentation.
					CO5: Examine the quality of food fat based on functional properties
					CO6: Compare food colours and flavours and their safety limits.
			P22CN3	FOOD SAFETY AND QUALITY CONTROL	CO1: Identify types of food spoilage and the need for hygiene in food handling
					CO2: Discuss the implications of food adulterants and additives on consumers' health
					CO3: Demonstrate skill in food quality testing career for further career prospects in food industry
					CO4: Describe the process of food quality assurance
					CO5: Apply the guidelines of food laws and standards to ensure food quality in food industry
					CO6: Interpret the principles of food safety and quality to contribute to the best practices in food
			P22CN4P	FOOD SCIENCE AND QUALITY CONTROL PRACTICAL	CO1: Perform the tests for identifying food adulterants
					CO2: Evaluate quality of milk, fats and oils based on its physical components
					CO3: Determine the quality check for edible oils and fats
					CO4: Apply the study of egg white stability in preparations of food emulsions
					CO5: Perform the sensory evaluation tests for different foods
					CO6: Integrate the evaluation techniques in food quality assessment
			P22DSN1A	FAMILY RESOURCE MANAGEMENT CONCEPTS AND CONTEXTS	CO1: Associate human values in achieving family goals.
					CO2: Demonstrate abilities in home management.
					CO3: Analyze effective usage of family resources.
					CO4: Develop skills in personal time and money management.
					CO5: Integrate ergonomics in home and work environment
			P22DSN1B	FOOD PROCESSING AND PACKAGING	CO1:Summarize the scope of food processing, preservation and packaging in India
					CO2: Combine methods of processing and preservation for different food products
					CO3: Apply principles of food packaging to selection of packaging materials for different foods
					CO4: Differentiate packaging materials and their finishes
					CO5:Discuss the recent trends in food packaging systems applied to perishable foods
					CO6:Interpret the contribution of food preservation sector towards nation's economy
			P22SEN1	HOME SCIENCE FOR COMPETITIVE EXAMINATIONS	CO1: State the dynamics of family relationships and differentiate the theories of human development
					CO2: Enumerate the functions and methodologies of resource management, interior decoration and work place design
					CO3: Classify the types of fibre, yam, weave and design apparel for different age groups
					CO4: Identify the types of communication and ICT for extension activities
					CO5: Apply the good safety regulations and standards in food safety management
			P22CN5	PRINCIPLES OF NUTRITION	CO1: Interpret RDA to meet nutritional requirements for Indians and determine energy requirements for all age groups based on BMR and activity levels
					CO2: Distinguish carbohydrates and dietary fibre; identify their role in promoting health
					CO3: Evaluate protein quality and protein deficiency
					CO4: Compare dietary fatty acids based on composition transport and absorption
					CO5:Analyze factors affecting bioavailability of minerals and vitamins in foods
			P22CN6	APPLIED HUMAN NUTRITION	CO1: Associate the nutritional needs during exercise and physical activity of different sports activities.
					CO2: Connect performance with nutritional needs before, during and after different sports activities.
					CO3: Indicate physiological changes and nutrient requirements during space activities
					CO4: Relate physiological and psychological changes to nutritional needs during sea travel.
					CO5: Integrate nutrition support system with relief and rehabilitation in disaster management
			P22CN7	BIOCHEMICAL CHANGES IN DISEASES	CO1: Examine the immunological and haematological functions, alterations and metabolic adaptations
					CO2: Describe the implications of alterations in blood components and circulatory system
					CO3: Identify the manifestations of gastrointestinal dysfunction and suggest diet therapy.
					CO4: Relate disorders of nutrient metabolism to general well-being.
					CO5: Suggest dietary management of various metabolic disorders
			P22CN8P	NUTRIENT ANALYSIS PRACTICAL	CO1: Understand the principle behind the nutrient analytical procedures
					CO2: Use the various equipments and analytical instruments for determining nutrient content
					CO3: Determine the nutrient content of foods using specific instruments
					CO4: Calculate the quantity of nutrients for different quantity of foods
					CO5: Apply the acquired analytical skills in handling instruments for career as food analysts
			P22DSN2A	TRENDS AND ISSUES IN HUMAN DEVELOPMENT	CO1: Apply the acquired knowledge on ante, pre and postnatal care to real life situations
					CO2: Connect the milestones of growth and developmental tasks with child rearing practices.
