UG COURSE OUTCOMES

S.NO	Programme Code	Programme Name	Course Code	Course Name	UG Course Outcomes
1	ULTA	B.A. Tamil	U221A1	Ikkalak kavithaiyum sirikadhaiyum	https://drive.google.com/file/d/1qnkLV3212ZTB7ePK647OgNEVff2wur_J/view?usp=sharing
			U22CT1	kavithai ilakkiyamum urainadaiyum	
			U22CT2	punaikkadhai ilakkiyamum naadagamum	
			U22ATT1	naattuppuraviyal	
			U22ATT2	sutrulaviyal	
			U22AE1	vilumiyakkalvi	
			U221A2	samaya ilakkiyamum sitrilakkiyamum	
			U22CT3	needhi ilakkiyam	
			U22CT4	nannool-eluththu	
			U22ATT3	thamilaga varalaarum panbaadum	
			U221A3	kaappiyamum naadagamum	
			U22CT5	nannool-sol	
			U22ATT4	idhaliyal	
			U22DST1A	koyirkalaigal	
			U22DST1B	kalvettiyal	
			U22SET1	aalumaiththiran	
			U22NMT1A	valartamil I	
			U22NMT1B	adippadaiththamil I (tamil payilaadha maanaviyaruku mattum)	
			U221A4	sanga ilakkiyamum Ara ilakkiyamum	
			U22CT6	bakthi ilakkiyam	
			U22CT7	porul ilakkanam	
			U22CT8	oppilakkiya nerimuraigal	
			U22DST2A	thagaval thodarbukkalai	
			U22DST2B	thiraippadakkalai	
			U22SET2	kaninith tamil	
			U22NMT2A	valartamil II	
			U22NMT2B	adippadaiththamil II (tamil payilaadha maanaviyaruku mattum)	
			U22CT9	kaappiyangal	
			U22CT10	ikkaalath tamil	
			U22CT11	sitrilakkiyam	
			U22CT12	yaappum aniyum	
			U22DST3A	vilambarakkalai	
			U22DST3B	tamil moli varalaaru	
			U23GET1A	panivaaippuththamil	
			U23GET1B	aatchith tamil	
			U22SET3	pechukkalai	
			U22CT13	Pandaiya ilakkiyam	
			U22CT14	ilakkiyath thiranaaivu	
			U22CT15	padaippilakkiyam	
			U22CT16	Tamil ilakkiya varalaaru	
			U22CT17	Tamilar nunkalaigal	
			U222A1	Part I English	UNIT 1 CO1: understand cultural difference, identify rhyme schemes,appreciate poetry and develop listening and reading skills UNIT 2 CO2: distinguish varied prose styles, connect ideas to evolve as a matured citizen and acquire argumentative skills. UNIT 3 CO3: enjoy literature and gain writing skills UNIT 4 CO4: identify noun, verb, adjective, use present Tense in different occasions UNIT 5 CO5: increase vocabulary strength, speak and write simple sentences
			U22CV1	Chaucer and the Elizabethan Age	UNIT 1 CO1: enjoy poetic beauty through literary devices. UNIT 2 CO2: comprehend the development of English poetry and locate the particular poem in its historical and social context. UNIT 3 CO3: understand the aspects of the essay -its elements, kinds,structure and the nuances of language. UNIT 4 CO4: grasp the plot, character, dialogue, theme, structure and dramatic techniques . UNIT 5 CO5: analyze and appreciate the innovative novelistic techniques employed in fiction
			U22CV2	Modern Grammer and Usage	UNIT 1 CO1: foster a strong theoretical understanding of Modern grammar. UNIT 2-CO2: acquire proficiency in different forms of expressions. UNIT 3-CO3: attempt creative writing skills. UNIT 4-CO4: express ideas with clarity and brevity . UNIT 5-CO5: distinguish between appropriate and inappropriate grammar and usages.
			U22AVV1	Social History of England	UNIT 1 CO1: understand their historical and cultural contexts that happened. UNIT 2 CO2: analyze the dynamic changes during the Colonial era. UNIT 3 CO3: Perceive the impact of various revolutions. UNIT 4 CO4: know the various impacts on Britain due to changes that happened outside England. UNIT 5 CO5: discuss the consequences of World Wars over England.
			U222A2	Part II English	UNIT 1 CO1: understand cultural difference, identify rhyme schemes, appreciate poetry and develop listening and reading skills UNIT 2 CO2: distinguish varied prose styles, connect ideas to evolve as a matured citizen and acquire argumentative skills UNIT 3 CO3: enjoy literature and gain writing skills UNIT 4 CO4: identify "- ing" form, use past Tense In different occasions UNIT 5 CO5: increase vocabulary strength, coin new words, use different prefixes and suffixes.
			U22CV3	Milton and the Neo-Classical Age	UNIT 1 CO1: appreciate a poem aesthetically and respond to its themes and Perspectives UNIT 2 CO2: identify personal experiences that can be used when writingPoems. 2 15 UNIT 3 CO3: take cognizance of the historical, social and cultural contexts and make connections between literature and society. 3 20 UNIT 4 CO4: interpret the thematic and stylistic elements along with social relevance and timeless appeal of the plays 4 20 UNIT 5 CO5: develop the ability and interest to read fiction on their own.
			U22CV4	Romantic Age	UNIT 1 CO1: distinguish poetry from the other literary art forms. UNIT 2 CO2: appreciate 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: familiarise the students with dramatic devices and theatricality UNIT 5 CO5: understand the development of novels as a literary genre.
			U22AVV2	Literary forms	UNIT 1 CO1: become familiar with the different poetic forms UNIT 2 CO2: understand the evolution of various schools and movements UNIT 3 CO3: comprehend the dramatic types UNIT 4 CO4: distinguish the different types of dramatic devices UNIT 5 CO5: understand the features of essay, Biography, Autobiography and Criticism
			U222A3	Part III English	UNIT 1 CO1:understand the cultural difference, identify rhyme schemes, appreciate poetry and develop listening and reading skills UNIT 2 CO2: distinguish varied prose styles, connect ideas to evolve as a matured citizen and acquire argumentative skills UNIT 3 CO3: compare and contrast the genre with other non-dramatic forms of literature UNIT 4 CO4: understand the difference between past, present and future tenses and convert direct speech into indirect speech UNIT 5 CO5: distinguish the nuances of formal and informal writingStyles
			U22CV5	Victorian Age	UNIT 1 CO1: 1. gain a sense of interpretation and appreciation of the selected texts from the genre of poetry 2. identify poetic devices and strategies and interpret their effective use UNIT 2-CO2: make them appreciate poetry by critically analyzing the poem in terms of content, background, etc. UNIT 3-CO3: enable students to appreciate modern prose for its writing style and as a vehicle of ideas UNIT 4-CO4: gain an existential understanding of drama in connection to social reality in terms of themes and characters UNIT 5-CO5: encourage discussions on the forms of fiction ,experiments in form and current theories on narratology
			U22AVV3	History of English Literature	UNIT 1 CO1: understand the history and evolution of English Literature through the works of Chaucer , Spenser , Shakespeare , Marlowe , Jonson and Donne UNIT 2 CO2: understand the cultural heritage of the English literary works of Milton , Dryden , Butler and John Bunyan II UNIT 3 CO3: appreciate the social and literary background of the age of Milton and Dryden III UNIT 4 CO4: know the historical movements that influenced the transformation of the literary tastes and standards IV UNIT 5 CO5: get a clear and systemic understanding of the national changes and developments that influenced British Literature
			U22DSV1A	Indian Writing in English	UNIT- I: CO 1: Recall the early poets in Indian Writing in English And define the essence of their perspectives on nation, nostalgia,spiritualism and writing UNIT-II: CO 2: Recognize the important issues discussed in the texts and explain them. UNIT-III: CO 3: Interpret the texts in their social and cultural contexts and understand their importance. UNIT-IV: CO 4: Distinguish the components of drama in comparison with other literary genres and experiment on enacting the text. UNIT- V: CO 5:- Investigate the arguments in a text, evaluate them and produce new perspectives in writing and articulating.
					UNIT 1 CO1: appreciate and understand the forms and style of poetry and the major poets during the Spenserian Period

2	ULEN	B.A. English	Course Code	Course Name	Course Outcomes
			U22DSV1B	Poetry	UNIT 2 CO2: understand the uniqueness of sonnet forms
					UNIT 3 CO3: develop skills to read, understand and appreciate literary text of minor writers.
					UNIT 4 CO4: imbibe knowledge over the mock elements, poetic techniques and socio-critical ideologies of the particular age.
					UNIT 5 CO5: The students are encouraged to analyze the poem critically
			U22SEV1	Communication for Career-I	UNIT 1 CO1: understand the nature of communication
					UNIT 2 CO2: comprehend the process and etiquettes of communication
					UNIT 3 CO3:listen and communicate efficiently
					UNIT 4 CO4: exhibit social skills
					UNIT 5 CO5: write error free basic sentences
			U22NMV1	Communication for Career-I	UNIT 1 CO1: understand the nature of communication
					UNIT 2 CO2: comprehend the process and etiquettes of communication
					UNIT 3 CO3:listen and communicate efficiently
					UNIT 4 CO4: exhibit social skills
					UNIT 5 CO5: write error free basic sentences
			U222A4	Part IV English	UNIT 1 CO1: understand cultural difference, identify rhyme schemes, appreciate poetry and develop listening and reading skills
					UNIT 2 CO2: distinguish varied prose styles, connect ideas to evolve as a matured citizen and acquire argumentative skills 2 20
					UNIT 3 CO3: analyze the elements of the novel 3 15
					UNIT 4 CO4: execute the presentation and interview skills in academic and work places 4 20
					UNIT 5 CO5: discuss and converse in the target language
			U22CV6	Twentieth Century Literature	UNIT 1 CO1: analyze the effects of socio-cultural changes in the poetry of the century, the aftermath of war and new forms of expression.
					UNIT 2 CO2: comprehend new voices in literature and express their appreciation by writing critical essays
					UNIT 3 CO3: understand the major literary and social changes that characterize the modern age and observe the form and style in modern prose.
					UNIT 4 CO4: internalize the importance of language as a tool of communication, the feminist subtext and the class divisions in the English society.
					UNIT 5 CO5: comprehend the emergence of new trends in fiction like science fiction.
			U22CV7	American Literature	UNIT 1 CO1: identify the subjects of early American poetry and the distinctive features of early American poets.
					UNIT 2 CO2: appreciate the craftsmanship of later American poets.
					UNIT 3 CO3: comprehend the theoretical approaches of American writers.
					UNIT 4 CO4: examine the significance of American Drama as a true reflection of the period.
					UNIT 5 CO5: relish the greatness of American Novel as a document of the great American tradition
			U22AVV4	Introduction to Phonetics	UNIT 1 CO1: create a thorough knowledge about the origin of speech sounds
					UNIT 2 CO2: understand the origin of speech sounds
					UNIT 3 CO3: helps in pronunciation
					UNIT 4 CO4: knowledge on phoneme and pronunciation
					UNIT 5 CO5: improves word pronunciation
			U22DSV2A	Children's Literature	UNIT- I: CO 1:- Makes them Knowledgeable about the history and context of Children's literary texts
					UNIT-II: CO 2:- Comprehends the thematic, didactic and entertaining elements present in Children's literature. II 9
					UNIT-III: CO 3:-Relates with the reception of the literary texts and analyzes the literary devices used by the writers III 9
					UNIT-IV: CO 4:-. Explores a variety of children's literature through different genres.
					UNIT- V: CO 5:- Demonstrate skills in reading and interpreting multiple dimensions of children's literary texts, particularly the verbal, the pictorial, and the physical, or material.
			U22DSV2B	Fiction	UNIT 1 CO1: Understand the literary and narrative aspects of the work.
					UNIT 2 CO2: appreciate and understand the eighteenth century VictorianNovel
					UNIT 3 CO3: develop skills read, understand and appreciate the historical aspects of the novel.
					UNIT 4 CO4: imbibe knowledge over the narrative techniques and character Analysis, develop acting skills through demonstrations.
					UNIT 5 CO5: enrich with the skills of reading through the novel.
			U22SEV2	Communication for Career-II	UNIT 1 CO1: differentiate hard skills and soft skills
					UNIT 2 CO2: comprehend the importance of soft skills
					UNIT 3 CO3: develop leadership skills
					UNIT 4 CO4: acquire proficiency in English
					UNIT 5 CO5: participate in group discussions
			U22NMV2	Communication for Career-II	UNIT 1 CO1: differentiate hard skills and soft skills
					UNIT 2 CO2: comprehend the importance of soft skills
					UNIT 3 CO3: develop leadership skills
					UNIT 4 CO4: acquire proficiency in English
					UNIT 5 CO5: participate in group discussions
			U22CV8	Introduction to Literature Criticism	UNIT 1 CO1: understand the origin of classical, critical tradition of Greece
					UNIT 2 CO2: acquire the knowledge of the impact of classical, critical tradition on English critical tradition and study its origin in England
					UNIT 3 CO3: understand the perspectival changes in the later critics
					UNIT 4 CO4: examine the paradigm shift in the contemporary critical premise
					UNIT 5 CO5: acquire knowledge of major critical approaches and its application to the text
			U22CV9	Contemporary British Literature	UNIT 1 CO1: Analyze the effects of socio-cultural changes in the poetry of the century, the aftermath of war and new forms of expression.
					UNIT 2 CO2: comprehend new voices in literature and express their appreciation by writing critical essays
					UNIT 3 CO3: understand the major literary and social changes that characterize the modern age and observe the form and style in modern prose.
					UNIT 4 CO4: internalize the importance of language as a tool of communication, the sub-text and the class divisions in the English society.
					UNIT 5 CO5: comprehend the emergence of new trends in fiction like science fiction.
			U22CV10	African American Literature	UNIT 1 CO1: understand, appreciate and evaluate fundamental elements of poetry and its types, dance rituals, ancestor ceremonies, music in black folktales.
					UNIT 2 CO2: assess, to understand and to analyze the forms of poetry and its themes of slavery and slave narratives.
					UNIT 3 CO3: develop higher understanding of African drama, the importance of dramatical elements
					UNIT 4 CO4: to comprehend the essence of African narrative skills, various themes and characterization through Fiction
					UNIT 5 CO5: discuss the essentials of short stories and analyze African culture
			U22CV11	Women Writers	UNIT 1 CO1: appreciate how women writers were instigated to create new histories through writing poetry.
					UNIT 2-CO2: map the broad contours of the theoretical field in which feminist narratives are located
					UNIT 3-CO3: locate women's writing in historical and ideological contexts of the women's movement in general and feminist thought in particular
					UNIT 4-CO4: integrate women's writing with feminist perspective through short stories
					UNIT 5-CO5: develop a cross cultural perception on women's writing and feminist theory
			U22CV12	Classical Literature in Translation	UNIT 1 CO1: compare and contrast different modes of aesthetic expression in classical poetic tradition
					UNIT 2 CO2: comprehend and interpret the classical prose texts
					UNIT 3 CO3: appreciate and analyze the genre of drama
					UNIT 4 CO4: perceive the different philosophical notions of absurdity
					UNIT 5 CO5: investigates how the art form voiced the unheard melody of the age
			U22GEV1A	Presentation Skills	UNIT 1 CO1: understand the methods of presentation
					UNIT 2 CO2: prepare plans for presentation
					UNIT 3 CO3: use visual aids
					UNIT 4 CO4: differentiate the methods of presentation
					UNIT 5 CO5: make an effective presentation
			U22GEV1B	Interview Techniques	UNIT 1 CO1: understand the importance of non- verbal communication
					UNIT 2 CO2: perceive the different types of interviews
					UNIT 3 CO3: prepares to respond the question process
					UNIT 4 CO4: stimulate the reflective thinking and instill leadership qualities
					UNIT 5 CO5: learn to exchange and share ideas effecti
			U22SEV3	Basics of Professional Communication	UNIT 1 CO1: understand the importance of improving communicative skill
					UNIT 2 CO2: assess the potentials of verbal and non – verbal communication
					UNIT 3 CO3: learn the importance of E-communication
					UNIT 4 CO4: identify the different kinds of technical writing and draft them without any error
					UNIT 5 CO5: draft a successful resume' and acquire Interview skills
			U22CV13	Shakespeare	UNIT 1 CO1: comprehend the nature of the dramatic genres in which Shakespeare wrote, including comedy, romance, tragedy, and history, life of Shakespeare and characteristic features of his plays
					UNIT 2 CO2: analyze the thoughts of a tragic hero by giving a deep reading.Understand the components of a tragedy and appreciate the philosophic vision of Shakespeare.
					UNIT 3 CO3: discover the flavor, style, forms, artistic features and the role of the fools in Shakespeare's comedies.
					UNIT 4 CO4: understand the primary theme of the work by investigating the textual background, study the play of Shakespeare in its historical context.
					UNIT 5 CO5: comprehend the elements of a tragicomedy and appreciate Shakespeare's plot construction.
			U22CV14	New Literature in English	UNIT- I: CO 1:- paves way for comprehending the poetic substance present in the poems belonging to different nationalities and comprehending the aesthetics of poetry.
					UNIT-II: CO 2:- Categorize concerns thematically pertaining to New Literatures in English and relate them sociologically.
					UNIT-III: CO 3:- facilitates comparison of the characteristic features specific to the dramatic trends that reflect the new literary scenario
					UNIT-IV: CO 4:-helps to explore various themes, subjects and trends used in modern fiction.
					UNIT- V: CO 5:-helps to learn the realistic sense, flexibility and themes in modern short fiction.
			U22CV15	Translation: Theory and Practice	UNIT 1 CO1: understand the connection between Language and the way of life, the emphasis on the cultural aspects of Translation
					UNIT 2 CO2: understand the Problems in Translation and the Cultural and Linguistic Approaches to Translation
					UNIT 3 CO3: understand the valuable position Translation holds within Literature and Society starting from the Romans
					UNIT 4 CO4: understand the status of translation studies from the seventeenth century to the present age.
					UNIT 5 CO5: know the difficulties in translating prose, poetry and dramatic texts.
			U22CV16	Diasporic Literature	UNIT 1 CO1: distinguish poetry from the other literary art forms and provide one of the most creative potential tools of Diasporic philosophy and love
					UNIT 2 CO2: examine the nuances of prose texts by interpreting the themes of diaspora.
					UNIT 3 CO3:
					UNIT 4 CO4: To familiarise the students with the literary trends of Drama in diasporic literature
					UNIT 5 CO5: understand the development of novel as a literary genre in diaspora

S.No	Category	Program	Course Code	Course Title	Course Outcomes
			U22CV17	Tamil literature in translation	UNIT 1 CO1:Identify the themes in early Tamil poetry UNIT 2 CO2: Associate themes in modern Tamil poetry with its earlier themes. UNIT 3 CO3: Interpret the text in its historical background and infer the multiple layers of drama through enacting and translation. UNIT 4 CO4: Distinguish novels as a literary genre and deduce the importance of protecting our environment. UNIT 5 CO5: Argue the thematic and stylistic features of short stories and create critical reviews.
			U22DSV3A	English Literature for Competitive Examinations	UNIT 1 CO1: develop their knowledge about age, movements, literary forms and writers UNIT 2 CO2: enrich their understanding on the ages and prepare themselves to face competitive exams and interviews UNIT 3 CO3: get a complete understanding of the ages and apply their knowledge when they write exams and seek for jobs UNIT 4 CO4: face eligibility exams like NET, SET and the challenges outside UNIT 5 CO5: update their knowledge on modern writers and writing and work for sustainable development among the environmental threats
			U22DSV3B	Media Studies	UNIT 1 CO1: grasp the complex relationship between communication or media theories and a diverse set of individual, social and professional practices. UNIT 2 CO2: conceptualize, design, and produce one or more works in media based on effective principles of media aesthetics for a target audience. Generate the impact of media related publicity to the problems of the people and also analyze how the media helps in establishing the cultural values of the people. UNIT 3 CO3: understand the philosophical assumptions of communication research methods to address a range of media texts and audiences, production and technological practices, and relevant social issues. UNIT 4 CO4: acquire the understanding of the importance of cooperation and teamwork. UNIT 5 CO5: cultivate a critical approach to the study of culture, explore the corresponding demands for rights and social justice, cultural diversity and socio- cultural change at the local, national and global level .
			U22CH1	History of India up to 600 A.D	UNIT 1 CO 1: Recognize the glory of past through different sources and evaluates the authenticity of different sources UNIT II CO2: Describe the function of Drafting Committee UNIT III C0 3: Acquirer the knowledge of the emergence of new religions and its circumstances UNIT IV CO 4: Asses the political evolution of various dynasties UNIT V COD5 Evaluate the Cultural Development under Kushanas
			U22CH2	Indian Geography	UNIT 1 CO1: Understand the Physical Geography of India and climate seasons of India. UNIT 1 CO2:Acquire the knowledge of Oceanography and classification of industries. UNIT 1 CO3:Obtain the facts of soil, natural vegetation and conservation measure UNIT 1 CO4: Analyze the Agriculture development in India and classification of industries UNIT 1 CO5:Examine the environmental issues and management
			U22AEH1	General Economics	UNIT1 CO1: Acquire the Knowledge of Ancient India UNIT 2 CO2: Examine the Role of Muslims invasions in India UNIT 3 CO3: Appraise the Role of Rajputs Administration in India UNIT 4 CO4 : Evaluate the South Indian Kingdoms Relations with chalukyas UNIT 5 CO5 : Acquire the knowledge of Turkish and Muhammadinvasion in india
			U22CH3	History of India from 600 to 1206A.D	UNIT1 CO1: Acquire the Knowledge of Ancient India UNIT 2 CO2: Examine the Role of Muslims invasions in India UNIT 3 CO3: Appraise the Role of Rajputs Administration in India UNIT 4 CO4 : Evaluate the South Indian Kingdoms Relations with chalukyas UNIT 5 CO5 : Acquire the knowledge of Turkish and Muhammadinvasion in india
			U22CH4	Public Administration	CO1: Discuss the concept, scope of Public Administration and Private Administration CO2: Evaluate the principle and theory of public administration CO3: Acquire the, Knowledge of 1he structure of the Public Administration C04: Assess the role of public sector undertaking in India and private sector CO5: Examine the importance of field relation
			U22AEH2	Banking Theory, Practice & Insurance	CO1: Discuss the various elements of a State and different 1 ypces of CO2: Acquire the knowledge of the different types of Constitutions. CO3: Analyze the different forms of Government and Party system C04: Describe the Salient features of the Constitution of England and Parliament. CO5: Explain the Salient features of the Constitution of the U.S.A,Powers and Functions of President and Vice - President.
			NMC	Language for Employability	CO1: Discuss the various elements of a State and different 1 ypces of CO2: Acquire the knowledge of the different types of Constitutions. CO3: Analyze the different forms of Government and Party system C04: Describe the Salient features of the Constitution of England and Parliament. CO5: Explain the Salient features of the Constitution of the U.S.A,Powers and Functions of President and Vice - President.
			U22CH5	History of India from 1206 to 1707 A.D	UNIT 1 CO1:Discuss the background of the establishment of Delhi Sultanate in India. UNIT 2 C02: Compare the relation between the Khaljis and Tuqluqs UNIT3C03:Analyze the position of Vijayanagar and Bahmani Kingdom in India UNIT 4C04: Acquire Knowledge about contribution of Mughals UNIT 5 COS : Understand the relation; between Mughals and Marathas
			U22AHH3	Modern Governments Paper-1 (History Students)	CO1: Discuss the various elements of a State and different 1 ypces of CO2: Acquire the knowledge of the different types of Constitutions. CO3: Analyze the different forms of Government and Party system C04: Describe the Salient features of the Constitution of England and Parliament. CO5: Explain the Salient features of the Constitution of the U.S.A,Powers and Functions of President and Vice - President.
			U22DSH1A	History of Europe from 1789 to 1914 A.D	CO1: Estimate the features of French Revolution causes and impact on the world CO2 : Emphasize the importance of the age of Metternich and Revolutions of 1830 and 1848 CO3 : Analyze the Foreign policy of Napoleon III CO4 : Examine the Rise of Nationalism in Italy and Germany CO5 : Assess the attitude of the major powers in the Eastern question
			U22DSH1B	History of England up to 1603 A.D	UNIT 1 CO1: Understand the Fundamental features of Indian Constitution UNIT 2 CO2: Describe the function of Drafting Committee UNIT 3 C03: Acquirer the knowledge of Directive Principles,Fundamental rights and Fundamental Duties UNIT 4 CO4: Discuss the structure of Parliament and its working UNIT 5 CO5: Imbibe the knowledge of Various Amendments
			U22SEH1	Skill Enhancement Course - Yoga and Meditation	UNIT ICO1: Acquire the knowledge of basic terms of Yoga and its origin UNIT II CO2: Assess the relationship between physical exercise and personality development UNIT IIICO3: Understand the various Methods of yoga UNIT IVCO4: Appreciate the Contributions of yogis to yoga UNIT VCO5: Gain the knowledge of different kinds of Mediation Techniques
			U22NMH1	History for competitive examinations	CO1: Estimate the features of French Revolution causes and impact on the world CO2 : Emphasize the importance of the age of Metternich and Revolutions of 1830 and 1848 CO3 : Analyze the Foreign policy of Napoleon III CO4 : Examine the Rise of Nationalism in Italy and Germany CO5 : Assess the attitude of the major powers in the Eastern question
			NMC	Digital skills for employability	UNIT ICO1: Acquire the knowledge of basic terms of Yoga and its origin UNIT II CO2: Assess the relationship between physical exercise and personality development UNIT IIICO3: Understand the various Methods of yoga UNIT IVCO4: Appreciate the Contributions of yogis to yoga UNIT VCO5: Gain the knowledge of different kinds of Mediation Techniques
			U22CH6	History of India from 1707 A.D to 1858 A.D	UNIT 1 CO1: Summarize the British invasion and administration. UNIT 1 CO2: Understand various reforms introduced by British India. UNIT 1 CO3: Examine the establishment of British Power in India and Various Acts. UNIT 1 CO4:Assess the reforms and annexation policy of the British Administrators. UNIT 1 CO5:Compare the internal and external policy of the British power in India.
			U22CH7	World Wars from 1914 to 1945 A.D	UNIT1CO1; Analyze the impact of World war I UNIT2CO2 ;Describe the post war territorial settlements and rise of dictatorship UNIT3CO3: Acquire the knowledge of world war II UNIT4CO4 ;Evaluate the role of UNO in peacemaking UNIT5CO5: Obtain the knowledge of cold war and its impact
			U22AHH4	Modern Government Paper - II (History Students)	UNIT 1 CO1:Know the salient features of Indian Constitution and Fundamental Rights and duties UNIT 2 CO2:Acquire the knowledge of the Indian Executive UNIT 3 CO3:Understand the Parliamentary System of India UNIT 4 CO4: Analyse the powers and functions of the judiciary of India UNIT 5 CO5:Evaluate the State Administration
3	UHIE 1	B.A. History	U22DSH2A	Museology	UNIT 1 CO 1: Acquire the Knowledge of basic terms of Museology UNIT 2 CO2: Asses the classification of various Museums UNIT 3 CO 3: Analyze the peculiar National Museums in india UNIT 4 CO 4: Assesthe role of Central and State Government for the protection of musercus through the implementation of acts UNIT 5 CO5: Gain the knowledge of legal procedures of maintaining museums
			U22DSH2B	Principles and Methods of Archaeology	CO1 : Understand the fundamentals of Archaeology CO2 : Explain the developments of Archaeology from 15th century to 20th century CO3: Access the different Scientific techniques associated with Archaeology CO4: Estimate the services of Eminent Archaeologists CO5 : Update the information on Evolution of South Indian temple architecture
			U22SEH2	Skills Enhancement Course - Rular Development	
			U22NMH2	NMEII - Constitution of India	UNIT 1 CO1: Understand the Fundamental features of Indian Constitution UNIT 2 CO2: Describe the function of Drafting Committee UNIT 3 C03: Acquirer the knowledge of Directive Principles,Fundamental rights and Fundamental Duties UNIT 4 CO4: Discuss the structure of Parliament and its working

Course Code	Course Title	Course Outcomes
		UNIT 5 CO5: Imbibe the knowledge of Various Amendments
U22CH8	History of India from 1858 to 1947 A.D	UNIT I CO1: Assess the main features of the Socio-Religious Reform Movement
		UNIT II CO2: Highlight the Evolution of Indian National Congress and the Independence Movement
		UNIT IIICO3: Examine the importance of Gandhian Era
		UNIT IVCO4: Evaluate the Civil Disobedience Movement and its impact
		UNIT VCO5: Write down the final phase of Indian National Movement
U22CH9	History of Tamilnadu up to 1565 A.D	UNIT I CO1: Interpret the sources of Tamil Country.
		UNIT I CO2:Understand the contribution of Pallavas to Economy, Art and Architecture.
		UNIT I CO3:Analyse the Tamil society under different rules with special reference to administration.
		UNIT I CO4:Assess the Pandyan Empire
		UNIT I CO5:Examine the impact of Muslim Invasion
U22CH10	History of Science and Technology	COI: Assess the functions of Scientific Society and Academies
		C02: Evaluate the Scientific inventions of 9th Century
		CO3: Analyse the impact of Two World Wars in the20lh Century
		C04: Understand the Space Age
		C05: Acquire the knowledge of DRDO and Modern Indian Space Research
U22CH11	Studies in Human Rights	UNIT 1 CO1: Define Human Rights and various theories of Human rights
		UNIT 2 CO2:Understand the works of United Nations role in protecting Human Rights and the role of other International organizations
		UNIT 3 CO3: Analyse the works of various regional organizations of Human Rights
		UNIT 4 CO4: Evaluate the role of National and State Human Rights Commissions in protecting Human rights.
		UNIT 5 CO5:Assess the contemporary issues of Human Rights such as Bonded labor Refuegees and Minorities.
U22CH12	Introduction to Historiography	UNIT 1 CO1:To understand what is History
		UNIT 2 CO2:To acquire knowledge on Sources of History
		UNIT 3 CO3:To understand the importance of Allied Subjects of History
		UNIT 4 CO4: To apply lessons of History in real life.
		UNIT 5 CO5: To evaluate the Historical writing
U22DSH3A	Epigraphy	UNIT 1 CO1 : Acquirethe knowledge of basic terms of Epigraphy
		UNIT 2 CO2: Assess the origin and evolution of scripts
		UNIT 3 CO3: Analyze the calculations of different eras throughout the history
		UNIT 4 CO4 : Assess the classification of various inscriptions
		UNIT 5 CO5: Gain the knowledge of local inscriptions and scripts
U22DSH3B	Panchayat Raj	UNIT 1 CO 1:Acquire the knowledge of of Panchayat Raj
		UNIT 2 CO2:Discuss the Constitutional amendments and implementations
		UNIT 3 C0 3: Analyze Panchayat Raj system in Tamilnadu
		UNIT 4 CO 4:Examine the financial set up in Panchayat Raj system
		UNIT 5 CO5: Acquire the knowledge the Panchayat Raj administration and schemes introduced and implemented by Governments
U22GEH1A	Generic Elective Course - Journalism	UNIT 1 CO1: Understanding Journalism as a sense of responsibility to provide truth to the society
		UNIT 2 CO2: Classify the qualities of Journalist and it's codes and principles
		UNIT 3 CO3 :To trace the growth of Journalism in India and Tamil nadu and its impact on society.
		UNIT 4 CO4: Describe the process of communication in advertisement.
		UNIT 5 CO5 : Analyze the role of editor in the journalistic process.
U22GEH1B	History of Europe from 1453 to 1789 A.D	
U22SEH3	Skill Enhancement Course - Fundamental of Computer	CO1 : Explain the Evolution and Classification of Computers
		CO2 : Possess the knowledge of basic hardware peripherals
		CO3 : Communicate to using MS Office products
		CO4 : Identify the different categories of Softwares and Networks components.
		CO5 : Study to use the Internet and Multimedia safely, legally and responsibly
U22CH13	Contemporary History of India from 1947 to 2000 A.D	UNIT 1 CO1: analyze the circumstances leads to Partition of India
		UNIT 2 CO2: appreciate the various role of the prime ministers of India
		UNIT 3 CO3: evaluate the pros and cons of India and her neighbors
		UNIT 4 CO4: Acquire the knowledge of economic development of India since Independence.
		UNIT 5 CO5: Examine the women welfare schemes and their empowerment
U22CH14	History of Tamilnadu from 1565 to 1964 A.D	UNIT 1 CO1:Know the administration of Nayaks and Poligars
		UNIT 2 CO2:Gain the knowledge of the impact of Mysore and Carnatic wars
		UNIT 3 CO3:Understand the importance of socio-religious reform movements
		UNIT 4 CO4: Visualize the role of Tamil Nadu in freedom movement
		UNIT 5 CO5:Evaluate the growth of Tamil Nadu since Independence
U22CH15	History of Madurai	UNIT 1 CO1:To trace knowledge about the Sources and Physical features
		UNIT II CO2: Identify the various Ancient Dynasties and Rulers
		UNIT III CO3:To acquire the knowledge of the Economy , Culture and Religion
		UNIT IV CO4: Evaluate the role of Madurai in the Indian Freedom Movement
		UNIT V CO5: Assess the Heritage and Historical important Monuments
U22CH16	Woman's Studies	UNIT I:CO 1: Understand the importance of women studies and theories of women studies
		UNIT II:CO 2: Explain the positions of women in Various Periods
		UNIT III:CO 3:Esteem the role of women in Freedom Movement
		UNIT IV: CO 4: Discuss the role of various movements in protecting the women
		UNIT V:CO 5: Acquire the knowledge of legal procedures on gender studies
U22CH17	Tourism Studies	UNIT I: CO 1: Understand the importance of Tourism and development
		UNIT II: CO 2: Explain tourism promotion, marketing
		UNIT III: CO 3: Evaluate the Tourism and International trade
		UNIT IV: CO 4: Discuss the growth of tourism,Economic and social significance of Tourism
		UNIT V: CO 5 : Acquire the knowledge of India and its Natural Heritage
U22AE3	Ability Enhancement Course (General Knowledge)	
U22CE1	MICROECONOMICS I	**CO1:** Define the various concepts in Economics
		CO2: Describe the various theories of consumer behaviour
		CO3: Understand the theoretical aspects of consumer equilibrium
		CO4: Identify the factors of production and their efficiency
		CO5: Analyse the role and importance of capital formation
U22CE2	ECONOMIC STATISTICS I	**CO1:** Understand the types of data
		CO2: Analyze the different techniques of presentation of data
		CO3: Understand the measures of central tendency
		CO4: Acquire knowledge about the measures of dispersion
		CO5: Understand the measures of skewness
U22CE3	MICROECONOMICSII	**CO1:** Discuss the different types of cost.
		CO2: Describe the different market conditions and fixing price – output determination under it.
		CO3: Analyse the importance of productivity in fixing factor price.
		CO4: Understand the theoretical aspects of rent and wage.
		CO5: Describe the theoretical aspects of interest and profit.
U22CE4	ECONOMIC STATISTICS II	**CO1:** Finding feasible solutions between the variables
		CO2: Applying practical knowledge
		CO3: Integrating the Past and Present conditions of Cost of Living Index
		CO4: Analyse the trend of production and prices
		CO5: Interpret the association of attributes
U22CE5	MONEY AND BANKING	**CO1:** Apply theoretical aspects of monetary system
		CO2: Understand the present situations of monetary system
		CO3: Integrate and Execute the banking System
		CO4: Analyse the trend of banking system
		CO5: Measure Credit Control System
U22AEE3	MATHEMATICAL METHODS I	**CO1:** Discuss the Basic Concepts of Indices
		CO2: Apply Equations to find Economic Variables.
		CO3: Describe the Concepts of SET Theory.
		CO4: Calculate Marginal Functions, Maximum Profit and Minimum cost for a Firm and Maximum Utility for Consumer.
		CO5: Examine Maximum Profit and Utility, Minimum Cost and Price; if there are two commodities.
U22DSE1A	SMALL BUSINESS MANAGEMENT	**CO2:** Enable the students to know the meaning of Entrepreneur and its functions
		CO3: Analyse the project proposal and Evaluate the different stages of Project Appraisal
		CO4: Understand the meaning of Entrepreneurial Development Programmes and Explain the various financial institution
		CO5: Assess the Women Entrepreneurs and Problems, Programmes for Women Entrepreneurs
U22DSE1B	RURAL ECONOMICS	
U22SEE1	INTRODUCTION TO MS OFFICE	**CO1:** Describe the basic components of MS Office and Word Window
		CO2: Apply the Steps for creating editing and formulating a document in MS word
		CO3: Apply the different tools related to table and mail merge in MS word
		CO4: Understand the Applications of Excel or Spreadsheet
		CO5: Intercept the data to draw the suitable chart related to different aspects
U22NME1	ENTREPRENEURIAL PRACTICE	**CO1:** Describe Entrepreneur, Entrepreneurship and Factors affecting growth of Entrepreneurs.
		CO2: Explain the women Entrepreneurs and their Growth and Problems
		CO3: Understand Project Identification and start to Small Industry
		CO4: Evaluate Financial Analysis and its types
		CO5: Analyse the Project report, formulation and Appraisal