					CO3: Integrate the intricacies of early childhood development and behaviour with parenting techniques.
					CO4: Promote positive habit formation to solve behaviour problems in late childhood.
					CO5: Suggest measures to promote inclusive environment for pre-school education
			P22DSN2B	DIABETES CARE AND EDUCATION	CO1: Identify diabetes as a rising public health concern in national and global scenario
					CO2: Demonstrate diagnostic and monitoring procedures for diabetes care.
					CO3: Familiarize with classic features and screening methods of diabetic emergencies.
					CO4: Discuss the criteria for screening and diagnosis of chronic complications of diabetes.
					CO5: Promote adherence to drug, diet and physical activity in diabetes.
			P22SEN2	EARLY CHILDHOOD CARE AND EDUCATION	CO1: Explain the importance of early childhood years and significance of intervention programs for early childhood development
					CO2: Describe the historical developments - global and Indian including the current programs and policies in ECCE.
					CO3: Analyze curriculum models and pedagogical approaches in early childhood education.
					CO4: Identify various indigenous (Indian) models of Early Childhood Education and apply it to understand the current early childhood research, theoretical trends and issues.

					CO5: Create developmentally appropriate programs for young children.
			P22CN9	DIET IN METABOLIC DISEASES	CO1: Explore new trends in dietary management of weight imbalances.
					CO2: Integrate meal planning techniques for nutritional management of diabetes and its complications
					CO3: Integrate the cardiac, renal and liver functional tests with acute and chronic complications
					CO4: Distinguish the clinical aberrations and medical nutritional management of various organ systems
					CO5: Familiarize with influences of clinical nutrition on inherited metabolic disorders.
			P22CN10	CLINICAL NUTRITION AND DIETETICS	CO1: Assess nutritional status to identify high risk individuals in critical care.
					CO2: Develop and implement feeding substrates for special feeding.
					CO3: Discern the role of nutraceuticals in cancer and immune deficiency disorders.
					CO4: Assess and recommend nutritional plans in pediatrics and geriatrics.
					CO5: Distinguish the etiology and clinical findings of GI diseases and suggest suitable dietary modificatiomodifications
			P22CN11	RESEARCH METHODOLOGY AND STATISTICS	CO1: Define the objectives of research and identify research problem
					CO2: Apply sampling techniques in data collection
					CO3: Formulate research hypothesis, design and conceptual framework
					CO4: Differentiate variable types and statistical measures
					CO5: Demonstrate application of digital tools in statistical analysis
			P22CN12P	CLINICAL NUTRITION, DIETETICS PRACTICAL & INTERNSHIP	CO1: Standardize food measures and practice use of exchange lists in planning diets.
					CO2: Formulate novel modified diets for surgical conditions, food intolerance and special needs
					CO3: Demonstrate applications of meal planning tools for dietary management of chronic disordedisorders
					CO4: Utilize nutritional screening tools and assessment techniques in critical care.
					CO5: Perform case studies of specific disease conditions.
			P22DSN3A	TRENDS IN EXTENSION EDUCATION AND COMMUNICATION	CO1: Apply the principles and philosophies of extension education to society.
					CO2: Exhibit the qualities and responsibilities of women extension workers.
					CO3: Display the individual, group and mass approaches for extension and communication
					CO4: Plan and execute community nutrition programmes for extension activities.
					CO5: Compare the objectives and implementation of community development programmes in India
			P22DSN3B	PUBLIC HEALTH & EPIDEMIOLOGY	CO1: Interpret indicators of health in relation to the health situation of India.
					CO2: Identify nutritionally vulnerable groups and the needs of special populations.
					CO3:Describe the significance of vital statistics in public health epidemiology
					CO4: Promote lifestyle changes to present chronic diseases.
					CO5: Justify the significance of immunization for public health.
			P22NMN1	NUTRITION FOR HEALTH AND FITNESS	CO1: Identify the role of nutrition in health and fitness.
					CO2: Apply nutrition management for exercise and fitness.
					CO3: Assess the role of nutritional supplements for specific sports activities.