4	UHCE	B.A. Economics	U22CE6	INTERNATIONL ECONOMICS	**CO1:** Enable the students to know the meaning of International Trade and Differentiate Internal and International Trade
					CO2: Describe the various theories of International Trade
					CO3: Define the concept of Free Trade and Protection and compare the trade policies
					CO4: Understand the meaning of Terms of Trade and Distinguish between Balance of Trade and Balance of Payments
					CO5: Evaluate the Exchange Control and Exchange Rate Policy
			U22AEE4	MATHEMATICAL METHODS II	**CO1:** Describe the Basic Concepts of Matrices.
					CO2: Solve the Equations by Matrices.
					CO3: Discuss the forms of Straight Line Equation
					CO4: Describe the Basic Rules of Integration
					CO5: Examine Total and Average Functions, Consumers and Producers Surplus.
			U22DSE2A	HUMAN RESOURCE MANAGEMENT	**CO1:** Understanding the implication of Human Resource Management
					CO2: Acquiring knowledge about organisational and manpower planning
					CO3: Demonstrating quantitative and qualitative aspects of HRM in India
					CO4: Identifying the various types of recruitment, selection, methods, placement, job analysis, job description, specification, evaluation etc.
					CO5: Integrating training and Development into Performance Appraisal
			U22DSE2B	LABOUR ECONOMICS	
			U22SEE2	ECONOMICS OF TOURISM AND TRAVEL MANAGEMENT	**CO1:** Acquiring knowledge about tourism scenario – Global, National and Regional
					CO2: Demonstrate full knowledge and skills in growth of tourism and World Tourism Organisation
					CO3: Understanding crucial issues of tour operators, ticket booking and organisation of travel
					CO4: Summarising steps in planning process and realising importance of tourism planning
					CO5: Analysing marketing concept and marketing functions of Tourism
			U22NME2	WOMEN EMPOWERMENT AND MICRO FINANCE	**CO1:** Identifying and examining the factors influencing women empowerment in Indian Economy
					CO2: Interpreting the role of Microfinance for poverty alleviation
					CO3: Examining the various women empowerment programmes and finding solutions to develop women empowerment
					CO4: Demonstrate about the activities of self help groups and understanding rules for their formation
					CO5: Integrating the role of government and Non-governmental organisation for strengthening SHGs.
			U22CE7	MACRO ECONOMICS I	**CO1:** Understand the meaning of Macro Economics and differentiate the concept of Micro and Macro Economics.
					CO2: Enable the students to know the methods of measuring National Income and Illustrate different concepts of National Income.
					CO3: Describe the Meaning of Full Employment and Unemployment and enable the students to understand the law of Market, Pigou's Effect and Keynes theory of Income, Output and Employment.
					CO4: Explain Average and Marginal Propensity to Consume and Interpret Keynes Psychological Law of Consumption.
					CO5: Discuss the Marginal Efficiency of Capital and Marginal Efficiency of Investment and Define multiplier and Accelerator.
			U22CE8	DEVELOPMENT ECONOMICS	**CO1:** Differentiate the concept of Economic Development and Economic Growth
					CO2: Describe the underlying theories of Development
					CO3: Analyse the availability of human resources and take decisions to improve development
					CO4: Apply the fiscal and monetary measures to solve the problems of Development
					CO5: Integrate the EXIM Policy to increase the foreign trade
			U22CE9	MANAGERIAL ECONOMICS	**CO1:** Describe the nature, scope of Managerial Economics
					CO2: Define the concepts of business firm and its objectives of business firm
					CO3: Interpret the demand forecasting and its types of demand forecasting
					CO4: Analyse the different types of pricing methods and explain the factors affecting pricing policy
					CO5: Illustrate the Break Even Analysis and its determinants
			U22CE10	MARKETING	**CO1:** Understand the modern concept of Marketing and explain the marketing functions.
					CO2: Discuss different types of consumers and analyse their buying motives.
					CO3: Illustrate the facilitating functions of marketing
					CO4: Explain the concept of a productive product line and product item and describe the product life cycle.
					CO5: Enable the students to know the channels of distribution and to understand the factors influencing channel section
			U22CE11	AGRICULTURAL ECONOMICS	
			U22DSE3A	ADVERTISEMENT AND SALESMANSHIP	**CO1:** Describe the nature, scope of Advertising and explain its objectives
					CO2: Analyse the advertising media and identify the various advertising agencies.
					CO3: Understand the salesmanship and qualities of a good salesman.
					CO4: Synthesis of the Recruitment and training, its objectives
					CO5: Explain the meaning, objectives of personal selling and distinguish between salesmanship and personal selling – its function.
			U22DSE3B	POPULATION DYNAMICS	**CO1:** Describe the nature, scope of demography and explain the relation of demography and explain the relation of demography with other social sciences
					CO2: Enable the students to understand the Concepts of Fertility, Measures of Fertility and Factors affecting Fertility
					CO3: Define the concept and measures of mortality and illustrate the levels and trends Mortality
					CO4: Understand the concept of migration, sources and methods of internal migration and Explain brain drain, factors, measures to reduce brain drain
					CO5: Assess the composition of Indian Population and analyse the various compositions of Indian Population and evaluate the causes, effects of population growth
			U22GEE1	BUSINESS COMMUNICATION	**CO1:** Understanding principles and barriers of communication
					CO2: Evolving different channels of communication
					CO3: Acquiring knowledge about business letters, Enquiry, Offers, and Quotations etc.
					CO4: Applying knowledge to execute order and cancellation of an order.
					CO5: Demonstrate full knowledge and skills in preparing and writing a good report.
			U22SEE3	PERSONALITY DEVELOPMENT	**CO1:** Understanding crucial characteristics and significance of personality development
					CO2: Examining the winning attitude and positive attitude and arriving solutions to build pleasing personality
					CO3: Effective and written presentation of personality traits and psychoanalytic theory of Fraud.
					CO4: Acquiring Professional Competencies – Leadership, Team Building etc.
					CO5: Appraise and appreciate successful implementation of interpersonal relationship
			U22CE12	MACROECONOMICS II	**CO1:** Understand the Goods Market and Money Market Equilibrium and describe the derivation of Aggregate demand curve with IS – LM Model.
					CO2: Explain the Types of Causes of Inflation and Suggest the Measures to Control Inflation
					CO3: Discuss the Phases of Business Cycle and Examine the Measures to control Trade Cycle.
					CO4: List out the Objectives of Monetary and Fiscal Policy and distinguish Centre cyclical and Compensatory fiscal policy.
					CO5: Evaluate different theories of Distribution.
			U22CE13	INDIAN ECONOMY	**CO1:** Discuss the characteristics of Indian Economy and explain the components of human development
					CO2: Analyse the agricultural scenario and explain the causes for low productivity
					CO3: Assess the industrial scenario, summarise the types of industries and explain the role of public and private sector in India
					CO4: Enable the Students to know the meaning of unemployment and its measures
					CO5: Evaluate the economic reforms and explain its features
			U22CE14	HISTORY OF ECONOMIC THOUGHT	**CO1:** Define the Mercantilism and physiocracy analyse the main Ideas of Physiocracy
					CO2: Describe the classical Economic Ideas of Adam Smith, Ricardo and T.R.Malthus
					CO3: Summarise the Ideas of Marxian and Neoclassical Economics
					CO4: Analyse the Economic Ideas of Keynes
					CO5: Evaluate the Economic thought in India in recent times
			U22CE15	HEALTH ECONOMICS	**CO1:** Enable the students to know the meaning, nature, scope of Health economics and determinants of health.
					CO2: Analyse the health care system and distinguish demand, supply in health care, graphically illustrate market equilibrium and reasons for market failure
					CO3: Evaluate the cost of healthcare and differentiate various economic analysis
					CO4: Describe the health status and its related Indicators
					CO5: Interpret the health plan and policies in India, tabulate the data sources for health statistics
			U22CE16	PUBLIC FINANCE	**CO1:** Define the nature and scope of public finance and also List out the difference between Polic Finanace and Private Finance
					CO2: Discuss the sources of Public Revenue and classify different type of taxes
					CO3: Explain the classification of Public Expenditure and examine the causes for the growth of public expenditure
					CO4: Illustrate the sources of Public Revenue and also analyse the causes and effects of Public Debt.
					CO5: Summarise the principles and problems of Union State Financial relation in India and discuss the function and local finance in india and also discuss the functions and problem of local finance in India
			U22CE17	INDUSTRIAL ECONOMICS	
			U22AEG1	Statistics - I	**CO1:** Understand the basic concept, Importance and Functions
					CO2: Analyse the methods of data collection and census, samples Methods
					CO3: Distinguish between classification and Tabulation
					CO4: Estimate the measures of Central Tendency
					CO5: Interpret the measures of Dispersion
			U22AEG2	Statistics - II	**CO1:** Understand the meaning and methods of correlation
					CO2: Analyse the Regression Concepts, Equations and Regression Lines
					CO3: Evaluation of Index Numbers and its Types
					CO4: Analyse the components and methods of Time Series
					CO5: Estimate the probability and its Theorems.
			U22CA1	MARKETING	CO1: Understand the concept and the elements of marketing
					CO2: Learn about the product and its life cycle
					CO3:Know how the price of a product is determined
					CO4:Study the different kinds of Sales promotion
					CO5: Understand the channels of distribution
			U22CA2	FINANCIAL ACCOUNTING - I	CO1: Prepare ledger accounts using double entry book keeping.
					CO2: Prepare final Accounts
					CO3: Obtain the skill for preparing consignment accounts.
					CO4: Develop the skill in preparing Joint Venture accounts.
					CO5: Calculate Depreciation under different Methods.
					CO1: Understand the nature and functions of advertisement

5	**UCOE**	**B.Com**	U22CA3	**ADVERTISING AND SALESMANSHIP**	CO2: Understand different aspects of advertisement and ethical issues of advertisement.
					CO3: Know the different types of advertisement media and advertising agency
					CO4: Learn about the salesman and their duties.
					CO5: Learn the recruitment and training of salesman
			U22CA4	**FINANCIAL ACCOUNTING -II**	CO1: Prepare bank reconciliation statement.
					CO2: Ascertain profits under single entry system.
					CO3: Compute claims on fire Insurance
					CO4: Prepare accounts of Non-profit organisations.
					CO5: Understand the principles in Insolvency Accounts.
			U22AAA1	**COMPANY LAW - I**	CO1:Understand the features of a company and its classification
					CO2: Understand the provisions regarding the formation of a company.
					CO3: Know the provisions of Memorandum of Association and Articles of Association
					CO4:Understand the concepts of Prospectus, minimum subscription and Underwriting.
					CO5: Gain knowledge about Securities.
			U22AAA2	**COMPANY LAW – II (Non Semester)**	CO1:Understand the rights and liabilities of members of a company.
					CO2: Understand the theoretical aspects regarding accounts of Companies.
					CO3:Understand the rights, duties, liabilities and disqualifications of Directors of a company
					CO4: Understand the procedure to be followed before, during and after the meeting.
					CO5: Understand the modes of winding up and also the duties and liabilities of the Company liquidator.
			U22CA5	**BUSINESS LAW - I**	CO1: Understand the provisions of Indian Contract Act.
					CO2:Acquire knowledge about the performance of Contract.
					CO3:Develop knowledge on Contract of Indemnity and Guarantee
					CO4:Understand the Contract of Bailment and Pledge.
					CO5:Understand the provisions of Sale of Goods Act.
			U22CA6	**ADVANCED ACCOUNTS**	CO1: Calculate profits of contract accounts.
					CO2: Prepare departmental accounts.
					CO3:Ascertain the profits of Branches.
					CO4:Prepare Royalty Accounts.
					CO5:Understand accounting treatment of hire purchase and installment system.
			U22CA7	**OPERATIONS RESEARCH**	CO1: Understand the conceptual frame work of operations research
					CO2: Analyse the linear programming problem and mathematical formulation
					CO3:Understand the various methods of transportation models.
					CO4:Find the optimum solution for assignment problem
					CO5:Analyse network problems, CPM, PERT.
			U22AAA3	**BUSINESS STATISTICS - I**	CO1: Understand the concepts of statistics- what and why.
					CO2:Analyse the data using measures of central value
					CO3: Understand the significance of measuring variation.
					CO4: Study the closeness of the relationship between the variables
					CO5:Analyse the relationship between two variables and able to make possible estimation or prediction.
			U22DSA1A	**ENTREPRENEURIAL DEVELOPMENT**	CO1:Understand the concepts of Entrepreneurship and functions of entrepreneur
					CO2:Gain knowledge on Women Entrepreneurship.
					CO3:Gain knowledge about facilitating institutions.
					CO4:Understand the procedures for starting Micro, Small, Medium Enterprises (MSME)
					CO5:Prepare project reports
			U22DSA1B	**PRINCIPLES OF CO-OPERATION**	CO1: Understand the history and Benefits of Co-opetaion
					CO2: Know about the different stages of Co-operative thoughts
					CO3: Acquire knowledge about forms of business organisation
					CO4: Know the forms of economic system
					CO5: Understand the different types of Co-opertives
			U22SEA1	**BUSINESS COMMUNICATION**	CO1:To understand the functions and essentials of a business letter.
					CO2: Write an Application Letter of various situations.
					CO3: Draft Trade Letters.
					CO4: Draft Status enquiry letters.
					CO5: Draft Circulars.
			U22NMA1	**FUNDAMENTALS OF ACCOUNTING**	CO1: Understand basic accounting concepts.
					CO2: Prepare Journal and Ledger.
					CO3:Prepare Cash Book.
					CO4:Prepare Trial Balance.
					CO5:Prepare Final Accounts.
			U22CA8	**BUSINESS LAW – II**	CO1: Understand the provisions of Factories Act.
					CO2:Describe the procedure for settlement of Industrial disputes.
					CO3:Acquire knowledge about the Environment Protection.
					CO4:Acquire knowledge about the Consumer Protection.
					CO5: Understand the provisions of Intellectual property rights.
			U22CA9	**PARTNERSHIP ACCOUNTS**	CO1:Understand the fundamentals of partnership accounts.
					CO2:Know the accounting treatment at the time of admission of a partner.
					CO3:Gain knowledge of the accounting treatment at the time of retirement and death of a partner.
					CO4:Learn how to close the books of accounts at the time of dissolution.
					CO5: Acquire the skill of settlement of accounts under dissolution.
			U22CA10	**PRINCIPLES OF MANAGEMENT**	CO1:Understand the functions of management.
					CO2:Familiarise with the types and process of planning.
					CO3:Knowthe structure of organization.
					CO4: Gain Knowledge on recruitment procedure.
					CO5:Acquire knowledge on directing and controlling.
			U22CA11	**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.
			U22AAA4	**BUSINESS STATISTICS - II**	CO1: Understand (i) the stages involved in statistical survey and (ii) sampling and methods of sampling.
					CO2: Construct Index numbers using different methods of constructing index numbers.
					CO3: Describe (i) the components of time series and (ii) measure the components and estimate for the future operations.
					CO4:Apply the tools of interpolation and extrapolation and estimate the missing values or project the future values
					CO5: Understand the application of probability theory in the solution of business problem.
			U22DSA2A	**INSURANCE**	CO1:Understand the nature and the importance of insurance
					CO2:Understand the different types of life insurance policies.
					CO3:Understand the different types of marine insurance policies.
					CO4:Understand the different kinds of fire insurance policies
					CO5:Familiarize with the Insurance Regulatory and Development Authority.
			U22DSA2B	**CONSUMER BEHAVIOUR**	CO1:To explain the concept of Consumer Behaviour & describe Consumer research process in detail.
					CO2:To evaluate the factors affecting consumer behaviour in detail
					CO3:To analyze the consumer decision process.
					CO4:To assess the impact of consumer's motivation, personality on the buying behaviour.
					CO5:To impart the basic knowledge of consumer protection rights.
			U22SEA2	**PERSONALITY DEVELOPMENT**	
			U22NMA2	**MODERN BANKING**	CO1:Understand the relationship between banker and customer
					CO2:List the procedure to open savings and current account
					CO3:Describe the rights, duties and liabilities of a banker
					CO4:Understand the concept of cheque, crossing and endorsement
					CO5:Understand principles of lending

			Course Code	Course Name	Course Outcomes
			U22CK1	**Principles of Management**	CO1: Understand the types of skills required, the levels of management and the difference between the Management and Administration.
					CO2: Understand the footsteps of legendary business gurus such as F.W.Taylor, Fayol, Mayo and also the importance of Planning, its premises.
					CO3: Understand the difference between Line & Staff, the need for departmentation and the pros & cons of Centralization, Decentralization.
					CO4: Know the principles of Direction function and the Controlling techniques
					CO5: Know the techniques of Motivation and the role of Staffing in Organizational Development.
			U22CK2	**Financial Accounting**	CO1: Develop the ability to use the fundamental accounting equation to analyze the effect of☐ business transactions on an organization's accounting records and financial statements. Develop the ability to use a basic accounting system to create (record, classify, and☐ summarize) the data needed to solve a variety of business problems.
					CO2: Develop the ability to use accounting concepts, principles, and frameworks to analyze☐ and effectively communicate information to a variety of audiences as subsidiary books.
					CO3: Prepare final accounts in accordance with generally accepted accounting principles.
					CO4: Ability to understand the effect of depreciation in accounting
					CO5: Understand the main elements of financial accounting information – assets, liabilities, revenue and expenses
			U22AKK1	**Managerial Economics**	CO1: Understand the basic concepts of managerial economics and identify the objectives of a Modern Business Firm
					CO2: Explain the various aspects of demand analysis and elasticity of demand
					CO3: Forecast demand and understand the concept of supply.
					CO4: Know the features of different forms of market and apply the various pricing methods.
					CO5: Plan the profit and understand the concepts of profit forecasting.
			U22CK3	**Business Communication**	CO1: Identify the key principles in communication and the importance of effective communication in business.
					CO2: Identify the importance of writing business letter
					CO3: Develop the ability to write curriculum vitae
					CO4: Develop effective interpersonal communication and conduct of meetings
					CO5: Identify the importance of writing reports in an organization
			U22CK4	**Organisational Behaviour**	CO1: Understand the importance of studying individual behaviour for organizational development and footsteps of legendary business gurus in organizational behavior
					CO2: Know the role of group for the overall development of an organization and the role of group think in decision making.
					CO3: Know the techniques of motivation and leadership, and importance of morale for motivation.
					CO4: Difference fight and conflict, type and role of conflict for resolution, change and its impact on productivity.
					CO5: Know the coping strategies for stress to make success.
			U22AKK2	**Money and banking**	CO1: Apprehend knowledge on Money market and circular floe of Money.
					CO2: Understand the various theories of Money and Income.
					CO3: Get knowledge on Gold standard and working of Currency system
					CO4: Understand the Functions and Types of Commercial Banks and Banking System.
					CO5: Know the Functions and Role of Reserve Bank of India
			U22CK5	**Financial Management**	CO1: Describe the financial objectives and Critically evaluate the of various financial decisions in an organisation
					CO2: Evaluate the various Source 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
			U22AKK3	**Business Statistics**	CO1: Understand the role of statistics in business, understanding of mass data.
					CO2: Simplify the mass data and to analyze the unwieldy data.
					CO3: Measure the principal characteristics of a distribution
					CO4: Indicate the extent of variations in a distribution of a research and its interpretation.
					CO5: Disclose whether a particular variable is going up or down over a period of time.
			U22DSK1A	**Banking Law And Practice**	CO1: Understand the role of a banker and their relationship with the custome
					CO2: Differentiate different customer requirements & the bankers services toward them
					CO3: Assess the innovative banking services and its role in the modern society
					CO4: Know the various types of loans and advances from banks & its importance
					CO5: Aware the different forms of negotiable instruments used in banking service
			U22DSK1B	**Insurance Management**	CO1: Provide a basic understanding of risk and uncertainty and the basic concepts in insurance mechanism
					CO2: Give insight to the students on the concept oflife insurance and how it is used to cover risk and the role of Life Insurance corporation of India
					CO3: Learn the fundamental concepts in General insurance and laws relating to the same
					CO4: Learn the basic concepts in fire insurance and Motor insurance
					CO5: Understand the basic concepts and law relating to Marine insurance
			U2SEK1	**Personality Development**	CO1: Understand the basics of personality and use the theories of personality.
					CO2: Analyze the attitude and values.
					CO3: Plan for self development and Time Management.
					CO4: Demonstrate self management through stress management and attain self growth
					CO5: Evaluate ego states and life positions and develop interpersonal relations.
			U22NMK1	**Business Management**	CO1: Understand the nature of business management and its universal Applications.
					CO2: Integrates the bases of Organizing Function
					CO3: Analyse the importance of staffing function
					CO4: Know the principles of Direction function, the techniques in motivation, leadership and how the communication leads success
					CO5: Check the current performance against the predetermined standards to bridge the gap.
			U22CK6	**Marketing Management**	CO1: Understand the evolution, nature and scope of Marketing, Role of Marketing Manager and Elements of Marketing Mix.
					CO2: Apprehend knowledge on product planning and Development, Managing Product Life Cycle, Branding and packaging
					CO3:Gain knowledge on Price Determination, various Pricing methods, policies and strategies, Functions of Distribution Channel ,Wholesaling and Retailing.
					CO4: Get knowledge on Advertising media selection, Advertising Agency and Measuring Advertising effectiveness.
					CO5: Understand the Sales Promotion and On line Marketing.
			U22CK7	**Business Environment**	CO1: Familiarize with the nature of business environment and its components and demonstrate and develop conceptual framework of business environment and generate interest in international business.
					CO2: Understand the definition of ethics and the importance and role of ethical behavior in the business world today.
					CO3: Identify the main features of the industrial licensing policy
					CO4: Assess Critically the present scenarios that synthesize privatization
					CO5: Identify the various business systems and its impact
			U22AKK4	**Business Mathematics**	CO1: Understand and apply the concepts of co-ordinate geometry.
					CO2: Apply set theory and to verify the laws related to set theory using Venn diagram for business problems.
					CO3: Understand and apply the basic arithmetic operations in matrices.
					CO4: Apply the concepts of differentiation in business.
					CO5: Calculate simple and compound interest for deposits.