					CO4: Plan and promote nutrition and exercise regimen for all age groups.
					CO5:Suggest self-help plans for stress management
			P22CN13	INSTITUTIONAL FOOD ADMINISTRATION	CO1: Differentiate food service institutions based on the objectives and customers.
					CO2: Integrate management tools for quality assurance in food service.
					CO3: Apply the acquired skills in handling food service equipment and procedures.
					CO4: Plan layout of food service establishments.
					CO5: Manage human resources within a food service organisation.
			P22CN14	FOOD PRODUCT DEVELOPMENT AND MARKETING	CO1: Generate ideas to formulate novel food product development.
					CO2: Perform quality tests to conform to food laws and standards.
					CO3: Determine costing and pricing of the developed product.
					CO4: Judge packaging materials and distribution methods suitable for the developed product.
					CO5: Explore the avenues of entrepreneurship and financial support system.
			P22CN15P	FOOD PRODUCT DEVELOPMENT AND MARKETING PRACTICAL	CO1: Understand the policies and regulations for food product development, Conduct market survey to Identify consumer needs for novel food producproducts
					CO2: State the scope of a new food product which can address a problem statement
					CO3: Generate ideas to meet the needs of the consumer related to food products
					CO4: Formulate the steps in preparing, budgeting, pricing for the new food product
					CO5: Perform feasibility tests to check the versatility of the new food product
			P22DSN4A	TEXTILES AND CLOTHING	CO1: Classify textile fibres based on origin, properties and uses.
					CO2: Familiarize with spinning and weaving.
					CO3: Identify fabric processing and finishing methods.
					CO4: Exhibit skills in identification, selection and care of clothing for different age groups.
					CO5: Choose appropriate methods of dyeing and printing of textiles and clothing.
			P22DSN4B	GENDER STUDIES	CO1: Interpret factors influencing sex role development in India with gender concepts.
					CO2: Explore the history of women's status in the post – independence era.
					CO3: Collect and analyse the role of women in different spheres of life.
					CO4: Integrate the Government policy implications to women's issues.
					CO5: Apply women's rights and laws to women's issues.
			P22CS1	Advanced JAVA Programming	CO1: Define the Applet fundamentals, GUI applications and AWT components.
					CO2: Discuss about Networking in java and Java database connectivity
					CO3: What do you mean by Servlets and define the purpose.
					CO4: Outline the concepts JSP and HTTP.
					CO5: Develop the Web programming on client side and serverside.
			P22CS2P	Advanced JAVA Programming	CO1: Define the Applet fundamentals, GUI applications and AWT components.
					CO2: Discuss about Networking in java and Java database connectivity
					CO3: Understand the concept Servlets.
					CO4: Understand the concepts JSP and HTTP.
					CO5: Discuss about the Web programming on client side and serverside.
			P22CS3	Data Structures and Algorithms	CO1: Explain the dynamic structures – trees and graphs and Outline the application of these structures in finding simplified solutions
					CO2: Relate and Recall hash and priority queues and its application
					CO3: Classify binary search tree, balanced tree and multi-way indexed tree
					CO4: Explain dynamic programming and traversal techniques of trees and graphs
					CO5: Apply and solve problems using backtracking and branch-and-bound technique.
			P22CS4P	Data Structures and Algorithms	CO1: Define algorithm and describes a specific algorithmic approach and apply it for solving common sorting and searching techniques.
					CO2: Describe simple and common data structures – array and list, stack and queue. Discuss the application of these data structures in solving problems.
					CO3: Describe the different types of linked list and its application
					CO4: Describe the advanced data structure – binary tree, its representation and discuss the application.
					CO5: Describe graph data structure and discuss its application.
			P22DSS1A	Discrete Mathematical Structures	CO1:Impart knowledge on mathematical logic and theory of inference
					CO2: Understand the concept of sets, relations, functions and mapping.
					CO3: Understand the concepts of Automata Theory, Regular expressions, NFA and Turing Machine
					CO4: Understand the concept of Probability theory.
					CO5: Understand the graph theory concepts and applications in computer science.
			P22DSS1B	Object Oriented Analysis and Design	CO1: Define the basics of Object Oriented concepts
					CO2: Show the functioning methodologies provided by Booch and Jacobson; Introduction on unified approach.
					CO3:Illustration of UML diagrams applicable to various phases of software development.
					CO4: Demonstrate on Relationship between various objects in the application and various ways of their reorientations
					CO5: Utilize knowledge on packaging classes, distributing them among layers. Introducing the object-oriented databases.
			P22DSS1C	Software Architecture	CO1: Define the Software Architecture and Software Architecture Reference Models
					CO2: List the Functionalities and Create a New Software Architectural Patterns.
					CO3: Explain the Different Life Cycle and Create a Skeleton System

14	PCSE	M.SC Computer science			CO4: Experiment the Software Architecture with Different Analysis Method.
					CO5: Model the Reusability of Software architectures with Different Case Studies.
			P22SES1	Networking Protocols	CO1: Define the basic concepts of Internet architecture services and addressing scheme.
					CO2: Describe the layering principle and justify the need for multiple protocols.
					CO3: Explain the purpose of internet protocol and its services.
					CO4: Explain the UDP protocol functions, error control, flow control and congestion control.
					CO5: Explain the connection oriented service with TCP and apply and apply application layer protocol for designing internet applications.
			P22CS5	Python Programming	CO1: Define the basic concepts of python programming, Functions and control structures.
					CO2: How to use Strings, Mutable and immutable objects.
					CO3: Explain Recursion and Files and exception.
					CO4: Explain classes, objects, polymorphism, encapsulation and inheritance.
					CO5: Apply python for collecting information from twitter, sharing data using sockets, managing database, and mobile application for android.
			P22CS6P	Python Lab	Demonstrate the understanding of syntax and semantics of PYTHON language
					Identify the problem and solve using PYTHON programming techniques.
					Identify suitable programming constructs for problem solving.
					Analyze various concepts of PYTHON language to solve the problem in an efficient way.
					Develop a PYTHON program for a given problem and test for its correctness
			P22CS7	Operating System Desingns Principles	CO1: Define the computer organization, operating system function and relate the relation between underlying hardware and operating system software. Discuss the evolution of various types of operating system
					CO2: Outline the process management, process synchronization, unicore, multicore processors and microkernel
					CO3: What do you mean by deadlock and how to memory managemen
					CO4: Explain processor and process scheduling algorithms. Select appropriate algorithm in different types of operating system
					CO5: Apply I/O management and disk scheduling algorithms. List file system organization and security features of Linux and Windows
			P22CS8P	Operating System	CO1:Impart knowledge on operating systems, its types and process scheduling
					CO2: Understand the CPU scheduling concepts and related algorithms
					CO3:Analyse the impact of deadlock and mechanisms to handle them
					CO4: Discuss the memory management
					CO5:Explain file system management
			P22DSS2A	Compiler Design	CO1: Define the basics of Compiler Structure
					CO2: Illustrate the functioning of Lexical Analyzer and implementation using Finite Automata.
					CO3: Identify the role of Context Free Grammar and Parsing Techniques
					CO4: Experiment the working methodology of LR Parsers and Representation of Intermediate Code Generation Phase
					CO5: What are all the Data Structures and various code optimization are used by compilers
			P22DSS2B	Distributed Computing	CO1: Define the introductory concepts of Distributed Systems, Types of Communication
					CO2: Explain the Types of Processes and entities
					CO3: What do you mean by Synchronization and Consultancy of Distributed Systems
					CO4: Identify Fault Tolerance and Security Issues of Distributed Systems
					CO5: Summarize Distributed File System and Case Study
			P22DSS2C	Cloud Computing	CO1: Define the Cloud Architecture and Model.
					CO2: Recall the basics and List the applications of Virtualization.
					CO3: Explain the different Cloud Infrastructure.
					CO4: Outline different programming model.
					CO5: Identiy the Cloud Security Challenges and Risks.
			P22SES2	Network Security	CO1: Define the various network security concepts.
					CO2: Describe the functions of DES.
					CO3: Understand the Advanced encryption standard principles.
					CO4: Explain the Asymmetric key cryptography and message authentication.