6	UBAE	BBA	U22DSK2A	Entrepreneurship	CO1: Understand how can she enter into self-employment and the role of entrepreneurs in economic development of a country.
					CO2: Know the various EDPs and the role of women in entrepreneurship.
					CO3: Analyze the different forms of business and its role in the economy development.
					CO4: Know the various promotional institutions for entrepreneurship
					CO5: Understand the nature of incentives and subsidy for the betterment of the entrepreneurship, the opportunities for export and import
			U22DSK2B	E-commerce	CO1: Understand the concept of E-commerce and Business Environment.
					CO2: Know the applications of internet.
					CO3: Gain knowledge on the concept of business models of e-commerce
					CO4: Understand the concept of EDI.
					CO5: Apprehend knowledge on electronic payments and online business
			U22SEK2	Presentation Skills	CO1: Learn, Use and practice delivery techniques for making presentation
					CO2: Structure Presentation skills in order to improve Presentation
					CO3: Understand the importance of Presentation materials
					CO4: .Know the audience to have effective presentation
					CO5: Demonstrate the methods for power point presentation
			U22NMK2	Entrepreneurial Development	CO1: Gain knowledge on Entrepreneurship. Qualities and Traits of Entrepreneurs, and Types of Entrepreneurs.
					CO2: Gain knowledge on Entrepreneurial Training , Skill Development for Entrepreneurs and Challenges of Women Entrepreneurs.
					CO3: Gain knowledge on MSMEs and how start and get license for MSMEs
					CO4:.Gain knowledge on Entrepreneurship Promotion Institutions and getting Credit Facilities from Banks
					CO5:Gain knowledge on strategies and case studies of Successful Entrepreneurs.
			U22CK8	Business Law	CO1: Understand the fundamental legal principles behind contractual agreements.
					CO2: Understanding of contract consideration and performance
					CO3: Demonstrate the ability to critically reflect on the Creation of Agency
					CO4: Identify the legal impact of Sale of Goods Act
					CO5: Examine how businesses can be held under Partnership Act
			U22CK9	Cost and Management Accounting	CO1: Understand the basis of the Cost Accounting
					CO2: Identify and discuss the techniques of Material control
					CO3: Evaluate the various concepts of Overhead and Break Even Analysis
					CO4: Understand the basis of the Management Accounting
					CO5: Apply the concepts of Fund flow and Cash flow statement
			U22CK10	Human Resource Management	CO1:To understand the basic concepts of human resource management
					CO2: To comprehend the major characteristics of job description, job specification, job evaluation.
					CO3: To understand the selection and training process in the organization
					CO4: To see through the methods of performance appraisal, importance of trade union.
					CO5: To register the role of industrial relations and collective bargaining in the organization.
			U22CK11	Computer Application in Business	CO1: Gain knowledge on Computer Hardware, Operating System, DOS and Windows
					CO2: Gain knowledge on MS-Word, Creating, Editing and Formatting Documents , inserting Tables and Pictures in a Document and Mail Merge system
					CO3: Gain knowledge on Components of MS-Excel, Entering Data and Formula in work sheet, Creating Charts using Excel
					CO4: Gain knowledge on creating power point presentation, applying multimedia, transition effects and animation effects, run slide show.
					CO5: Gain knowledge on Internet, E-Mail and E-Commerce Applications
			U22CK12	Research Methodology	CO 1 To apprehend the knowledge of research design
					CO 2 To comprehend the major types of sampling methods.
					CO 3 To be able to collect primary source of data
					CO 4 To be able to understand as how to do data processing.
					CO 5 To be able to write a report of research.
			U22DSK3A	Practial: Office Automation	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,blogs, E-Mail ,Search engine and E-commerce Applications
			U22DSK3B	SPSS	CO1: Illustrate the steps in creating and editing a dataset
					CO2: Introducing descriptive statistics, frequency distribution and preparing chart
					CO3: To learn to do cross tabulation and chi square test
					CO4: To compare means using one sample t test and one Way ANOVA using computer based statistics package
					CO5: Learn to calculate correlation and regression using computer based statistics package
			U22GEK1A	Salesmanship	CO1:Develop their skill of attracting, smiling behaviour for sales force
					CO2:Demonstrate and acquireTechniques in Listening and Handling the Customers
					CO3: Demonstrate and developing skill on Cooperation and friendly approach with Customers.
					CO4:Demonstrate the observation skill, Self Confidence and combating tension and depression.
					CO5 :Demonstrate on Time management Techniques.
			U22GEK1B	Tourism Management	CO1: Understand the basic concepts of Tourism and the impact of Tourism in the Economy.
					CO2: Understanding the factors influencing Tourism development and different products and types of tourism.
					CO3: Analyse the Tourism Industry in India.
					CO4: Analyse the role of various administrative bodies in Tourism development of India.
					CO5: Examine the process of tourism planning and promotion.
			U22SEK3	Employability Skills	CO1:Gain knowledge on Employability skills and Vocational skills for Job market
					CO2:Gain knowledge on Embedded Employability Skills , Developing Competency, Task Management and Contingency Management skills
					CO3: Gain knowledge on Inter personal Relationship, Communication, Team Work, Problem solving, initiative and self Management.
					CO4: Gain knowledge Resume Writing and Etiquettes.
					CO5 :Gain knowledge on Arithmetic and Logical Reasoning Skills.
			U22CK13	Strategic Management	CO1:Understand the integrative nature of strategic management and levels of strategy
					CO2: Know the strategic options and formulate realistic strategies to achieve an organization's goals.
					CO3: Identify and update methods of project and resource allocation of strategy implementation
					CO4: Identify and update methods of Structural , functional and operational implementation
					CO5: Understand the various levels of strategy. Access and evaluate techniques of strategic control.
			U22CK14	Operations Management	CO1: Understand the basic concepts of operations management and the different types of production systems.
					CO2: Identify suitable plant location and design a plant layout.
					CO3: Explain the concept of PPC, identify the principles and equipments for material handling and know how to maintain a plant.
					CO4: Classify materials, apply inventory control techniques and analyse purchasing procedure.
					CO5: Acquire knowledge about work study and Control the quality of Production.
					CO1: Get knowledge on Evolution and Functions of Retailing and Emerging online Retailing market.

Course Code	Course Title	Course Outcomes
U22CK15	Retail Management	CO2:Understand the Environmental Factors affecting Retailing Business and analyzing Competitiveness in Retailing
		CO3: Understand on Retail Organization Formats and Rural Retailing.
		CO4:. Get knowledge on Merchandising and operations of Stores.
		CO5: Analyse the shopping behaviour in Retailing and Legal and Ethical aspects of Retailing.
U22CK16	Advertising and sales Promotion	CO1: Familiarize with the fundamental concepts in Promotion and Promotional strategies
		CO2: Understand the basic concepts in advertising and role of advertising agencies
		CO3: Identify the various concepts involved in development of advertising campaign and copy
		CO4: Understand the various media of advertising and strategies in selection of the Media
		CO5:. Learn the fundamental concepts in sales promotion and the various level of sales promotional strategies
U22CKPW	Project Work	

S.No	College	Programme	Course Code	Course Title	Course Outcomes
7	UHCE	B.Sc. Mathamatics	U22CM1	Differential Calculus	CO1. Acquire a good foundation in the topics of curvature, envelops.
					CO2. Students will have a working knowledge of important Mathematical concepts in evolutes, involute and p-r equations
					CO3. Understand tangents, normal, polar subtangent and polar subnormal
					CO4. Gain understanding of mathematical concepts of asymptotes, singularity
					CO5. Solve problems related to tracing of curves
			U22CM2	Classical Algebra	CO1. Analyse and sum the series of binomial, exponential and logarithm
					CO2. Understand relation between roots and coefficients of nthdegree equation
					CO3. Solve reciprocal equation, apply Rolle's theorem, Transformationof equation, Descarte's rule of sign
					CO4. Apply Strum's theorem and Solve equation by using Horner's method
					CO5. Solve cubic equation by using Cardon's method, biquadratic equation by using Ferrari's method
			U22AMMI	Allied Paper-1 : Statistics-I	CO1. Recall basic concepts and solve problems in Probability Theory.
					CO2. Classify discrete and continuous one dimensional and two dimensional random variables.
					CO3. Define and find Mathematical Expectation, Moment Generating Function and Characteristic Function.
					CO4. Describe Binomial and Poisson distributions.
					CO5. Recognize the concept of Rectangular and Normal distributions.
			U22CM3	Integral Calculus	CO2. Understand the reduction formulae and Bernoulli's formula
					CO3. Solve problems in double and triple integrals
					CO4. Solve volume of solids of revolutions and areas of curved surfaces
					CO5. Understand the Beta & Gamma function. Demonstrate the techniques of integration.
			U22CM4	Analytical Geometry	CO1. Derive the polar equation of straight lines, circles, conics
					CO2. Understand the concept of direction cosines of a line and normal of the plane
					CO3. Interpret plane and straight line and coplanar lines
					CO4. Expand hyperbolic functions and find logarithm of complex numbers
					CO5. Sum up trigonometric series
			U22AMM2	Allied Paper II: Statistics II	CO1. Explain curve fitting.
					CO2. Execute Correlation coefficient, Rank Correlation, Regression coefficient and Angle between two lines of regression.
					CO3. Define Attributes and find the consistency of data and independence of data.
					CO4. Discuss the significance of single mean and difference of means of large samples.
					CO5. Implement t-distribution, F-distribution and Chi-square distribution
			U22AMM3	Allied Paper III : Discrete Mathematics	CO1. Understand the concept of Connectives, Negation, Conjunction and Truth Table
					CO2. Demonstrate the Algebraic Structure.
					CO3. Acquire a good foundation in Lattices and Boolean Algebra.
					CO4. Understand the concept of Languages, Finite State Machine Languages.
					CO5. Acquire Knowledge about Number System and Codes, Gray Code, ASCII Code.
			U22CM5	Statics	CO1. Gain the knowledge about forces and resultant of forces acting at a point
					CO2. Predict the effectiveness of parallel forces and moments
					CO3. Use conditions of equilibrium of forces and moments to solve external and internal forces acting on objects
					CO4. Describe the force of friction on stationary & moving objects
					CO5. Explain the principle of virtual work & basic concepts and to solve the Problems
			U22CM6	Vector calculus	CO1. Acquire a good foundation in the topics of Differentiation of vector functions.
					CO2. Gain understanding of mathematical concepts ofScalar and vector point functions,
					CO3. Solve problems related toDivergence and Curl of a Vector point function.
					CO4.Analyse the PropertiesofIntegral Theorems
					CO5.Demonstrate the techniques of integration .
			U22NMMI	NMECI-Quantative Aptitude for Competitive examinations	CO1. Recall H.C.F,LCM,decimal fractions and simplifications
					CO2. Understand, determine and apply the concept of average and percentage.
					CO3. Clasiffy profit and loss,Ratio and Propositions.
					CO4. Sketch the ability of partnership, Time and work.
					CO5. Demonstrate the knowledge of Simple and Compound intrest.
			U22CM7	Differential Equation	CO1. Acquire good knowledge in first & second order linear differential equations and solving techniques
					CO2. Develop the idea about homogeneous linear differential equations and solving techniques
					CO3. Develop the solving techniques of simultaneous differential equations & method of variation of parameters
					CO4. Form the partial differential equations and evaluation of some standard forms
					CO5. Explore the use of differential equations as models in various applications
			U22CM8	Dynamics	CO1. Understand the basic laws of forces and their effects on motion
					CO2. Define projectiles and explain the characteristics of projectiles.
					CO3. Solve problems involving the impulse forces.
					CO4. Describe Simple Harmonic Motion and motion under the action of central forces.
					CO5. Demonstrate the concept of moment of inertia.
			U22NMM2	NMEC-II Data interpretation and reasoning	CO1 List the Logical Venn Diagrams and Mathematical Operations.
					CO2 Explain Arithmetic Reasoning,Series.
					CO3.Recognize about Tabulations.
					CO4 Demonstrate the concept of Pie Charts.
					CO5.Sketch the Bar graphs and Line graphs.
			U22SEMI	Skill Enhancement Course I: Mathematical Aptitude for competitive Examinations	CO1. Recall LCM and HCF of numbers,BODMAS Rule and learn to do simplifications and find average.
					CO2. Analyse Profit and Loss, find percentage , illustrate ratio and proportion and solve partnership problems.
					CO3. Relate Time and Work , Pipes and cisterns , Time and distance , Problems on Trains,boats and streams ,Alligation or Mixtures and solve problems
					CO4.Distinguish Simple interest & Compound Interest and demonstrate Area , Volume and surface area.
					CO5. Analyse Odd man out and series , apply Data interpretation do Tabulation and draw Bar graphs Pie charts , Line graphs
			U22CM9	Abstract Algebra	CO1. Students will have a working knowledge of important mathematical concepts in abstract algebra such as definition of a group, permutation group and subgroups Students will be knowledgeable of different types of subgroups such as Cyclic subgroups, Normal subgroups, quotient groups and understand the structure and characteristics of these subgroups.
					CO2.Write precise and accurate mathematical definition of objects in Ring Theory. Understand subrings, Ideals and Integral domain
					CO3 Demonstrate theorems about Euclidean domains PIDs and UFDs . Gain theoretical knowledge of vector spaces, and Linear transformations
					CO4. Acquire good knowledge of Linear independence, basis and dimension Understand the concepts related to inner product spaces
					CO5. Develop the knowledge of Rank of matrix, bilinear and quadratic forms. Understand the concepts related to inner product spaces
			U22CM10	Graph Theory	CO1. Acquire the knowledge of basic definitions of Graphs, Isomorphism, Walks,Connected Graphs and Cut Vertices and Edges
					CO2. Gain the knowledge of Eulerian and Hamiltonion Graphs
					CO3. Identify the concept of Bipartitite Graphs and Matrices
					CO4. Perceive the idea of Planar graphs
					CO5. Recognize the concept of Colouring and Directed graphs
			U22CM11	Fourier Series & Trigonometry	CO1. Expand any periodic function as a Fourier series
					CO2. Expand Fourier Series in terms of change of interval
					CO3. Expand Sine and Cosine series
					CO3. Expand hyperbolic and Inverse functions
					CO5. Resolving into factors and finding logarithm of a complex function
			U22CM12	Operations Research	CO1. Solve linear programming problems.
					CO2. Apply different methods to find transportation cost.
					CO3. Recognize Hungarian method to solve Assignment Problems.
					CO4. State Maximin-Minimax principle and list the types of inventories.
					CO5. Identify critical path.
			U22DSM1A	C-Programming	CO1. Acquire the knowledge of basic structure of a C Program, constants, variables and data types, Managing input and output operations
					CO2. Study about Operators
					CO3. Implement decision making with branching & looping
					CO4. Learn about one dimensional &two dimensional arrays, string handling functions

Code	Subject	Course Outcomes
		CO5. Study about user defined fnctions, structures, unions and pointers
UAADSM1B	OOPS With C++	CO1. Understand the principles, benefits and applications of OOP & begin with C++
		CO2. Understand the functions in C++ programming
		CO3. Gain knowledge about classes and objects in C++ programming
		CO4. Present knowledge of constructors and destructors
		CO5. Understand inheritance
U22SEM2	SEC-II: Laplace Transforms and Fourier Transforms	CO1. Find the Laplace Transform of some standard functions
		CO2. Find the Inverse Laplace of functions
		CO3. Apply the Laplace Transform to solve the linear differential equations and simultaneous linear differential equations
		CO4. Define the Fourier Transform and explain some properties
		CO5. Evaluate Fourier sine transform ,cosine transform of functions
U22SEM3	SEC-III: Optimization Technique-II	CO1. Analyse and solve sequencing Problems
		CO2. Demonstrate Queuing Theory and Classify Queuing Models .
		CO3. Distinguish Single server models with finite capacity and infinite capacity, derive their characteristics and solve problems
		CO4. Analyse Birth and Death Process and derive its Characteristics
		CO5. Distinguish multi server models with finite capacity and infinite capacity, derive their characteristics and solve problems
U22CM13	Core13-Complex Analysis	CO1. Construct Analytic functions and Harmonic functions
		CO2. Classify and Evaluate Contours integration
		CO3. Find the Taylors and Laurent Series
		CO4. Derive Rouches theorem and evaluate improper integrals
		CO5. Construct the conformal mapping
U22CM14	Core14-Real Analysis	CO1. Define the inequalities,write clear and precise proofs.
		CO2. Understand, determine and apply the concept of sequences and series
		CO3. Understand and acquire the knowledge of open sets, closed sets, limit in metric spaces
		CO4. Sketch the ability to model continuous, complete metric spaces
		CO5. Demonstrate the knowledge of connected sets and compact sets of R
U22CM15	Core15-Number Theory	CO1. Recall the concepts mathematical induction and early number theory .
		CO2. Demonstrate divisibility theory in integers.
		CO3. Derive fundamental theorem of Arithmetic.
		CO4. Analyse and apply the theory of congruence.
		CO5. Describe Fermat's Theorem.
U22DSM2AP	C Programming Lab	
U22DSM2BP	C++ Programming Lab	
U22DSM3A	Numerical Methods	CO1. Solve the Guass Elimination Method
		CO2. Find the Difference and Factorial polynomial and error propagation
		CO3 Discuss and demonstrate the concept of interpolation
		CO4. Understand the Newton's Forward and Backward formula .
		CO5. Apply Euler's and RungeKutta method for fourth order
U22DSM3B	Fuzzy Mathematics	CO1. Recall the basic definitions, characteristics and significance of fuzzy sets.
		CO2. Classify the operations on fuzzy sets, concept of extension principle.
		CO3. List the concept of fuzzy complements, intersection and union.
		CO4. Interpret the combination of operations and aggregation operations.
		CO5. Explain the concept of Fuzzy numbers.
U22GEM1A	Astronomy	CO1. Understand Celestial co-ordinates, sidereal time
		CO2. Demonstrate effects of Geometric, Heliocentric, Parallax.
		CO3. Find equation of time and conversion of time
		CO4. Understand relation between sidereal month Lunation and relation between theorem
		CO5. Understand Planetary phenomena & Astronomical instruments
U22GEM1B	Mathematics Modelling	CO1. Understand models
		CO2. Develop models in medicine
		CO3. Explain models through differential equations
		CO4. Explain models through difference equations
		CO5. Understand models through graphs
U22AMP1	Allied Mathematics Paper-I	CO1. Analyse the Binomial series
		CO2. Understand and apply the concept of Exponential & Logarithm series
		CO3. Get clean concept of Relation between roots and coeffients
		CO4. Demonstrate the techniques of Newton's and Horner's method
		CO5: Solve the problems related to Radius&Center of curvature
U22AMP2	Allied Mathematics Paper-II	CO1. Understand the Hyperbolic functions and Logarthiam of complex number
		CO2. Analysis the properties of definite integral
		CO3. Acquire a goodfoundation in Differential equation of first order
		CO4. Get Clear Concepts of second order equations and solve the problem
		CO5: Demonstrate the techniques of partialdifferential equations
U22AMP3	Allied Mathematics Paper-III	CO1. Find the Gradiant ,Curl and Divergence of a function
		CO2. Evaluate line integral and surface integral
		CO3.Understand the concept of Lplace Transform and inverse Laplace Transform
		CO4. Calculate correation coefficient and Index numbers
		CO5: Compute Fourier,Cosine and Sine Series
U22AMC1	ALGEBRA & TRIGONOMETRY	CO1. Analyse the Binomial series
		CO2. Understand and apply the concept of Exponential & Logarithm series
		CO3. Get clean concept of Relation between roots and coeffients
		CO4. Demonstrate the techniques of Newton's and Horner's method
		CO5: Solve the problems related to Radius&Center of curvature CO1. Understand the Hyperbolic functions and Logarthiam of complex number
U22AMC2	CALCULUS	CO1: Solve the problems related to Radius&Center of curvature
		CO2. Analysis the properties of definite integral
		CO3. Acquire a goodfoundation in Differential equation of first order
		CO4. Get Clear Concepts of second order equations and solve the problem
		CO5: Demonstrate the techniques of partialdifferential equations
U22AMC3	APPLICATION OF MATHEMATICS	CO1. Calculate correation coefficient and Index numbers
		CO2: Compute Fourier,Cosine and Sine Series
		CO3. Find the Gradiant ,Curl and Divergence of a function
		CO4. Evaluate line integral and surface integral
		CO5.Understand the concept of Lplace Transform and inverse Laplace Transform
U22CP1	MECHANICS, FLUID DYNAMICS AND SOUND	CO 1: Identify the concepts of dynamics of rigid bodies
		CO 2: Discuss about types of collision and able to derive the expression for final velocities and loss of kinetic energy
		CO 3: To collect primary idea of gravitation and rocket motion
		CO 4: Impart the knowledge of properties of fluid, hydrostatics and kinematics of fluid flow
		CO 5: Analyze about Ultrasonic and its applications .
U22CP2	HEAT AND THERMODYNAMICS	CO1: Understand the behavior of real gases and derive Vander Waals equation of a state. Understand the concept of transport phenomenon.
		CO2: State and explain the laws of thermodynamics. Apply the laws to explain carnot engine. Understand the concept of entropy and derive Maxwell's equations.
		CO3: Understand the methods of liquefaction of air. Explain the properties of Helium I and II. Describe the process of Adiabatic demagnetization.
		CO4: Understand the different methods of transmission of heat. State and explain Wien's displacement Law – Rayleigh Jean's Law – Solar constant. Explain Waterflow Pyrheliometer.
		CO5: Understand thermometry and calorimetry and explain Cp and Cv- Mayers relation-Cv by Jolys differential steam calorimeter method- Cp by Regnaults method.
U22CP3P	MAJOR PRACTICAL PAPER -I	CO 1 : be familiar with elasticity and various moduli of elasticity
		CO 2 : calibrate the low range voltmeter
		CO 3 : construct different types of waveforms
		CO 4 : be familiar with spectroscopic techniques
		CO 5 : experiment with semiconductor devices to understand their properties
U22CP4	ELECTRICITY AND ELECTROMAGNETISM	CO1 : Understand fundamental laws of electricity and magnetism apply the knowledge of electricity and magnetism to technological advances
		CO2 : Get a clear idea about chemical, thermal and magnetic effect of electric current and its uses which provide a pathway for the new scientific invention
		CO3 Understand how Faraday's law relates to induced emf and to calculate the energy stored in an inductor
		CO4 : Apply the knowledge of basic circuital laws and simplify the DC and AC networks using reduction techniques
		CO5 : Apply Maxwell's equations to solve various physical problems and develop problem solving skills in electromagnetism
U22CP5	PHYSICAL AND LASER OPTICS	CO1 : describe and discuss about interference and its applications
		CO2 : describe and discuss diffraction effects observed in a single slit and circular aperture and relate to optical resolution
		CO3 know how to Produce and detect of plane, circularly and elliptically polarised light
		CO4 : explain the basic principles of laser and. types of laser
		CO5 :understand the working principle, recording, reconstruction and types in holography and the advance applications of laser in various field like medicine and industry
U22CP6P	MAJOR PRACTICAL – PAPER – II	CO1: apply the procedures and techniques for the experiments.
		CO2: use the different measuring devices and meters to record the data with precision .
		CO3: show the basic working condition of the experiment.
		CO3: apply the mathematical concepts/equations to obtain quantitative results.
		CO4: understand the standard value of the results and the applications.
		CO5:communicate scientific information in oral, written and graphical formats.