					CO5: Explain the cryptographic hash functions and digital signature
			P22CS9	Degital Image Processing	CO1: To impart the knowledge about image processing techniques and understand the concept of image analysis, storage formats of image
					CO2: To analyze the attitude of image processing arithmetic operations and image transformation techniques.
					CO3: Discuss about the image need for image enhancement and use of image restoration.
					CO4: To understand the concept of image compression models , measures and algorithms.
					CO5: Understand the role of image segmentation , various color models and color image transformation
			P22CS10P	Image Processing	CO1: To understand the concept of image Processing and their fundamentals
					CO2: To analyze the concept of image acquisition process
					CO3: Analyze the working methodology of Arithmetic operations on image
					CO4: Discuss about the need for image transformation
					CO5: Describe the concept of image enhancement
			P22CS11	Soft Computing	CO1:Introduce the basic concepts and techniques of Soft Computing
					CO2:Differentiate Biological and Artificial Neural Network and Explain the types of Neural Networks
					CO3:Analyze various fuzzy models in developing fuzzy inference systems to be appropriate with specific real time problems
					CO4:Use genetic algorithms to combinatorial optimization problems
					CO5:Discuss the Optimization techniques Swam Intelligence and Ant colony optimization
			P22CS12P	Soft Computing	
			P22DSS3A	Internet of Things	CO1: Discuss about Design of IoT, deployment templates and Domain specific IoT.
					CO2: Analyze IoT , M2M and SDN and NFV for IoT.
					CO3: Understand the IoT platform design methodology and logical design using python.
					CO4: Understand IoT physical devices and physical servers.
					CO5: Apply IOT Design in various domains and Data analytics for IoT.
			P22DSS3B	Wireless sensor Networks	CO1: Discuss about Networked wireless sensor devices, design challenges and topology
					CO2: Analyze the Localization, synchronization issues and approaches
					CO3: Understand the wireless characteristics, MAC protocols and contention free protocols
					CO4: Construct topology for connectivity, coverage and routing techniques.
					CO5: Discuss about the data centric routing and Reliability and congestion control
			P22DSS3C	Mobile Computing	CO1: Explain the concepts of communication technologies, network architecture in general and wireless networking technology in particular
					CO2: Describe the mobile computing architecture and applications. Describe the wireless technology standards and services.- GSM, GPRS, UMTS
					CO3: Analyze the mobile application related protocols of IEEE, MAC, Mobile IP and transport layer
					CO4: Describe the concept of Mobile Ad-hoc network and wireless sensor network

					CO5: Understand the Wireless Transport Layer functions and Wireless Application Protocols.
			P22NMS1	Biometrics	CO1: Discuss the basics of Biometrics , methods and Benefits
					CO2: Analyze the functioning of various metrics
					CO3: Understanding the various types of scan , merit and demerits
					CO4: Analyze the facial scan methods
					CO5: Discuss the iris scan and working methodology
			P22CS13	Big Data Analytics	CO1: To Discuss about the sources and impact of Data Explosion, need of Big Data & Technology and Outline the Classification algorithms, Regression techniques and Domain specific analytic techniques. Also associate Analytic with agricultural field and marketing area.
					CO2: To explain the Big Data Back bone systems and emergence of NOSQL
					CO3: To impart knowledge on issues on High Dimensional Data and Reduction Techniques. To describe the need of visualization, properties and techniques
					CO4: To demonstrate the statistical package R and its support on data analytics.
					CO5: To Demonstrate the need of MongoDB and its support on Big Data platform. To illustrate the interfacing mechanism of MongoDB with Statistical applications through interfacing techniques of R
			P22CS14	Data Mining and warehousing	CO1: Describe the introductory concepts, issues and Types of attributes of Data Mining
					CO2: Explain the methods of Preprocessing, Data Cleaning and implementation of Data Warehouse
					CO3: Demonstrate the methods of Mining Frequent Patterns, Associations and Correlations
					CO4: Design and evaluate Classification algorithms.
					CO5: Summarize Cluster Analysis and categorize the Cluster Methods.