8	UPHE	B.Sc Physics			CO6: develop basic communication skills through working in groups in performing the laboratory experiments and by interpreting the results
					CO7: identify the basic concepts needed to develop a program
			U22NMP1	Weather Forecasting	UNIT 1 CO1: Understand the importance of atmosphere, composition and structure of atmosphere also know the characteristics
					UNIT 2 CO2: Know about the Wind systems and Clouds.
					UNIT 3 CO3: identify the Cyclones, Classification of Cyclones and thunderstorms
					UNIT 4 CO4: Know about the classification of climate and importance of global warming
					UNIT 5 CO5: Understand the importance of Weather Forecasting and Satellites observations.
			U22CP7	Mathematical Methods	CO1:define the errors and root of equations
					CO2: solve the problems using Matrices
					CO3: interpret the interpolation
					CO4: explain about numerical differentiation and integration
					CO5: solve the problems using differential equations
			U22NMP2	SOLAR ENERGY AND ITS APPLICATIONS	CO1: Understand the importance of sun , composition ,layers .
					CO2: Know the difference of renewable energy sources and non-renewable energy sources
					CO3: know the working of solar heater and solar drier
					CO4: Know the working of solar cooker and solar pond.
					CO5: know the uses of solar energy
			U22SEP1	ASTROPHYSICS	CO1: describe the features of objects in the Solar system giving details of similarities and differences between these objects. Understand the fundamental concepts of the celestial sphere comets, asteroids, meteors, galaxies and motion of planets.
					CO2: understand the elements and types of telescopes and know the importance and features of Spectrograph
					CO3 : study classification of stars and Hertzsprung - Russel diagram for population of stars, understand absolute, apparent luminosity and their measurement and black holes
					CO4 : study the properties of Sun, Solar Atmosphereand Solar activity
					CO5 : study structure and characteristics of the Earth, Understand the relations between the Moon and earth and Know the effects of sun, moon and earth
			U22CP8	Analog Electronics	CO 1:understand Kirchhoff's Laws and various network theorems and describe the function of various diodes and their applications
					CO 2: distinguish between BJT and FET and able to explain the working of Transistor amplifiers
					CO 3:describe the working of various types of amplifiers
					CO 4: explain the working of different types of oscillators and multivibrators
					CO 5: explain the characteristics and application of operational amplifier
			U22CP9	Atomic Physics	CO1: Explain the Atom Model and the Quantum Number associated with the Vector Atom Model.
					CO2:Explain the properties of positive rays and analyze the presence of positive rays by Thomson's parabola method. To able to solve the problem in Mass Spectrograph.
					CO3: Summarize the free electron theory of metals, to classify the solids on the basis of band theory.
					CO4:Explain the various types of Coupling scheme and to define the effect of Normal and Zeeman Effect.
					CO5:Study the production, properties, absorption and characteristics of X-rays sspectra and to solve problems using Moseley's law . Examine and understand the process of scattering of X-rays by light elements (Compton effect).Demonstrate and describe the photoelectric effect and to list the performance and applications ofphotoelectric devices. Formulate the Einstein's light quanta hypothesis.
			U22CP10	Classical,Statistical,and Quantum Mechanics	CO1: define the basic concepts in classical mechanics.
					CO2: apply classical approach to some of the physical systems.
					CO3: know the basics of wave mechanics.
					CO4: understand thermodynamic probability andclassicalstatistics.
					CO5: explain quantum statistics and differentiate it from classical statistics.
			U22CP11P	Major Practical Paper III	CO1 : Understand the theoritical concepts by doing experiments
					CO2 : Familiarize with microscope, spectrometer and ballistic galvanometer
					CO3 : Understand the application side of the experiment
					CO4 : Study the spectral and optical properties of the given materials
					CO5 : Improve the practical skills and knowledge
			U22DSP1A	Medical Physics	CO1 : list the electrode material and types of electrodes
					CO2 : mention active and passive transducers
					CO3 : explain the characteristics of the recording system
					CO4 : discuss about the diagnostic instruments
					CO5: understand the working of medical equipments
			U22DSP1B	Radiation Safety	CO1 : understand the basics of atomic and nuclear physics
					CO2 : list the types of radiation and its interaction with matter
					CO3 : discuss different radiators and monitoring devices
					CO4 : specify the radiation safety management
					CO5:study the use of radiators in medicines and industries
			U22GEP1	Physics of the Earth	CO1 : To describe the Important physical parameters and properties of the planet earth
					CO2: Impart the knowledge of understanding Gravitational attraction, Gravitational Theory
					CO3 Analyse the Thermal history of the Earth
					C04 : To understand the Elastic constants and Elastic process in the earth
					CO5 : To understand the Theory of earth's magnetic field
			U22SEP2	Programming with C	CO1: define the basics of programming language
					CO2: understand the concept of input and output operations
					CO3: describe decision making and branching
					CO4: discuss the use decision making and looping
					CO5: describe arrays and strings
			U22CP12	Digital electronics and Communication	CO 1: define the different types of number systems and enhance their skills in conversion of number systems
					CO 2: explain the basic and universal logic gates and relates the truth tables
					CO 3: simplify the logic expressions using Boolean laws and Kmap
					CO 4understand the working of multivibrators and flipflops
					CO 5: describe the principle and types of modulation
			U22CP13	Solid State Physics	CO 1 : Conceptually explain the classification schemes that are used to categorize engineering materials and describe how and why defects in materials greatly affect engineering properties and limit their use in service
					CO 2 : understand concisely and effectively resistivity and conductivity using basic relations, gain important conceptual and operational understanding of different types of conduction materials
					CO3 : Complete understanding about magnetic materials and superconductors, their basic theories, types and applications.
					CO4 : Acquaint complete knowledge of dielectric materials, with their types and applications.
					CO5 : Acquire knowledge of biomaterials,ceramics and nano materials, with their preparation and applications.
			U22CP14P	Major Practical -Paper IV	CO1: Construct electronic circuits using logic gates & ICs
					CO2: Study the characteristics Transister and FET.
					CO3: Construct dual power supply.
					CO4: Understand the theoretical concepts by doing experiments
					CO5: Understand applications of ICs by doing experiments
			U22CP15	Optoelectronics	CO1 : Understand the basic knowledge of LED and LCD and instrumentation involved
					CO2 :acquire complete about the operation and construction of lasers
					CO3 : Familiarize with various optoelectronics such as Photo transistors, photo diodesand its real time applications
					CO4 : understand basic principle of optical fibre
					CO5 : learn and practice the techniques used by an optical phenomenon so that these can be applied to actual field studies
			U22DSP2A	Nuclear physics	UNIT 1 CO1- PROPERTIES AND STRUCTURE OF NUCLEI. Know the properties of nucleus, understand binding energy, nuclear composition , nuclear forces , analyse liquid drop model
					UNIT 2 CO2 - RADIOACTIVITY Know properties of alpha, decay , properties of neutrino, uses of radio beta , gamma rays, understand alpha , beta
					UNIT 3 CO3 – NUCLEAR REACTIONS. Know kinematics of nuclear reaction, differentiate nuclear fusion calculate Q value of nuclear reaction
					UNIT 4 CO4– NUCLEAR DETECTORS AND PARTICLE ACCELERATORS Know neutron sources , properties , nuclear detectors , particle accelerators, understand the working principle of detectors and accelerators.
					UNIT 5 CO5- COSMIC RAYS AND ELEMENTARY PARTICLES Know about cosmic rays , origin of cosmic rays, understand altitude, latitude , longitudinal effect of cosmic rays , differentiate elementary particles
			U22DSP2B	Nano Physics	CO1 Know the history of nano technology, understand synthesis of oxide nano particles, develop skills in synthesis of nano particles
					CO2 Know super lattice, understand preparation of quantum nano structure,differentiate quantum well laser, quantum cascade laser, quantum wire, quantum dot, analyse application of quantum dots.
					CO3 Know discovery of nano tubes, classify types of carbon nano tubes,synthesize carbon nano tubes
					CO4 Know nano crystalline soft material, understand theoretical back ground of permanent magnetic material, discuss quantum cellular automata
					CO5 Know about chemistry and environment, understand applications of nano technology, analyse medical applications of nano technology
			U22DSP3A	Spectroscopy	CO1: understand Microwave Spectroscopy in detail with the knowledge of classification of molecules
					CO2: analyze the theory of Infra red spectroscopy with the vibrating diatomic molecule as harmonic and an anharmonic oscillator.
					CO3: understand and analyze Raman Spectroscopy in detail with the knowledge of classical and quantum effects.
					CO4: understand the electronic spectroscopy Vibrational coarse structure: Progressions – Frank-Condon principle
					CO5: explain the construction and working of IR spectrophotometer (Single beam and double beam).
			U22DSP3B	Problems solving skills in Physics	CO1: understand and develop the skill in solving problems in Mechanics and also to recollect the corresponding theories.
					CO2: analyze and solve the problems in Thermal Physics.
					CO3: solve the problems in Electricity and Magnetism and also will discuss the corresponding theories.
					CO4: understand and solve problems in Quantum Mechanics
					CO5: explain the general concepts in Physics and mathematics by solving problems.
			U22SEP3	Physics for competitive Examinations	CO1: develop the method of attending multiple choice questions in mechanics, properties of matter
					CO2: enhance the skill in solving problems and answering multiple choice questions in physics
					CO3: understand and analyze the tricks in attending more questions (multiple choice) in a short interval of time.
					CO4: apply the knowledge of physics in solving problems.
					CO5: develop the confidence of attending competitive exams.

S.No	Dept Code	Programme	Course Code	Course Name	Course Outcomes
			U22APCT1	Allied physics-1	CO1 : understand the various modulus involved in the materials and apply the knowledge to practical applications
					CO2 : explain the concept behind flow of liquids due to viscous forces
					CO3 understand how heat is transmitted due to process of conduction, convection and radiation and atmospheric pollution
					CO4 : understand various thermodynamic laws and the concept of entropy
					CO5 : know the concepts of interference, diffraction and polarisation and its uses in practical applications
			U22APCT2	Allied physics -II	CO1 : understand the uses of resistance and capacitance and able to determine the unknown values like current, voltage in the circuit
					CO2 : know how electrons are ejected from the surface of a metal when light is incident on it and its technological applications
					CO3 understand the basic concepts of electromagnetic induction and acquire complete knowledge about Alternating current
					CO4 :explain the methods of biasing transistors & design of simple amplifier circuits and to develop the ability to analyze and design analog electronic circuits using discrete components..
					CO5 :apply knowledge of number systems, codes and Boolean algebra to the analysis and design of digital logic circuits.
			U22APCP	Allied physics pratical	CO1 : use vernier caliper and screw gauge for various measurements
					CO 2 : apply the concepts of Physics relevant to the theory learnt in allied core courses in a practical situation
					CO 3 evaluate various physical properties of materials through experiments
					CO 4 : analyze the basic electrical circuit and to find the unknown value of current and inductance
					CO 5 :construct logic circuits using universal NAND or NOR gates.
			U22APMT1	General physics-I	CO1 : understand the various modulus involved in the materials and apply the knowledge to practical applications
					CO2 : explain the concept behind flow of liquids due to viscous forces
					CO3 understand how heat is transmitted due to process of conduction, convection and radiation and atmospheric pollution
					CO4 : understand various thermodynamic laws and the concept of entropy
					CO5 : know the concepts of interference, diffraction and polarisation and its uses in practical applications
			U22APMT2	General physics -II	CO1 : understand the uses of resistance and capacitance and able to determine the unknown values like current, voltage in the circuit
					CO2 : know how electrons are ejected from the surface of a metal when light is incident on it and its technological applications
					CO3 understand the basic concepts of electromagnetic induction and acquire complete knowledge about Alternating current
					CO4 :explain the methods of biasing transistors & design of simple amplifier circuits and to develop the ability to analyze and design analog electronic circuits using discrete components..
					CO5 :apply knowledge of number systems, codes and Boolean algebra to the analysis and design of digital logic circuits.
			U22APMP	General physics pratical	CO1 : use vernier caliper and screw gauge for various measurements
					CO 2 : apply the concepts of Physics relevant to the theory learnt in allied core courses in a practical situation
					CO 3 evaluate various physical properties of materials through experiments
					CO 4 : analyze the basic electrical circuit and to find the unknown value of current and inductance
					CO 5 :construct logic circuits using universal NAND or NOR gates.
9	UCHE	B.SC Chemistry	U22C1	GENERAL CHEMISTRY I	CO1: write IUPAC names organic compounds (upto C10), bicyclo compounds and simple aromatic compounds.
					CO2: (i) describe the hybridization. (ii) explain the electronic effects. (iii) apply the influence of electronic effects, relative strengths of acid and base and stability of radicals, carbocations & carbanion
					CO3 :(i) explain the factors affecting ionic compounds, Born Haber cycle, Pauling & Mullikan's scales of electronegativity and Fajan's rule. (ii) differentiate inter and intramolecular hydrogen bonding. (iii) apply VSEPR theory to simple inorganic compounds. (iv) apply MO theory (v) compare VB and MO Theorie
					CO4: to explain the quantum numbers, Pauli's exclusion principle, Hund's rule, Aufbau Principle and periodic properties.
					CO5: to describe the basics of atomic structure and quantum theory.
			U22CC2P	PRACTICALS-1 QUALITATIVE ANALYSIS & ORGANIC PREPARATION	CO1: analyse the mixture containing two cations and two anions.
					CO2: prepare a few important organic compounds
			U22CC3	GENERAL CHEMISTRY- II	CO1: to describe the chemistry Alkanes, Alkenes and Alkynes.
					CO2: to explain the chemistry of cycloalkanes, Diels-Alder reaction.
					CO3: to demonstrate the metallurgical processes and explain the principles of qualitative analysis
					CO4: describe the chemistry of s-block elements
					CO5: to explain gas and liquid state
			U22CC4	GENERAL CHEMISTRY- III	CO1: demonstrate aromaticity, Aromatic electrophilic substitution
					CO2: explain the characteristics of elements of Group III A and some important compounds of Boron and Aluminium.
					CO3: demonstrate the characteristics of elements of IV A and the Chemistry of silicones.
					CO4: explain the nature of applications of colloids
					CO5: explain nanomaterials, liquid crystals and their applications.
			U22CC5	GENERAL CHEMISTRY – IV	CO1: demonstrate the chemistry of haloalkenes.
					CO2: demonstrate the chemistry of alcohols, phenols and ethers.
					CO3: explain the theory behind the volumetric analysis and perform calculations based on it.
					CO4:explain the principles of gravimetric analysis, error analysis and adsorption.
					CO5: describe the chemistry of Nitrogen.
			U22CC6P	PRACTICAL – II, VOLUMETRIC ANALYSIS AND ORGANIC ESTIMATION	CO1: estimate the given inorganic solution, volumetrically
					CO2: estimate the given organic solution, volumetrically
			U22CC7	PHYSICAL AND INORGANIC CHEMISTRY	CO1: explain Raoult's law, non-ideal solutions and Colligative properties
					CO2: describe the concepts of phase rule.
					CO3: demonstrate the composition and stability of the nucleus and types of nuclear reactions
					CO4: explain the Natural and artificial radioactivity and applications.
					CO5: explain crystal structures and crystal defects.
			U22SEC1	CHEMISTRY FOR COMPETITIVE EXAMINATIONS	CO1:discuss General characteristics of alkanes, alkenes, alkynes, stereochemistry, Explain carbohydrates, hybridization, polar effects.
					CO2:describe the periodic properties, metallurgical processes, types of chemical bonding and nuclear chemistry.
					CO3: explain Colligative properties, Phase rule, Catalysis, chemical kinetics and electrochemistry.
					CO4: apply the concepts of volumetric analysis, thermo gravimetric analysis.
					CO5: discuss the properties of Paints, varnishes, cement, fuels soaps and detergents, insecticides.
			U22CC8	ORGANIC CHEMISTRY- I	CO1: Stereochemistry of organic compounds
					CO2: Chemistry of Aldehydes and Ketones
					CO3: Chemistry of Aliphatic and Aromatic Carboxylic acids
					CO4: Chemistry of Aliphatic and Aromatic Nitrogen compounds
					CO5: Chemistry of Carbohydrates
			U22CC9	PHYSICAL CHEMISTRY I	CO1: explain the basic terminologies and laws of thermodynamics and calculations of enthalpy, entropy and free energies.
					CO2: demonstrate the different ways of stating II law of thermodynamics and its significance, Entropy, free energy function and Partial molar quantities.
					CO3: explain the III law of thermodynamics
					CO4: derive the rate constants for 1st, 2nd, 3rd and zero order reactions
					CO5: discuss the theories of reaction rates and the influence of temperature on rate of the reaction and correlating the physical properties and chemical constitution.
			U22CZ1	Biology of invertebrates	CO1: Classify animal kingdom. Describe the structure and functions of different systems in Paramecium and canal system of Porifera
					CO2: List out general characters of phylum Helminthes and Annelida. Describe the structure and function of different systems in Nereis .Analyse the parasitic adaptation of helminthes and adaptive radiation in Annelida
					CO3: Describe the excretory, reproductive system and life cycle of Pienaeus monodon and compare and contrast the mouth parts of insects
					CO4: Gain knowledge about the general characters of phylum Mollusca. Describe the structure and functions of different systems of Pila globosa and analyse the torsion in Gastropoda and advanced features in Cephalopods.
					CO5: Classify the phylum Echinodermata depending on the observed characteristics and describe the water vascular system, reproductive system of starfish and larval forms of Echinodermata and types of Pedicellaria.
			U22CZ2P	Biology of Invertebrates - Practical	CO1: Understand the morphological characters of the selected animal species.
					CO2: Gain knowledge about various organ system of the selected invertebrate species
					CO3: Exhibit practical skills in mounting and correlate structural features.
					CO4: Identify and locate given organ system of an invertebrates by virtual or visual aids.
					CO5: Identify draw and elucidate various structural features of animals of various phyla.
			U22AZZ1	Economic Zoology I	CO1: Describe the history of sericulture in India and basic concepts of silkworm rearing.
					CO2: Explain processing of cocoon and apply knowledge of diseases of silkworm to develop entrepreneurship.

No	Code	Programme	Course Code	Course Title	Course Outcomes
10	UZOE	B.Sc Zoology	U22AZZ1	Economic Zoology I	CO3: Acquire knowledge and skills in the establishment and production of vermicompost.
					CO4: Understand the concepts and techniques of vermicomposting
					CO5: Gain knowledge about lac cultivation and its benefits.
			U22AZZ2P	Economic Zoology Practical	CO1: gain knowledge on various characteristics of silkworm larvae and pupae rearing practices and diseases of silkworm.
					CO2: infer social organization in honeybee , bee keeping practices and to understand lifecycle of lac insect.
					CO3: comprehend the principles of vermicompost technology, and apply them to exhibit entrepreneurial skills
					CO4: gain knowledge about freshwater and marine fishes and interpret various physico-chemical parameters essential for fishery industry
					CO5: demonstrate knowledge about various chick breeds and their characteristics and also about various cattle diseases and byproducts of dairy industry
			U22CZ3	Biology of Chordates	CO1: Impart basic knowledge about the general characters and classification of Chordates
					CO2: Provide adequate explanation to the students about animal diversity in Pisces through classification and organ systems
					CO3: Understand the unique characters, classification of Amphibians and Reptiles
					CO4: Develop knowledge about the classification and evolutionary significance of Aves
					CO5: Understand analytical thinking about classification and organ systems in Mammals
			U22CZ4P	Biology of Chordates - Practical	CO1: Understand the morphological characters of the selected animal species.
					CO2: Gain knowledge about the various organ systems of the selected chordate species
					CO3: Illustrate the anatomical features of the organ systems of the selected species of chordates.
					CO4: Exhibit the practical skill on mounting and correlate the structural features
					CO5: Identify, draw and elucidate various structural features of chordates
			U22AZZ3	Economic Zoology II	CO1: Learn the importance of Government organizations and Indian economy related to fishery and acquire the knowledge about the classification of fisheries.
					CO2: Understand the various methods of fish culture
					CO3: Learn the basic techniques involved in ornamental fish culture
					CO4: Understand the Poultry farming and practice to rear them in their fields
					CO5: Understand the Dairy farming and management
			U22AE2	Environment Studies	
			U22CZ5	Genetics and Biodiversity	CO1: Acquire knowledge on Mendelian principles, understanding gene interaction and apply the knowledge practically in donating blood to the needy.
					CO2: Recognize and correlate the relationship between linkage and crossing over of genes and analyse gene frequency.
					CO3: Identify and analyse the risk factors causing anomalies of chromosomes and apply the knowledge practically in human genetic counseling for the welfare of the society.
					CO4: Enrich knowledge on biodiversity and to understand the causes of extinction of animals, apply the skills to conserve biodiversity.
					CO5: Involve themselves in practicing the policies on biodiversity and strive for harmonious existence of the environment.
			U22CZ6P	Genetics and Biodiversity Practical	CO1: Understand the principles of Mendelian inheritance and d significance of Barr body in human
					CO2: Enrich their knowledge and understand the genetic Crossing
			U22CB1	Algea, Fungi And Lichens	UNIT 1 CO1: Spot, collect, identify algal forms, and recognize the ways of utilizing the algal resources for their vocation and livelihood
					UNIT 2 CO2: Compare the similarities and contrast differences between the chosen groups and eventually be able to build logic for understanding and appreciating plant evolution
					UNIT 3 CO3: Learns the characteristic feature and habitat of fungal groups
					UNIT 4 CO4: Understands and compares the lifecycle patterns of different fungal groups
					UNIT 5 CO5: Enable the students to know the organization of lichen thallus, the ecological benefits and uses of it, recognizes the causal organism and symptoms of some common plant diseases.
			U22CB2P	Practical I	UNIT 1 CO1: Able to write technical description of plants to their systemic position.
					UNIT 2 CO2: Apply the knowledge of plant observation and identify them with characteristic features.
					UNIT 3 CO3: Learn the structure of Lichen and its importance as pollution indicators.
					UNIT 4 CO4: Identify the types of plants and classify them
					UNIT 5 CO5: Learn the concepts and facts about various plant groups
			U22ABB1	Introduction to Ecobiology	UNIT 1 CO1: Understand various zones of environment and adaptations of Hydrophytes, Xerophytes and Halophytes to their respective habitat.
					UNIT 2 CO2: Differentiate positive and negative interrogations
					UNIT 3 CO3: Understand the structure and function of ecosystem
					UNIT 4 CO4: Develop concept on hydrosere and Xerosere. Causes and basic types of succession.
					UNIT 5 CO5: Enable students to carry out vegetation studies
			U22CB3	Bryophytes, Pteridophytes, Gymnosperms And Paleobotany	UNIT 1 CO1: Understand the characteristics of Bryophytes and their classification. Assess the evolutionary features in Bryophytes
					UNIT 2 CO2: Understand the classification of the Pteridophytes and general character of primitive groups
					UNIT 3 CO3: Understand the morphological diversity of Pteridophytes and economic importance
					UNIT 4 CO4: Understand the characteristics of Gymnosperms and their classification
					UNIT 5 CO5: students are aware of the preserved vestiges of plant life of the geological past
			U22ABB2P	Ancillary Practical - I	UNIT 1 C01: Able to compare the distinguishing features of plantsof various habitats.
					UNIT 2 CO2: Apply the knowledge of plant interaction and identify them with special features.
					UNIT 3 CO3: Develops the skill of sectioning and handling lab wares.
					UNIT 4 CO4: Ddentify and apply the principles of solar powered equipments.
					UNIT 5 CO5: Enable the students to study vegetation using quadrat method.
			U22CB4P	Practical II	UNIT 1 C01: Able to write technical description of plants to their systemic position.
					UNIT 2 CO2: Apply the knowledge of plant observation and identify them with characteristic features.
					UNIT 3 CO3: Learns the concept of stelar evolution in Pteridophytes
					UNIT 4 CO4: Identify the morphological characteristics of Gymnosperms
					UNIT 5 CO5: Acquires knowledge about the preservation of fossil slides
			U22ABB3	Ancillary Paper II Energy Resources	UNIT 1 C01: Understands the world energy resources and its availability
					UNIT 2 CO2: Learns about conventional and nonconventional energy and distinguishes them.
					UNIT 3 CO3: Understands the principles and mechanism behind solar equipments
					UNIT 4 CO4: Enable the students to apply the principles of solar energy in routine life.
					UNIT 5 CO5: Recognizes the source of biogas production and appreciates its applications.
			U22CB6P	Practical III	UNIT 1 CO1: Able to write technical description of plants to their systemic position.
					UNIT 2 CO2: Apply the knowledge of plant observation and identify them with characteristic features.
					UNIT 3 CO3: Identify the types of stomata and its distribution in plants
					UNIT 4 CO4: Learns the germination patterns of pollen in Angiosperms
					UNIT 5 CO5: Learn how to dissect the plant embryo and identify the stage
			U22AE2	Environmental Studies	
			U22CB5	Plant Anatomy and Embryology of Angiosperms	UNIT 1 CO1: List down the different kinds of tissues, able to differentiate simple tissue from complex tissue.
					UNIT 2 CO2: Compare and contrast the anatomy of root &stem and also between dicot and monocot appreciate the vascular supply.
					UNIT 3 CO3: Describe the normal secondary growth and differentiate it from anomalous thickening.
					UNIT 4 CO4: Analyse the sequencesof reproductive process and appreciate the way the life perpetuates.

11	UBOE	B.Sc. Botany			UNIT 5 CO5: Differentiate the various kinds of endosperm and summarize the embryogeny and polyembryony, apomixis.
			U22NMB1	Horticulture	UNIT 1 CO1: Understands the basic knowledge of horticulture
					UNIT 2 CO2: Learns the techniques of artificial propagation.
					UNIT 3 CO3: Enable the students to know the preservation methods for storing vegetables.
					UNIT 4 CO4: Understands and recognizes the vegetable growing methods.
					UNIT 5 CO5: Appreciates the art of gardening and develops interest in decoration.
			U22CB7	Taxonomy of Angiosperms	UNIT 1 CO1: Understand the different parts of the plant and their modifications.
					UNIT 2 CO2: Understand the various systems of classification and appreciates the use of Taxonomy in other branches.
					UNIT 3 CO3: Analyse the important characteristics and relate the evolutionary relationship among Polypetalae.
					UNIT 4 CO4: Analyse the important characteristics and relate the evolutionary relationship among Gamopetalae.
					UNIT 5 CO5: Analyse the important characteristics and relates the evolutionary relationship among Monochlamydeae and monocots.
			U22CB8P	Practical IV	UNIT 1 CO1: Able to write technical description of plants and construct Floral diagrams and formulas.
					UNIT 2 CO2: Apply the knowledge of plant observation to their systemic position.
					UNIT 3 CO3: Learn to compare and differentiate the family characters at generic level
					UNIT 4 CO4: Identify plants belonging to same genera and families, compares monocots and dicots
					UNIT 5 CO5: Acquire knowledge in preparing key for plant identification.
			U22NMB2	Medicinal Botany	UNIT 1 CO1: Describe the applications of plants in a historical, cultural, medicinal, legislative, and global context.
					UNIT 2 CO2: Critically evaluate the ideas and discussed plant as source of food and medicine.
					UNIT 3CO3: Identify and learnt medicines obtained from Non-flowering plants.
					UNIT 4 CO4: Identify and learnt medicines obtained from flowering plants.
					UNIT 5 CO5: Acquired knowledge on cultivation and uses of medicinal plants.
			U22SEB1	Horticulture	UNIT 1 CO1: Understands the basic knowledge of horticulture
					UNIT 2 CO2: Learns the techniques of artificial propagation.
					UNIT 3 CO3: Enable the students to know the preservation methods for storing vegetables.
					UNIT 4 CO4: Understands and recognizes the vegetable growing methods.
					UNIT 5 CO5: Appreciates the art of gardening and develops interest in decoration.
			U22CB9	Cell Biology, Genetics and Evolution	UNIT 1 CO1 understand tissue morphogenesis and ultimately facilitates to know what happens at the cellular and molecular levels.
					UNIT 2 CO2: Learn the principles in microscopy and the structure, chemistry and functions of cellular organelles
					UNIT 3 CO3: Learn about Mendelian principles
					UNIT 4 CO4: understand the different types of genetic interaction, incomplete dominance, codominance, inter allelic genetic interactions, multiple alleles and quantitative inheritance
					UNIT 5 CO5: Familiarize about Evolution and the emergence of evolutionary thoughts
			U22CB10	Plant Physiology	UNIT 1 CO1: To understand water relations in plants
					UNIT 2 CO2: To give knowledge about Mineral nutrition and the role of minerals in plants
					UNIT 3 CO3: Develop the students, understanding of photosynthesis and pathways of CO2 fixation in plants.
					UNIT 4 CO4: To provide knowledge about respiration and different sources of nitrogen to plants.
					UNIT 5 CO5: Develop the students' appreciation for the complexity of plant growth and development and physiology of flowering in plants.
			U22CB11	Biochemistry and Biophysics	UNIT 1 CO1: Understand the structure and properties of Macromolecules
					UNIT 2 CO2: Learn about the Significance of Carbohydrates, Protein and Lipids.
					UNIT 3 CO3: Learn the properties of enzymes, enzyme catalysis and Mechanism of enzyme action
					UNIT 4 CO4: Understand the role and function of water soluble and fat soluble vitamins.
					UNIT 5 CO5: Understand the concepts in biophysics
			U22CB12P	Practical V	UNIT 1 CO1: able to write technical description in genetics andsolve genetic problems.
					UNIT 2 CO2: apply the knowledge of plant observation to their underline physiological causes.
					UNIT 3 CO3: learn the qualitative and quantitative analysis of biomolecules through various lab techniques.
					UNIT 4 CO4: learn the theories related to evolution and about the different cell organelles and their functions
					UNIT 5 CO5: acquire knowledge in experiments pertaining to biochemistry.
			U22DSB1A	Forestry and Economic Botany	UNIT 1 CO1:Make decisions and exercise informed judgement in relation to native forest, plantation develop and implement well-justified forest management strategies Get awareness on the conservation practices of medicinal plants.
					UNIT 2 CO2:Incorporate the foundational natural and social sciences into decision making, Study the interactions of people and plants.
					UNIT 3 CO3:Understand the economic products with special reference to the Botanical name, family, morphology of useful part and the uses, Describe healing and medicinal uses of plants.
					UNIT 4 CO4: Gain knowledge about economic products with special reference to the Botanical name, family, morphology of useful part and the uses, Describe healing and medicinal uses of plants
					UNIT 5 CO5: Know about the major and minor ethnic groups or Tribals of India, and their life styles. Gain knowledge on the role of ethnobotany in modern Medicine
			U22DSB1B	Environmental Biotechnology	UNIT 1 CO1: To appraise the four R's of waste management.
					UNIT 2 CO2: Awareness about biofertilisers and hazards of synthetic fertilizers and pesticides..
					UNIT 3 CO3: Learns the process of Biogas production and its advantages.
					UNIT 4 CO4: Understands and appreciates the use of plant derived fuels.
					UNIT 5 CO5: learns the sewage treatment process and treatment of effluents of textile industry.
			U22GEB1A	Organic Farming	UNIT 1 CO1To appraise the concepts and objectives of organic farming
					UNIT 2 CO2: The importance of organic manures, farm yard manure, compost, advantages of green manure, concentrated manures, vermicompost, most widely used.
					UNIT 3 CO3: Learns the characteristics, identification, cultural methods and maintenance of Azospirillum, Azotobacter, Azolla and Anabaena
					UNIT 4 CO4: Understands and appreciates the use of organic and biological methods to control pests and diseases
					UNIT 5 CO5: learns the benefit reducing the usage of fertilizers gradually and usage of integrated of pest management
			U22GEB1B	Medicinal Botany	UNIT 1 CO1: Describe the applications of plants in a historical, cultural, medicinal, legislative, and global context.
					UNIT 2 CO2: Critically evaluate the ideas and discussed plant as source of food and medicine.
					UNIT 3 CO3:Identify and learnt medicines obtained from Non-flowering plants.
					UNIT 4 CO4: Identify and learnt medicines obtained from flowering plants.
					UNIT 5 CO5: Acquired knowledge on cultivation and uses of medicinal plants.
			U22SEB2	Mushroom Cultivation	UNIT 1 CO1: Understands the basic knowledge of identifying edible mushroom from the poisonous one
					UNIT 2 CO2: Learns the techniques of mushroom cultivation
					UNIT 3 CO3: Understands and recognizes the raw materials used for growing mushrooms
					UNIT 4 CO4: Enable the students to know the preservation methods and marketing of mushrooms
					UNIT 5 CO5: Appreciates the nutritive values of mushroom and prepares recipes from it.
			U22CB13	Microboilogy and Pathology	UNIT 1 CO1: Students will be able to acquire, articulate, retain and apply knowledge relevant to microbiology.
					UNIT 2 CO2: Students will acquire and demonstrate competency growth and 1 reproduction of bacteria.
					UNIT 3 CO3: Students will learn culture medium types and bacterial straining.
					UNIT 4 CO4: Students will make the students to Understand the general characteristics of water and food microbiology.
					UNIT 5 CO5: Students will acquire knowledge on diseases affecting plants and its control measures.
			U22CB14	Plant Biotechnology and Bioinformatics	UNIT 1 CO1: Know and describe the scope and tools of biotechnology.
					UNIT 2 CO2: Understand the gene cloning and it applications.
					UNIT 3 CO3: Gain knowledge on plant biotechnology and gene transfer in plants through microbes.
					UNIT 4 CO4: Acquires knowledge about Intellectual Property Rights and its uses to society.
					UNIT 5 CO5: Understand bioinformatics and data bases.
			U22CB15P	Practical – VI	C01: Learn the methods of media preparation
					CO2: Apply the knowledge of isolation of bacteria.
					CO3: Learn the different culture techniques in microbiology.
					CO4: Identify common microbes from diverse natural habitats and isolate microbial culture
					CO5: Acquire knowledge in experiments pertaining to biotechnology and identifying various plant diseases
			U22DSB2A	Industrial Microboilogy	UNIT 1 CO1: understand the role and functions of microbes in nature and confidently handle microbes for gainful employment as technician and expert
					UNIT 2 CO2: apply their knowledge and training for manipulation of microbes and microbial processes in production and service industries
					UNIT 3 CO3: produce marketable products that they will be job-ready to join large scale and small or can start their own entrepreneurial projects
					UNIT 4 CO4: find their spaces of engagement in the extended domains of food industries and energy production and gain confidence in taking job roles as technicians and managers
					UNIT 5 CO5: to intelligently manipulate microbes in producing vaccines and antibiotics thereby gaining confidence in seeking placements in sales and service sector of the pharmaceutical companies
			U22DSB2B	Molecular Biology and Recombinant Technology	UNIT 1 CO1: Understand the role and functions ofDNA and its replication methods
					UNIT 2 CO2: Knows about RNA, its role in transcription process.
					UNIT 3 CO3: Aware about translation and post translational modifications
					UNIT 4 CO4: Admires recombinant technology anddevelops keen interest in gene cloning.
					UNIT 5 CO5: To intelligently manipulate cloning methods and apply it in agriculture.
			U22DSB3A	Biodiversity	UNIT 1 CO1: scientifically and systematically study and investigate botanical elements that have material, cultural and aesthetic values and take upon themselves the obligation to upkeep and replenish the dwindling resources
					UNIT 2 CO2: handle issues that are considered serious threats to biodiversity as they would be sensitized to prevent the ongoing onslaughts on nature
					UNIT 3 CO3: creatively participate and contribute to the implementation of national and global initiatives and involve in focussed efforts directed on saving nature and biodiversity
					UNIT 4 CO4: to preserve depleting bioresources and evince interest in proactive and confident engagement in preparing action plans and advocacies aimed to conserve the bioresources