			P22CS15P	Data Analytics With R and MongoDB & Technical Documentation Lab	
			P22CSPW	Project	
			P22DSS4A	Artificial Intelligence and Expert Systems	CO1: Understand the problem domain, problem formulation and introducing intelligent agents
					CO2: Analyze the functioning of various searching methodologies in AI
					CO3: Impart knowledge on various reasoning methodologies
					CO4: Analyze the uncertain knowledge and ways to handling them
					CO5: Impart knowledge on learning; To illustrate expert systems, its components and working methodology.
			P22DSS4B	Information Retrieval	CO1: Understand the basics of Information Retrieval System.
					CO2: Analyze the challenges such as indexing, scoring and ranking in Information Retrieval system.
					CO3: Discuss about various Classification algorithms for Information Retrieval Process (Eg. Naïve Bayes Algorithm, K-Nearest Neighbour).
					CO4: Understand the purpose of Support vector machines and machine learning on documents and Flat Clustering techniques for Information Retrieval.
					CO5: Discuss about various Clustering techniques used for Information Retrieval Process.
			P22DSS4C	Advanced Software Engineering	CO1: Define the basics of software engineering and show the organizational and development process
					CO2: Explain Structuring Information and validation
					CO3: Classify the Cost Estimation and Project Scheduling
					CO4: List various software design methodology and Illustrate
					CO5: Make use of various Testing approaches , verification and validation techniques
			P22CC1	Mathematical Foundations of Computer Science	CO1: Logical operations and predicate calculus needed for computing skill.
					CO2: Basic knowledge set theory, functions and relations concepts needed for designing and solving problems.
					CO3: Design and solve Boolean functions, induction principles for defined problems.
					CO4: Apply the acquired knowledge of lattices in the area of designing.
					CO5: Design Apply the acquired knowledge of finite automata theory and to design discrete problems to solve by computers.
			P22CC2	OPERATING SYSTEMS	CO1: Implement the algorithms in process management and solving the issues of IPC.
					CO2: Able to demonstrate the mapping between the physical memory and virtual memory.
					CO3: Able to understand file handling concepts in OS perspective
					CO4: Able to perform the services with the recent OS.
					CO5: Understand the basic structure used in the current operating
			P22CC3	C++ AND DATA STRUCTURES	CO1: Able to understand the concepts of data types, data structures and linear structures.
					CO2: Able to apply the OOPs concepts of Inheritance and over loading
					CO3: Application of arrays in list and queue structure
					CO4: To design and implement simple and advanced data structure concepts in C++.
					CO5: to design a search application using data structures
			P22DSC1A	OBJECT ORIENTED ANALYSIS AND DESIGN	CO1: Able to understand the object oriented concepts and to apply object oriented life cycle model for a project.
					CO2: Able to design static and dynamic models using UML diagrams.
					CO3: Able to perform object oriented analysis to identify the objects from the problemSpecification.
					CO4: Able to identify and refine the attributes and methods for designing the object oriented system
					CO5:Able to learn the open source CASE tools and to apply them in various domains.
			P22DSC1B	MANAGEMENT INFORMATION SYSTEMS	CO1: Understand the leadership role of Management Information Systems in achieving business competitive advantage through informed decision making.
					CO2: Analyze and synthesize business information and systems to facilitate evaluation of strategic alternatives
					CO3: Effectively communicate strategic alternatives to facilitate decision making.
					CO4: Able to manage the Database design
					CO5: Able to develop Client – Server programming application basics
			:P22DSC1C	SOFT SKILLS	CO1: Resilience – learning to keep going when things don't go according to plan, coping with the unfamiliar, managing disappointment and dealing with conflict.
					CO2: time and resource management, conflict resolution, teaching and mentoring others
					CO3: Teamwork – learning to connect and work with others to achieve a set task and group learning to increase the memory power
					CO4: Communication – demonstrating clear briefing and listening skills, not being afraid to ask for help and support when necessary.
					CO5: Positive thinking and Leadership – assessing the requirements of a task, identifying the strengths within the team, utilizing the diverse skills of the group to achieve the set objective, awareness of risk/safety.
			P22CC4P	C++ AND DATA STRUCTURES LAB	CO1 : able to understand the OOPs concepts
					CO2 : able to apply all functionalities into programs
					CO3 : able to implement basic data structure operations.
					CO 4 : Understand the concepts of TREE traversal and its implementations
			P22SEC1P	MULTIMEDIA AND UML LAB	CO1 : able to develop an animation using Flash
					CO2 : Able to develop an application and modification using Photoshop
					CO 3 : understand the concepts of 3D object development using 3D Max
					CO4 : able to draw all types of UML diagram using Star UML.
					CO1: Analyze the LPP and IPP Understand of Transportation problem

15	PCAE	M.C.A	P22CC5	RESOURCE MANAGEMENT TECHNIQUES	CO2: Apply transportation and assignment models to find optimal solution in warehousing and Travelling, CO3: To prepare project scheduling using PERT and CPM CO4: Able to use optimization concepts in real world problem CO5: Identify and analyze appropriate queuing model to reduce the waiting time in queue.
			P22CC6	RELATIONAL DATABASE MANAGEMENT SYSTEMS	CO1: Identify the methodology of conceptual modeling through Entity Relationship model. CO2: Define program-data independence, data models for database systems, database schema and database instances CO3: Identify Structure Query Language statements used in creation and manipulation of Database. Develop a simple database applications using normalization. CO4: understand the concepts of Data Storages. CO5: Acquire the knowledge about different special purpose databases and to critique how they differ from traditional database systems
			P22CC8	DATA COMMUNICATIONS AND NETWORKING	CO1: Understand the components of a data communications system. CO2: Identify key considerations in selecting various transmission media in networks. CO3: Usage of the various error detection and correction schemes and the various types of signals and their features. CO4: Identify and de.ne roles and features of various data transmission protocols. CO5: Understand the network security methods and its applications
			P22DSC2A	CLOUD COMPUTING	CO1: Compare the strengths and limitations of cloud computing CO2: Analyze and Identify the architecture, infrastructure and delivery models of cloud computing. CO3: Effectivelymanage the challenges and facilitate user authentications. CO4: Address the core issues of cloud computing such as security, privacy and interoperability. CO5: Design Cloud Services and Set a private cloud And apply suitable virtualizationconcept.
			P22DSC2B	INTERNET OF THING	CO1: Analyze various protocols for IoT CO2: Develop web services to access/control IoT devices. CO3: Design a portable IoT using Rasperry Pi CO4: Deploy an IoT application and connect to the cloud. CO5: Analyze applications of IoT in real time scenario
			P22DSC2C	DIGITAL PRINCIPLES AND COMPUTER ORGANISATION	CO1: Understand the concept of Gates and its circuit designs. CO2: Understand the design principles of Flip Flop s and counters. CO3: Comprehend basic input/output functioning including program controlled I/O and interrupt I/O and design Instruction formats . CO4: Understand the design and functioning of a machines central processing unit (CPU). CO5: Be through with organization of memory hierarchies including Cache and Virtual Memory.
			P22CC9P	CLIENT SERVER LAB	CO1 : able to develop a client server applications CO 2 : Able to develop a system functions CO 3 : understand to develop a front end and back end applications.
			P22SEC2P	NETWORKING AND SECURITY Theory and LAB	CO1 : understand the concepts of RMI with client and server machine CO 2 : able to code program with COM technologies CO3 : Able to develop an application with TCP and UDP protocols CO4 : able to develop an application with Database connectivity
			P22CC10	ENTERPRISE WEB APPLICATIONS	CO1: Understand the development of a server-side n-tierenterprise web system including its capabilities andlimitations. CO2: Knowledge over arrays , abstraction, inheritance and polymorphism exception handling and the benefit of developing reusable business objectclasses. CO3: Usage of RDBMS functionality to protect the data in the database. And also SQL functions. CO4: Understand XML and describe its role in an n-tier database-driven application. CO5: Identify which parts of an application project utilize XML markup and edit existing XML and also its protocols.
			P22CC11	PYTHON PROGRAMMING	CO1: To design and develop simple Python programs. CO2: Understand object oriented programming CO3: Understand principles of Python CO4: learn the concepts of LISTs Understand the pros and cons on scripting languages vs. classical programming languages CO5: using file concepts Understand how Python can be used for application development as well as quick programming
			P22CC12	DIGITAL IMAGE PROCESSING	CO1: Review the fundamental concepts of a digital image processing system. CO2: Analyze images in the frequency domain using various transforms. CO3: Evaluate the techniques for image enhancement and image restoration in color image processing. CO4: Understand the wavelet and Morphological operations and its applications CO5: Image segmentation and pattern class identifications for high level processing.