			Code	Course	Outcomes
					UNIT 5 CO5: wilfully give their time and effort in fulfilling the tasks and goals they set before themselves to befit their training for a meaningful participation and wholesome involvement directed at protecting and managing biodiversity
			U22DSB3B	Environmental Related Occupational Hazards	UNIT 1 CO1: Understand the factors affecting health. UNIT 2 CO2: Gains knowledge about water borne diseases and chemicals in water that affect health. UNIT 3 CO3: Learn the types of airborne diseases and control measures. UNIT 4 CO4: applies the knowledge about food additives and food preservatives. UNIT 5 CO5: Understands aboutthe occupational health hazards.
			U22SEB3	Biological Techniques	UNIT 1 CO1: Understand the methods used in micrometry, microtomy and staining procedures. UNIT 2 CO2: Gain skills on working principles of pH meter and colorimeter UNIT 3 CO3: Learn the technique of centrifugation &its applications UNIT 4 CO4: Gain knowledge about variouschromatographic techniques UNIT 5 CO5: Understand about radiometry, its application in biological studies.
12	UGEE	B. Sc Geography	U22CG1	GEOMORPHOLOGY	UNIT 1 CO1: Acquisition of information about an origin of the earth and its theory. UNIT 2 CO2: To understand the theories UNIT 3 CO3: to know about the earth movements UNIT 4 CO4: to collect the informations of geomorphic process UNIT 5 CO5:To identify the evolution of landforms
			U22CG2P	Practical 1 - REPRESENTATION OF MAP SCALES AND RELIEF	CO1: Understand the map scale and their types CO2:Acquire more knowledge about plain scale, comparative scale and diagonal scale CO3: Develop mapping skill through the Representation of Relief: Hill shading – contouring and form lines CO4: Develop the skill to draw the cartographic relief features like hills, plateau, valleys and ridges
			U22CG3	CLIMATOLOGY	UNIT 1 CO1: Understand the importance of weather and climate, composition and structure of atmosphere and know the insolation. UNIT 2 CO2: Know about the pressure belts and the wind system UNIT 3 CO3: Identify the Atmospheric moisture , precipitation and types clouds UNIT 4 CO4: Familiar about the mass and fronts, classification of cyclone and thunderstorms UNIT 5 CO5: Know about the classification of Climatic - Greenhouse Effect and Global warming
			U22CG4P	Practical II - REPRESENTATION OF CLIMATIC DATA AND WEATHER MAP INTERPRETATION	CO1: Representation of Climatic Data: Climatic graph, Water budget graph, and Climograph. CO2: Hyther Graph, Rainfall dispersion diagram, Ergo Graph and Wind Rose: Simple and Octagonal wind rose. CO3: Maps and Instruments- Weather Elements on map Meteorological signs and symbols- Weather Station model- Salient features of Indian Seasons. CO4: Study of Indian Daily Weather maps: Information - Procedures of interpretation -Interpretation of Indian daily weather Report.
			U22CG5	OCEANOGRAPHY	CO2: Hyther Graph, Rainfall dispersion diagram, Ergo Graph and Wind Rose: Simple and Octagonal wind rose. CO3: Maps and Instruments- Weather Elements on map Meteorological signs and symbols- Weather Station model- Salient features of Indian Seasons. CO4: Study of Indian Daily Weather maps: Information - Procedures of interpretation -Interpretation of Indian daily weather Report. UNIT 1 CO1: Acquire knowledge about the meaning , scope and significance of oceanography and configuration of ocean floor
			U22CG6P	Practical III - MAP PROJECTION	UNIT 2 CO2:understand the Temperature , Salinity and Density of sea water – Atlantic, Pacific and Indian Ocean . UNIT 3 CO3: Familiar with Dynamics of Ocean Water – Waves and Tides and Tsunami UNIT 4 CO4: understand the types and general Ocean Currents- Types- Corals UNIT 5 CO5: develop knowledge about the marine deposits and marine resources UNIT-I CO1:understand the construction methods of different types of directions and bearings
			U22AGGP	Allied Practical - Statistical Diagrams and Maps	UNIT-II CO2: construct and Analyse the measurement of area and measurement of Distance with Thread, Divider and Rotometer methods. UNIT-IIICO3: Construct and understand the classification of projections (Cylindrical, Equidistant, Equal area and Mercator's projection) UNIT-I VCO4: Understand to measure the conical, Zenithal, Polyconic, Mollweide and Sinusoidal projections.
			U22NMG1	NMEI- Fundamentals of Physical Geography	UNIT 1 CO1:Geography – Definition – Solar System – Shape & Size of the Earth- configuration of land & sea UNIT 2 CO2: Interior of the Earth – Earth Movement - Fold, Fault, Earthquake-Volcanoes UNIT 3 CO3: Rocks – Igneous- Sedimentary- Metamorphic . UNIT 4 CO4: Weathering - Factors –Physical, Chemical, Biological. UNIT 5 CO5: Elements of weather and climate – temperature , pressure ,
			U22CG7	CARTOGRAPHY	UNIT 1 CO1: Develop an idea about the nature , scope , history and modern trends in cartography UNIT 2 CO2: Getting familiar with the latitudes ,longitudes local time , standard time and international date line and understanding maps scale and types UNIT 3 CO3: Analyze different types of maps and symbols UNIT 4 CO4: acquire the knowledge about methods of showing in reliefs in maps and explain about survey of India topographical map and its index UNIT 5 CO5: apply the knowledge about projection and classification in preparation of maps
			U22CG8P	Practical IV - SURVEYING	CO1: apply the knowledge to conduct the two methods of chain survey CO2: Construct and Analyse the prismatic compass and its applications CO3: understand about plane table survey and constructions of its types. CO4: Understand to measure the height .of the object through (Indian clinometers), leveling (dumpy level)
			U22NMG2	Social - Cultural Geography	CO1: To understand the nature and scope of social geography CO2: To know the structure and process of the space and society CO3: To explain the knowledge of socio – cultural regions of India CO4: To understand the Religion and caste system of India CO5: To know the classification of Indian language – language concentration and diversification
			U22S3EG1	POPULATION DATA ANALYSIS	CO1: To understand the Sources of Population data CO2: To know the Dynamics of Population CO3: To explain the knowledge Major consequences of migrations - Laws of Migration - Policies on migration CO4: To understand the Population composition - Sex composition Gender ,Age structure ,Literacy, Determinants. CO5: To know the Occupational composition of population
			U22CG9	WORLD REGIONAL GEOGRAPHY	UNIT 1 CO1: know about different types of Regions – understand the specific characteristics about vegetation, animal life of world regions UNIT 2 CO2: Acquire knowledge about Tropical Regions – Monsoon type – Sudan type - Sahara type – Caribbean type UNIT 3 CO3: Analyze the Warm Temperate Regions- Mediterranean type- China type – Tropical Desert type. UNIT 4 CO4: Understand the Cool Temperate Regions- British type, Siberian type and Laurentian type. UNIT 5 CO5: Explain about the Polar Regions – high land - Tundra type
			U22CG10	GEOGRAPHY OF INDIA	UNIT 1 CO1: Understand the location Physiography, Drainage, Climate, and Vegetation of India UNIT 2 CO2: Know the silent feature, problems and prospects of Agriculture. UNIT 3 CO3: Know about the power resources in India. UNIT 4 CO4: Understand the nature of industries and study the spatial Distribution of manufacturing industries in India UNIT 5 CO5: Understand population Composition in India
			U22CG11	HUMAN GEOGRAPHY	CO1: Nature and scope : understand the branches of Human Geography CO2: Know the Concepts of Determinism, Possiblism and Probablism. CO3: Able to analyze Levels of Culture – Primitive to modern – World cultural Regions. CO4: Explain Language, Religion , Race and Distribution CO5:Understand the demographic pattern, problems and related theories.
			U22CG12P	Practical V - THEMATIC DATA ANALYSIS AND MAP INTERRETATION	CO1: Understand the Statistical method: One dimensional diagrams, Two dimensional diagrams, Three dimensional diagrams, Pyramidal diagrams- pictorial- flow, line pie diagrams with computer assistance CO2: Acquire more knowledge about the drawing of isopleths- choropleth- chorochromatic and choroschematic maps with computer assistance CO3: Familiar with the cartographic skill through the Methodological signs and symbols of SOI maps. CO4: develop the interpretation skills of SOI maps and OS sheets.
			U22DSG1A	GEOGRAPHY OF RESOURCES	CO1: Know the difference of Renewable & Non- Renewable resources – and its Significance. CO2: Analyse the population Distribution and Density and understand Problems of Population. CO3: Understand the types of Fishing and distribution and identify the Forests and its conservation to know about the Cattle and Sheep rearing CO4: Know about the Agriculture – Type and Major crops CO5: identify the Mineral Resources and Energy Resource. Know about the various industries and its Distribution.
			U22DSG1B	AGRICULTURAL GEOGRAPHY	CO1: 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
			U22SEG2	Theory - PRINCIPLES OF GIS & GNSS	CO1: To know about the Concepts: Definition and History of GIS CO2: Learn and practice the Raster and Vector Data Analysis CO3: Examine the Vector Data, Spatial Data Accuracy, Vector data Sources. CO4: Identify the Historical Development of GPS System. CO5: To analyze the Integration techniques - Hardware and Software Platforms
			U22SEG3P	Practical - FIELD SURVEY AND MAPPING ANALYSIS	CO1: Understand the Ethics, Framing Research Questions, Objectives CO2: Examine the Selection of field and identification of the topic CO3: Apply the knowledge to Field Techniques CO4: Understand to measure the Qualitative / Quantitative Data Analysis

Course Code	Course Name	Course Outcomes
U22CG13	GEOGRAPHY OF SETTLEMENTS	CO1: Nature and scope : to understand the location size and growth has related with nature of Settlements.
		CO2: Rural settlements : space bound social organization varying from an isolated farmstead
		CO3: Urban settlements: to study the social organization has much greater scope
		CO4: Urban morphology : examine the concerned with form, structure and functions of an area
		CO5:Understand the demographic pattern and problems of urban areas
U22CG14	PRINCIPLES OF REMOTE SENSING	CO1: Acquisition of information about an object- area without making physical contact by air crafts and satellite.
		CO2: To understand the Elements of remote sensing system , sensing of emitted energy and the use of non- imaging sensors
		CO3: Examine the air photos through sophisticated methods
		CO4: Refers to the structure of the instruments has mounted
		CO5:To manage the spatial data with suitable applications
U22CG15P	Practical VI - AERIAL PHOTO & SATELLITE IMAGE INTERPRETATION	CO1: Understand the Elements of aerial photographs – Determination of scale, distance, height and area.
		CO2: Understand different analysis of Interpretation of single vertical photograph – Interpretation of stereo pair
		CO3: To know the techniques of Marginal information of satellite images –Elements of image Interpretation.
		CO4: To identify the Interpretation of resources and weather satellite images – image classification
U22DSG2A	GEOGRAPHY OF TAMILNADU	CO1: Identify the location, Relief, Drainage, Climate, Types of Soils and Forest of Tamil Nadu
		CO2: Examine the distribution of various forests, livestock and fisheries in Tamil Nadu
		CO3: Analyse the irrigation and agricultural resources in Tamil Nadu
		CO4: Knowledge about the different types mineral and industrial resources in Tamil Nadu
		CO5: Understand the growth, distribution of population of Tamil Nadu and the various kinds of transportation like land ,water and air and trade
U22DSG2B	BIOGEOGRAPHY	CO1: Understand the Definition Scope, Origin of Flora and Fauna-Distribution of plant life on the Earth.
		CO2: To understand The Basic principles, food chain and concept of Biome, Eco – tone and community.
		CO3: Analysis Biodiversity, Habitat decay, need for conservation and process of Desertification and its Consequences.
		CO4: Understand the World Biome Topical forest and grasslands, Temperate grassland and Tropical Desert
		CO5: understand the Ecological and Environmental Managements
U22DSG3A	GEOGRAPHY OF ASIA	CO1: To know the idea about the Physical Landscape: Location-importance of its location - Asia is a continent of contrast – Political divisions - Physiographic division
		CO2: To understand Soil: types, characteristics and problems – Agricultural determinants - Major crops and distribution - Asia
		CO3: To explain the Minerals and Industries, major industries and their location - problems and future.
		CO4: Acquire more knowledge about the Transport and Trade
U22DSG3B	GEOGRAPHY OF TRAVEL AND TOURISM	CO1: Know the idea about the Travel – Motivation - Meaning and Nature of Tourism - Types of Tourism.
		CO2: Understand the Elements of Tourism – Attraction, Accessibility, Accommodation and Amenities
		CO3: Acquire more knowledge about the Travel formalities – Tour Itinerary Travel Agencies – Travel Abroad Facilities – Visa, Passport, Bank restrictions – Traveller's Cheques.
		CO4: Explain the Role of Transport in Tourism Development.
		CO5: observe and recognize Tourism Potentials of India - special reference to India- The role of India Tourism Development Corporation (ITDC) – Indian Tourism Development Corporation and World Tourism Organization (WTO)
U22GEG1A	GEOGRAPHY OF HEALTH	CO1: Understand the nature scope and development of health geography.
		CO2: Find out the Geographical Background of Diseases.
		CO3: to identify the health risk and exposure
		CO4: Understand classification of diseases. Create Awareness of malnutrition and hygiene.
		CO5: Understand the Process of health care planning in India.
U22GEG1B	Disaster Management	CO1: Knowledge about the hazard, types - natural , manmade and environmental hazards
		CO2: Understand the effects of global warming and causes of cyclones, flood, drought and tsunamis
		CO3: Analyze the human impact on agriculture, consequences of deforestation and desertification
		CO4: Knowledge about the classification of pollutions- air, water and noise pollution
		CO5: Examine the awareness programmes about the disaster management
U22CN1	Basics of Food Science and Nutrition	CO1 : Understand the concepts of food, nutrition and functional foods in relation to health
		CO2 : Relate knowledge of macro and micro nutrients with health status and to identify deficiencies
		CO3 : Apply the acquired knowledge on composition and classification of foods in cookery
		CO4 : Identify the concept of processing and cooking method to conserve nutrients
		CO5 : Predict the role of foods in cookery
U22CN2P	Food Science and Nutrition Practical	CO1 : Understand safe handling, cleaning, care and use of kitchen, equipments / instruments and dining utensils
		CO2 : Demonstrate skill in different methods of food measures
		CO3 : Perform market survey of locally available food items
		CO4 : Classify food groups and perform basic nutritional assessment
		CO5 : Display knowledge and skill in Experimental cookery - Cereals, Pulses, Vegetables, Milk, Egg, Meat and Sugar, styles of table settings and napkin folds.
U22ANN1	Nutritional Biochemistry-I	CO1 : Recall the structure and properties of carbohydrates.
		CO2 : Differentiate amino acids and proteins based on structure and properties.
		CO3 : Summarize the types and physiological role of lipids.
		CO4 : Explain the activity of enzymes and co-enzymes of metabolism.
		CO5 : Discuss the interrelationship between nutrients.
U22ANN2P	NUtritional Biochemistry Practical	CO1 : Demonstrate the skills in qualitative testing of sugars
		CO2 : Exhibit skills in performing qualitative tests of protein, amino acids and minerals
		CO3 : Show dexterity in estimating the quantity of reducing sugar
		CO4 : Display skill in estimation of vitamin C in different foods using Colorimeter
		CO5 : Estimate the quantity of iron and phosphorus in foods
U22CN3	Human physiology	CO1 : Comprehend anatomy of various organs in the human system.
		CO2 : Acquire knowledge on functions of organ systems.
		CO3 : Describe the physiological processes of organ systems.
		CO4 : Appraise the functions of the reproductive system.
		CO5 : Define hormonal and nervous regulation of body functions.
U22CN4	Food Standards and Quality Control	CO1 : State the role of quality in food production
		CO2 : Classify different types of food adulterants
		CO3 : Distinguish food safety regulations in India and other countries
		CO4 : Describe the process involved in safe handling of food and production of quality food products
		CO5 : Explain the national and international standards involved in food quality control
U22ANN3	Nutritional Biochemistry-II	CO1 : Describe the various metabolic pathways of carbohydrates.
		CO2 : Differentiate the types of metabolic reactions of amino acids.
		CO3 : Define the metabolic end products of lipids.
		CO4 : Explain the biological oxidation process.
		CO5 : Summarize the metabolic pathways of different nutrients.
U22CN5	Food Production and Service	CO1 : Apply skills in pre-preparation and standardization of recipes.
		CO2 : Compare the methods of cooking related to Indian cookery.
		CO3 : Demonstrate soups, sauces and salad preparations.
		CO4 : Calculate Food Cost And Minimise Food Loss.
		CO5 : Apply Knowledge Of Equipment In Food Preparation And Service.
U22NMN1	Food Preservation	CO1 : Distinguish various methods of food preservation.
		CO2 : Explain the FPO specifications of jams, jellies and marmalades.
		CO3 : Demonstrate preparations of squashes and syrups.
		CO4 : Apply the acquired knowledge while preparing jams and jellies.
		CO5 : Develop value added food products.
U22CN6P	Food Production and Preservation Practical	CO1 : Apply principles of cooking to various food groups and Preservation techniques.
		CO2 : Develop skills techniques in Continental dishes and Indian dishes
		CO3 : Display the acquired skills in food preparation and service.
		CO4 : Develop skills and techniques in Preparation of Tandoor and its related products
		CO5 : Develop skills and techniques in Preparation of International cuisine.
U22CN7	Food Preservation	CO1 : Relate the need, principles and method of preserving foods.
		CO2 : Differentiate the various physical methods of preservation using temperature variations and irradiation.
		CO3 : Identify and describe the chemical methods of food preservation.
		CO4 : Associate the use of food additives with food preservation.
		CO5 : Demonstrate skills in the subjective and objective methods of sensory evaluation of foods.
U22NMN2	Health and Hygiene	CO1 : Discuss about the role of international organizations working towards public health
		CO2 : Apply healthy eating habits in day to day life
		CO3 : Describe the functions, requirements and sources of macro and micro nutrients
		CO4 : Define the objectives of health education
		CO5 : Explain safe handling of food and water.
U22SEN1	Interior Decoration	CO1 : Recognize elements and principles of art and design
		CO2 : Appreciate role of design in interior decoration
		CO3 : Identify Colour concepts in all art formsm.
		CO4 : Apply principles of lighting in interiors.
		CO5 : Integrate and apply principles of design in home décor
U22CN8	LifeSpan Development	CO1 : Apply the acquired knowledge on pregnancy in real life situations.
		CO2 : Explain the intricacies of raising a child.
		CO3 : Summarize the turbulent stage of adolescence.
		CO4 : Identify the physical and psychological changes in elderly persons.
		CO5 : Discuss the relevance of inclusive education for children with special needs.
		CO1 : Interpret the principles of meal planning to suit different income levels
		CO2 : Associate nutritional requirements with various stages of pregnancy and lactation