			P22CC16	DATA MINING	CO1: Understand the functionality of the various data mining and data warehousing component Knowledge CO2: Identify the scope and necessity of Data Mining &Warehousing for the society and real time problems. CO3: To develop ability to design various algorithms based on data mining tools. CO4: able to describe different methodologies used in data mining and data ware housing pattern and classifications. CO5: Learn and apply different methods of cluster analysis.
			P22DSC3A	HUMAN RESOURCE MANAGEMENT	CO1: Contribute to the development, implementation, and evaluation of employee recruitment, selection, and retention plans and processes. CO2: Manage own professional development and provide leadership to others in the achievement of ongoing competence in human resources professional practice. CO3: Develop, implement, and evaluate employee orientation, training, and development programs. CO4: Develop, implement, and evaluate organizational development strategies aimed at promoting organizational effectiveness. CO5: Manage own professional development and provide leadership to others in the achievement of ongoing competence in human resources professional practice.
			P22DSC3B	ARTIFICIAL INTELLIGENCE	CO1: Analyze the Fundamentals of Artificial Intelligence CO2: Learns about Predictive Calculus and Knowledge Representation. CO3: Becomes acquainted with Depth searches and Problem Backtracking. CO4: Recognizes the importance of knowledge inference. CO5: Learns the fundamentals of planning and the many styles of learning.
			P22DSC3C	SOFT COMPUTING	CO1: Evaluate various techniques of soft computing to defend the best working solutions. CO2: Understand the basic construction of ANN and its different types of network structure. CO3: Apply Soft computing techniques the solve character recognition, pattern classification, regression and similar problems. CO4: Understand the application development in fuzzy systems CO5: Under stand the application development using Genetic Algorithms .
			P22CC13P	PYTHON PROGRAMMING LAB	CO1 : Able to write simple python program with a study of working environment CO2 : understanding the concepts of OOPs Implementations CO3 : develop a application using GUI

			P22CC14P	**Enterprise WEB APPLICATION LAB**	CO1 : understand the concepts of PHP programing
					CO2 : able to develop a web site
			P22DSC4A	**MOBILE COMPUTING**	CO1: To understand the concept of cellular communication
					CO2: Knowledge of GSM mobile communication standard, its architecture, logical channels, advantages and limitations.
					CO3: To understand the basics of universal wireless communication standards .
					CO4: Understand the mobile network layer with IP addressing
					CO5: Understand the Mobile communication transport layer structure for application programming.
			P22DSC4C	**MACHINE LEARNING**	CO 1 Understand various machine learning Techniques.
					CO2: implement various ways of selecting suitable model parameters for different machine learning techniques
					CO3: Learn the algorithm and different models used in Machine Learning Process.
					CO4: Apply the techniques of ANN in Machine learning Process for Real time Applications
					CO5: Analyse the techniques of Genetic algorithms in Machine learning Process for Real time Applications
			P22DSC4B	**PRINCIPLES OF COMPILER DESIGN**	CO1: To study the The design aspects of a typical Compiler .
					CO2: Design different types of Finite Automata and Machines as Acceptor, Verifier and Translator.
					CO3: Understand, design, construct, analyze and interpret Regular languages, Expression and Grammars.
					CO4: Design different types of Push down Automata as Simple Parser. And Design different types of Turing Machine
					CO5: Understand, design, construct, analyze and interpret Regular languages, Expression and Grammars with symboltable.
			P22CC7	**FINANCIAL ACCOUNTINTG**	CO1 Understand the role of accounting Management and List the primary sources of capital and incorporate their cost when making investment decisions
					CO2 Analyze and synthesize stock level for business information and systems to facilitate evaluation of strategic alternatives.
					CO3 Estimate the required return on projects of differing risk and how to use the required return in evaluating investment decisions.
					CO4 Design and Integrate knowledge to estimate the cash flows from an investment project.
					CO5 Estimate the required return on projects of differing risk and how to use the required return in evaluating investment decisions.
			P22CCPW	**Project**	