13	UHSE	B.Sc Home Science	U22CN9	Nutrition Through Life cycle	CO3 : Analyze the advantages and disadvantages of breastfeeding over bottle feeding;
					Discuss about supplementary foods for infants and preschoolers
					CO4 : Identify nutritional requirements for school-going children and adolescents based on growth, development and deficiencies
					CO5 : Predict the special nutritional needs and nutritional deficiencies in geriatrics
			U22CN10	Therapeutic Nutrition	CO1 : Summarize the concepts and principles of diet therapy and the role of a dietitian.
					CO2 : Apply the principles of dietetics to plan therapeutic diets for febrile conditions and gastrointestinal disorders.
					CO3 : Assess the grades of obesity, underweight and food allergies; Recommend customized dietary modifications.
					CO4 : Describe the symptoms, diagnostic tests and complications for dietary management of diabetes mellitus, cardiovascular diseases and hypertension using diet planning tools.
					CO5: Classify the diseases of liver and urinary system based on causes and symptoms and plan diet therapy.
			U22CN11P	Dietetics Practical	CO1 : Apply knowledge to plan and construct a menu for a balanced meal for families in different income levels.
					CO2 : Apply knowledge to plan, calculate, prepare, serve and evaluate diets for different age groups.
					CO3 : Demonstrate skills in planning, preparing, serving and evaluation of modified diets.
					CO4 : Demonstrate skills in planning, preparing, serving and evaluation of diets for deficiency conditions.
					CO5 : Demonstrate skills in planning, preparing, serving and evaluation of diets for different therapeutic conditions.
			U22DSN1A	Community Nutrition	CO1 : Assess the nutritional status of individuals of different age groups.
					CO2 : Summarize the nutritional problems of the Indian Community – causes, prevention and treatment.
					CO3 : Describe the National schemes and programmes to combat malnutrition.
					CO4 : Explain the hazards of food adulteration and water pollution and suggest methods to alleviate the hazards.
					CO5 : Discuss the aims of National Policies, Plan of Action and implementation of welfare schemes.
			U22DSN1B	Family Dynamics	CO1 : Summarize the types of families and different stages of family life cycle
					CO2 : Discuss the challenges faced in marital life
					CO3 : Develop positive human relationship
					CO4 : Describe the causative factors of marital disharmony
					CO5 : Define the need of premarital and marital counselling
			U22SEN1	Entrepreneurship Development	CO1 : Summarize the types and qualities of an entrepreneur.
					CO2 : Explain the procedure of starting a business.
					CO3 : Describe the role of financing institutions involved in entrepreneurship development.
					CO4 : Discuss the steps in preparation of project proposal.
					CO5 : Analyze the case histories of successful women entrepreneurs.
			U22SEN2P	Bakery	CO1 : To know the essentials of Basic bakery and confectionery knowledge
					CO2 : To identify the various commodities used in bakery and confectionery preparation
					CO3 : To illustrate the methods of cooking in bakery and confectionery
					CO4 : To differentiate the between selection and identification of raw materials used in bakery and confectionery
					CO5 : To classify the cooking equipments used in bakery and confectionery
			U22CN12	Food Service Management	CO1 : Distinguish the types of catering institutions, food service and comprehend the menu planning techniques.
					CO2 : Summarize the types of organizations and leadership techniques for effective food service management.
					CO3 : Describe the process and factors involved in personnel management.
					CO4 : Identify the order of food procurement, storage and issue; understand the maintenance of food inventory.
					CO5 : Explain the concepts of food cost in pricing of foods.
			U22CN13	Extension Education	CO1 : Summarize the objectives and principles of Home Science Extension
					CO2 : Demonstrate the principles of democratic decentralization in local governance
					CO3 : Classify extension teaching methods
					CO4 : Analyze the pros and cons of traditional and modern media of communication
					CO5 : Formulate a plan of work for the execution of an extension programme
			U22CN14	Family Resource Management	CO1 : Understand the concepts and principles of family resource management.
					CO2 : Interpret time and energy management for work simplification.
					CO3 : Analyze sources of family income and budgeting.
					CO4 : Develop skills in family savings and investments.
					CO5 : Promote positive consumer behaviour among students.
			U22CN15P	Dietetics Internship & Project	CO1 : Apply knowledge to plan and construct a menu for a balanced meal.
					CO2 : Demonstrate skills in planning, calculating nutritive value and evaluation of therapeutic diets.
					CO3 : Exhibit skills in management of a dietary department.
					CO4 : Apply computer skills to plan standard therapeutic diets for hospital kitchens.
					CO5 : Interpret nutritional status of patients, plan customized diets and conduct diet counseling.
			U22DSN2A	Fundamentals of Textiles and Clothing	CO1 : Identify the types of textile fibres based on their properties.
					CO2 : Define and classify weaves.
					CO3 : Associate the types of finishes with functional properties of fabric.
					CO4 : Identify the common types of dyeing and printing of textiles.
					CO5 : Apply the principles of clothing for various age groups; solve the problem of stains in fabric.
			U22DSN2B	Development and Welfare Programmes in India	CO1 : Discuss the ongoing rural development programmes
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			U22DSN3A	Food Packaging	CO1 : Summarize the functions and properties of food packaging
					CO2 : Compare and assess different food packaging materials
					CO3 : Distinguish various food packaging methods and performances
					CO4 : Identify suitable packaging methods and materials for different foods
					CO5 : Integrate knowledge on food laws and standards with consumer behaviour
			U22DSN3B	Food Microbiology	CO1 : Summarise the general Characteristics of microorganisms
					CO2: Identify and apply technics to control microbes
					CO3: Recognise microbial spoilage in various Foods
					CO4: Distinguish Food born infection and intoxication and apply quality control measures
					CO5: Explain the beneficial role of microbes in food
			U22GE1A	Housekeeping	CO1 : Discuss the role of housekeeping in the hotel industry.
					CO2 : Identify types of room layout and bed making procedures.
					CO3 : Demonstrate skills in cleaning techniques in housekeeping.
					CO4 : Distinguish types of linen, linen maintenance and laundry procedure.
					CO5 : Compare different soft furnishings and window treatment.
			U22GE1B	Front Office & Personnel Management	CO1 : Understand the functions of front office and duties of personnel
					CO2 : Demonstrate front office operations
					CO3 : Handle guest room occupancy and billing procedures
					CO4 : Exhibit communication skills in guest care in front office
					CO5 : Apply the knowledge on personnel management in various levels of front office
			U22CS1	Programming in C	CO1: Discuss the basic concepts of C, operators and Expressions.
					CO2: Understand the role of managing input and output operations and Control statements
					CO3: Analyze the working methodology of arrays and String functions.
					CO4: Understand the concept of user defined functions, structure and union.
					CO5: have prior knowledge about pointers in c and its working principles.
			U22CS2P	Programming in C Lab	Remember the program structure of C with its syntax and semantics
					Understand the programming principles in C (data) types, operators, branching and looping, arrays. functions, structures, pointers and files)
					Apply the programming principles learnt in real-time problems
					Analyze the various methods of solving a problem and choose the best method
					Code, debug and test the programs with appropriate
			U22ASS1	Digital Electronics	CO1: Describe the basics of Number System and Codes.
					CO2: Understand the concepts of Boolean Algebra and K-Maps.
					CO3: Analyze the purpose and applications of Combinational and Sequential Logic
					CO4: Discuss the various Combinational and Sequential Logic.
					CO5: Explain the purpose of Passive Elements.
			U22CS3P	Office Automation Lab	On completion of this course, students will
					Possess the knowledge on the basics of computers and its components
					Gain knowledge on Creating Documents, spreadsheet and presentation.
					Learn the concepts of Database and implement the Query in Database.
					Demonstrate the understanding of different automation tools.
			U22CS4	Object Orient Programming with C++	CO1: Describe the basics of Object Oriented Programming
					CO2: Understand and apply concepts of objects, arrays, functions and constructors within a class
					CO3: Demonstrate ability to implement overloading and inheritance
					CO4: Analyze and utilize the concept of Pointers, Virtual Functions and I/O Operations
					CO5: Discuss the File stream operations and Templates
			U22CS5P	Programming in C++ Lab	CO1: Describe the basics of Object Oriented Programming
					CO2: Understand and apply concepts of objects, arrays, functions and constructors within a class
					CO3: Demonstrate ability to implement overloading and inheritance
					CO4: Analyze and utilize the concept of Pointers, Virtual Functions and I/O Operations
					CO5: Discuss the File stream operations and Templates
			U22CS6	Data Structures and Algorithms	CO1: Describe the basics of Object Oriented Programming
					CO2: Understand and apply concepts of objects, arrays, functions and constructors within a class
					CO3: Demonstrate ability to implement overloading and inheritance
					CO4: Analyze and utilize the concept of Pointers, Virtual Functions and I/O Operations
					CO5: Discuss the File stream operations and Templates
			U22ASS2	Mathematical Foundations	CO1: Represent the sets, operations on sets, verifying basic law using Venn Diagrams
					CO2: Understand the relationship between sets, operations on relations, Representing the relationships with Hasse Diagrams and finding closure using Warshalls Algorithm; To have introduction to Lattices
					CO3: impart knowledge on driving Truth Tables, equivalence of formulas and Quantifiers.
					CO4: Introduce the concept of graph and basic terminologies, theorems.
					CO5: Introduce special types of Graph – Tree and basic terminologies, essential theorems on Trees.
			U22CS7	Computer System Architecture	CO1: Impart knowledge on registers, instruction, timing and control
					CO2: Understand types of languages, operators, and subroutine and to illustrate the working scenario of assembler
					CO3: Understand the instruction formats, Addressing modes, Data transfer & manipulation instructions and RISC
					CO4: Illustrate interrupt concepts and DMA
					CO5: Illustrate memory hierarchy and its working fashion

14	UCSE	B.Sc Computer Science	U22CS8	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
			U22CS9P	Visual Basic Lab	CO1:Knows the basic concept in VB Concept of resources in VB Knows Design concept. Concept of GUI based events
					CO2 :Understand the concept of DDL operations.Understand the Connection to the DATABASE.
					CO3:Concept of list Creating Menu Editor
					CO4:Concept of adding images.
					CO5 : Understand the table creation
			U22ASS3	System Software	CO1: Define System Software and Discuss about machine architectures of SIC and SIC / XE systems.
					CO2: Discuss about the Assembler basic functions, algorithms, data structures, features and various types of assemblers.
					CO3: Understanding the role of various Loaders functions and features.
					CO4: Describe the Macro Processor functions and features.
					CO5: Analyze the role of Compiler.
			U22NMS1	Information Technology	
			U22CS10	Computer Networks	CO1: Describe the basics of Computer Networks
					CO2: Analyze Physical Layer of Transmission Media
					CO3: Understanding Data Link Layer , Design Issues and Error Correction
					CO4: Analyze various Routing Algorithms and Quality of Service
					CO5: Discuss about the Transport Layer and Application Layer
			U22CS11	Database Management System	CO1: Describe the purpose of Database System, Database Architecture and basics of Relational Model.
					CO2: Understand the concepts of SQL.
					CO3: Explain the purpose of Relational Query Languages and ER Model
					CO4: Analyze the purpose of Normalization and discuss about various Normal Forms.
					CO5: Discuss about the storage and file structure, Indexing and Hashing techniques.
			U22CS12P	ORACLE Lab	
			U22ASS4	Probability & Statistics	CO1: Represent the various aggregation methods on group of numbers
					CO2: Understand the concepts of curve fitting line, curve and parabola.
					CO3: Impart knowledge on finding relationship between attributes through correlation and regression.
					CO4: Study on probability, random variables, expectations and moment generating functions
					CO5: Introduce special types of distributions – binomial, Poisson and normal.
			U22NMS2	Internet at your Finger Tips	1 Understand about IoT its Architecture and its Applications
					2 Understand basic electronics used in IoT & its role
					3 Develop applications with Cusing Arduino IDE
					4 Analyze about sensors and actuators
					5 Design IoT in real time applications using today's internet & wireless technologies
			U22SES1	Assembly Language Processor Lab	
			U22CS13	Software Engineering	CO1: Describe the basics of software engineering and plan the organizational and development process
					CO2: Analyze various software cost estimation and staffing Level estimation
					CO3: Understand the software requirement definitions
					CO4: Analyze various software design
					CO5: Discuss about the verification and validation techniques
			U22CS14	PHP and MySQL Programming	CO1: Introduce the basic concepts of Web and PHP
					CO2: Elaborate the usage of basic data types, Functions, Arrays, Strings, Date and Times, Regular Expressions of PHP
					CO3: Discuss the basic concepts of Object Oriented Programming
					CO4: Demonstrate the Database manipulation and MYSQL queries
					CO5: Describe Report Generation in PHP
			U22CS15P	PHP and MySQL Programming Lab	Learn the PHP Three tier Architecture, PHP Scripting language Condition and Branches, Loops basics of computer, Construct the structure of the required things in computer, learn how to use it.
					Develop PHP scripting Language
					Concept of Oops, SQL, MySQL Queries
					Work with Querying Database, Processing User Input, PEAR Overview, Core Components, Packages, Writing to Web databases
					Usage of Operating system in information technology which really acts as a interpreter between software and hardware.
			U22DSS1A	Computer Graphics	CO1: Describe the applications of computer graphics concepts in the development of computer games, information visualization, and business applications. and discuss the overview of Display devices, Input devices and Hard copy devices
					CO2: Analyze and provide an understanding to draw the various shapes and fill the shapes using various algorithms.
					CO3: Understanding the Attributes of Output Primitives, Inquiry Functions and Anti aliasing.
					CO4: Analyze and comprehend the two dimensional graphics and their transformations as well as other transformations.
					CO5: Discuss and provide an better analogy of mapping from a world coordinates to device coordinates, and clipping
			U22DSS1B	Artificial Intelligence	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.
			U22GES1A	Human Resourse Management	
			U22GES1B	Management Information System	
			U22SES2	Image Processing Tool-Lab	1 Understand the fundamentals of Digital Image Processing
					2 Understand the mathematical foundations for digital image representation, image cquisition, image transformation, and image enhancement
					Apply Design and Implement and get solutions for digital image processing problems
					Apply the concepts of filtering and segmentation for digital image retrieval
					Explore the concepts of Multi-resolution process and recognize the objects
			U22CS16	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.
			U22CSPW	Major Project	
			U22DSS2A	Python Programming	CO1: Describe the basic concepts of python programming, Functions and control structures.
					CO2: Understand Strings, Mutable and immutable objects.
					CO3: Understand Recursion and Files and exception.
					CO4: Discuss 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.
			U22DSS2B	Network Security	
			U22DSS3AP	Advanced Java Programming Lab	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.
			U22DSS3BP	Network Lab and Android Programming	
			U22SES3P	Data Mining Tool-Lab	
			U22CU1	PROGRAMMING IN C	CO1: Understand programming concepts by learning algorithms and flowcharts.
					CO2: Obtain knowledge about the basics of C Programming.
					CO3: Apply different operations in an array.
					CO4: Understand use of function , pointers, structures and unions
					CO5: Acquire knowledge about the basics of file handling mechanism
			U22AUU1	DISCRETE MATHEMATICS	CO1: Apply boolean algebra, the language that simplifies communication in the world of computers.
					CO2: Use formal logic, and will be able to identify interesting outcomes
					CO3: Implement mathematical structures (sets, relations, functions, sequences, series, graphs) in real world situations.
					CO4: Summarize principles of counting and will be able to grasp patterns in data that follows fixed set of rules.
					CO5: Discuss graph concepts.
			U22CU3	OBJECT ORIENTED PROGRAMMING WITH C++	CO1: Design programs with object and classes.
					CO2: Discuss the significance of object oriented concepts for modular development.
					CO3: Apply Object Oriented Programming Concepts.
					CO4: Implement the concept of polymorphism and inheritance.
					CO5: Design the application software using C++.
			U22AUU2	PROBABILITY AND STATISTICS	CO1: Acquire the basic concept of Probability and Conditional probability.
					CO2: Summarize the concept of random variables, expectations and moment generating functions.
					CO3: Discuss about some standard distributions.
					CO4: Know about correlation and regression.
					CO5: Understand the concept of testing of hypothesis.
			U22CU6	PROGRAMMING IN JAVA	CO1: Develop Java application using OOP concepts with appropriate program structure.
					CO2: Understand the concepts of polymorphism and inheritance.
					CO3: Develop packages and interfaces in a Java program.
					CO4: Implement exception handling in java
					CO5: To design an applet program using AWT.
					CO1: Summarize the impact of information and Communication Technologies, on the internet in Business Operations.
					CO2: Analyze Electronic Payment System and its environment.

			U22AUU3	E-COMMERCE	CO3: Make ethical decisions related to e-commerce based on laws, privacy, and security.
					CO4: Explain the steps, tools, and security considerations needed to start selling online.
					CO5: Discuss various types of digital documents.
			U22NMU1	COMPUTER FUNDAMENTALS	CO1: Gain knowledge on data representation and Binary codes used.
					CO2: Ability to apply Boolean algebra in circuit design.
					CO3: Acquaintance of knowledge to design combinational and sequential circuits.
					CO4: Understanding the hardware used in computer arithmetic.
					CO5: Familiarity in information storage and retrieval concepts.
			U22CU8	DATA STRUCTURES	CO1: Understand the sorting and searching algorithms.
					CO2: Apply and implement stacks and queue.
					CO3: Understand the different types of linked lists.
					CO4: Study about trees.
					CO5: Analyze different graphs. Its tree traversal.
			U22CU9	DIGITAL PRINCIPLES AND COMPUTER ORGANISATION	CO1: Define the basic components of a digital computer and their function
					CO2: Enhance knowledge on simplifying digital circuits.
					CO3: Apply Boolean algebra in design of gates.
					CO4: Simplify and solve the logical expressions.
					CO5: Design various counters.
			U22AUU4	COMPUTER BASED FINANCIAL ACCOUNTING	CO1: Knowing the fundamentals accounting.
					CO2: Preparation of journal, ledger and trial balance.
					CO3: Understanding the types of subsidiary books.
					CO4: Acquiring knowledge on Tally.
					CO5: Having clear idea of preparing final accounts of individuals.
			U22NMU2	INTERNET AND ITS APPLICATIONS	CO1: learning the basic concepts of computer network and its topologies to accesss
					CO2: introducing communication media and its principles
					CO3: Able to understand the internet accessing methodologies
					CO4: Able to realize the revolution of Internet in Mobile Devices, Clouds using mail services
					CO5: · Understand the value added networks with its working principle and applications
15	UCAE	BCA	SU53	DATABASE MANAGEMENT SYSTEMS	CO1: .Familiar with the file database management systems and its applications.
					CO2: Understand the various models like E-R model.
					CO3: Master the basics of SQL and construct queries using SQL.
					CO4: Design a relational database schema using SQL for a given problem-domain
					CO5:Understand the concept of concurrency control of database processing
			U22CU11	OPERATING SYSTEMS	CO1: Analyze the concepts of file management.
					CO2: Implement security aspects in appropriate situations.
					CO3: Discuss various other operating systems.
					CO4: Apply knowledge gained through processor scheduling to other applications.
					CO5: Analyze limitations of operating systems.
			U22CU12	COMPUTER NETWORKS	CO1: Discuss the introduction of networking concepts.
					CO2: Analyze in detail transmission media .
					CO3: Examine the layers design and CRC.
					CO4: Recognize the network routing algorithm and their effectiveness.
					CO5:Assess the internet domains and its services for any domain.
			U22CU14P	WEB PROGRAMMING WITH PHP	CO1: Understand the general concepts of PHP three-tier architecture and PHP.
					CO2: Use PHP logical and comparison operators, branching structures programs for developing(if/switch), and loop structures (for, for each, do, do/while) Programs.
					CO3: Erecit Database using MySQL for any required applications with OOPS concepts.
					CO4: Construct PHP program to connect and query database.
					CO5: Understand, develop to web application using PHP and validate them.
			EU51	PROGRAMMING WITH .NET	CO1: Knowledge about the .NET framework.
					CO2: Ability to analyze the structure of a .NET.
					CO3: Programming skills development for n-tier architecture.
					CO4: Design and develop Web based applications and its validations.
					CO5: Capable of integrating webpages with database using ADO.Net.
			U22DSU2B	ARTIFICIAL NEURAL NETWORKS	CO1: Introductions of learning and training neurons.
					CO2: Understanding various models of neural networks.
					CO3: Explore applications network models for various domains.
					CO4: Analysis of back propagation methods scrutiny.
					CO5:Implementation Applications of neural network concepts
			U22SEU3	COMPUTER GRAPHICS	CO1: Gain proficiency computer graphics and graphics devices
					CO2: Understand about the primitive drawing and its generation algorithms
					CO3: Enhance the perspective of modern computer system with modeling, analysis and interpretation of 2D and 3D visual information.
					CO4: Able to develop clipping and viewing process
					CO5: Gain the knowledge of 3D and its transformations
			U22DSU1C	SYSTEM SOFTWARE	CO1: . To know about the translation instructions and computers
					CO2: . To study about the assembler and its functions
					CO3: Understand and identify the types of loaders and their functions
					CO4: Analyse about macro processors
					CO5: Know about the working principle of compiler
			U22CU15	SOFTWARE ENGINEERING	CO1: Acquire fundamental knowledge in software engineering.
					CO2: Estimating and analysing the cost for software.
					CO3: Effectively demonstrate competence in communication, planning, analysis, design, construction, testing and deployment
					CO4: Adapt to design notations and techniques
					CO5: Incorporating .testing , verification and validation techniques into a software
			U22CU16	DATA WAREHOUSING AND MINING	CO1: Know about the data warehouse and its architecture
					CO2: Understand the data mining definitions, techniques and its challenges
					CO3: Familiar with how to find and group any data set
					CO4: Designing and using various classification methods and prediction methods
					CO5:Apply data mining techniques to all real time applications
			U22DSU2C	DIGITAL IMAGE PROCESSING	CO1: Understand the image conversion approaches.
					CO2: Build knowledge about pixels and signal passing methodologies.
					CO3: Learn to develop color image processing approaches using Image
					CO4: Understands various processing involved in analyzing digital images
					CO5: Capable of segmating image based on its boundaries.