



St. Mary's College (Autonomous)
Reaccredited with 'A+' Grade by NAAC (Cycle IV)
Thoothukudi



Criterion: I – Curricular Aspects
1.1 – Curriculum Design and Development
Year: 2018-2023



1.1.1 Courses relevant to the Regional developmental needs during the assessment period



Total number of courses: 91

Lina Rose
Principal

St. Mary's College (Autonomous)
Thoothukudi-628 001.

Programme: BBA

Semester II			
Allied IV –Business Ethics			
Code:18UBAA22	Hrs/Week:3	Hrs/Semester:45	Credits:3

Course Outcome :

CO. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand and illustrate the theoretical foundation of business ethics.	1	Un
CO-2	understand the knowledge of business and economic concepts from an ethical perspective.	3	Un
CO-3	know the importance, for business and the community, of ethical conduct.	1,3	Un
CO-4	analyse and resolve ethical issue in business.	1,3	Un, An
CO-5	perform and critically examine their own values.	1,3,5	Cr
CO-6	confidently apply systematic ethical reasoning to business dilemmas and communicate effectively in oral and written forms these.	4,6	Ev
CO-7	expose the concepts, logic and rhetorical conventions of business ethics.	7	Ap
CO-8	apply the role of government in business environment.	1	Ap

Semester I			
Allied– I		Business Environment	
Course Code:21UBAA11	Hrs/Week:4	Hrs/Semester: 60	Credits:4

Course Outcomes:

CO. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand the concept and levels of business environment	1,3	Un
CO-2	gain knowledge on business economic system	1, 4	Un, An
CO-3	have an effective knowledge on socio and cultural environment	1,3,4	Un, An
CO-4	observe knowledge on legal business environment	3	An, Cr
CO-5	inculcate the information of privatizations and impart information on private & public sector	3,7	Un
CO-6	inculcate knowledge on globalization	3, 5	Un, An

Semester II			
Allied II	Business Ethics and Corporate Social Responsibility		
Code: 21UBAA21	Hrs/Week : 4	Hrs/Sem: 60	Credits :4

Course Outcomes:

CO.No	Upon completion of this course, students will be able to	PSO Addressed	CL
CO-1	understand and illustrate the theoretical foundation of business ethics	1	Un
CO-2	understand the knowledge of business and economic concepts from an ethical perspective.	3	Un
CO-3	know the importance of ethical conduct of business environment and community development.	1,3	Un
CO-4	expose the concepts of CSR and to analyse and resolve ethical issue in business.	1,3, 7	An
CO-5	know the role of government and application of procedures to perform the business and critically examine their own values.	1,3,5	CR
CO-6	confidently apply systematic ethical reasoning to business dilemmas and communicate effectively in oral and written forms.	4,6	CR

SEMESTER VI			
Core – XII		Knowledge Management	
Course Code:21UBAC62	Hrs/Week:6	Hrs/Semester: 90	Credits:5

Course Outcomes:

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	know the value proposition used in knowledge management	2	Un, Re
CO-2	construct the knowledge strategy	2	Un, Cr
CO-3	gain knowledge of strategic dimensions	5	Un, Cr
CO-4	implementation of knowledge management system	4	Re, Cr
CO-5	describe the tools and techniques in knowledge management	1,4	Un
CO-6	evaluate the measures of knowledge management in global era	6	An, Re

Programme: B. Sc. Botany

Semester III			
Core Skilled Based– Horticulture and Plant breeding			
Code:18UBOS31	Hrs/week:4	Hrs/Semester : 60	Credit : 4

Course Outcome:

CO.No.	Upon completion of this course, students will be able to	PSO Addressed	CL
CO-1	explain the various divisions of horticulture and importance	1	Un
CO-2	design a landscape and interiorscape project	8	Re
CO-3	apply concept of horticulture science to select, manage and improve plants and their production	7	An
CO-4	demonstrate employability skills in the field of horticulture	6	Re
CO-5	equip the skill in landscaping, gardening and floriculture and enhance sense of beautification and aesthetic values	6	Un
CO-6	demonstrate an understanding of basic plant breeding facts and principles	1	Cr
CO-7	integrate knowledge from different areas into crop improvement problems	1	An
CO-8	describe various selection techniques and methods that can be used in genetic improvement of self and cross pollinated crops	6	Ap

SEMESTER - III	
Self Study (Optional)	Organic Farming
Code: 18UBOSS1	Credits: 2

Course Outcome:

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	to understand overall perspective on organic farming.	7	Un
CO-2	to realize the advantages of traditional organic farming over modern system of organic farming	4, 7	An
CO-3	to identify and formulate mechanical and biological managements of insects/pests/ weeds.	8	An
CO-4	to prioritize good water management system, fertilizer choices and application	7	Un
CO-5	to recognize the importance of composting and bio fertilizers over chemical fertilizers.	7	Ev
CO-6	to understand and implement crop protection methods of fruits and vegetables	4, 6	Un
CO-7	to follow the certification of their produce	6	Ap
CO-8	to enhance self employability and improve their economy	6	Ap

SEMESTER IV

Core Skill Based

Herbal health care products

Code: 18UBOS41

Hrs/week: 4

Hrs/Semester:60

Credit: 4

Course Outcome:

CO.No.	Upon completion of this programme, students will be able to	PSO Addressed	CL
CO-1	recognize and identify the common herbs	1	Un, An
CO-2	perceive knowledge on common herbs and use of herbal products safely.	1, 6	Re
CO-3	know how to integrate knowledge of raw materials to formulate herbal products.	3	Un
CO-4	acquire the skills to establish and maintain an effective herbal practices.	8	Cr
CO-5	formulate and use herbal remedies for personal health and wellness	4,6	Cr
CO-6	develop herbal products for a homespun herbal products business	6,8	Ap
CO-7	to create optimum awareness and interest amongst the common people about medicinal plants	6	Ap
CO-8	to develop awareness for utilization of herbal medicines for home remedies.	6,7	An

SEMESTER - III			
Skill Based Elective		Horticulture	
Course Code: 21UBOS31	Hrs/week: 2	Hrs/Semester: 30	Credits: 2

Course Outcomes:

CO. No.	Upon completion of this course, students will be able to	PSO Addressed	CL
CO-1	explain the various divisions of horticulture and importance.	1	Un
CO-2	design a landscape and interior scope project.	8	Cr
CO-3	apply the concept of horticulture science to select, manage, improve plants and their production.	6	Ap
CO-4	demonstrate employability skills in the field of horticulture	6	Ap
CO-5	equip the skill in gardening and floriculture to enhance sense of aesthetic appreciation.	6	An
CO-6	synthesize and integrate information to solve horticultural problems.	4	Ap

SEMESTER - IV**Skill Based Elective Organic Farming and Biofertilizer****Course Code: 21UBOS41****Hrs/Week 2****Hrs/Semester 30****Credits: 2****Course Outcomes:**

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand overall perspective on organic farming.	2,7	Un
CO-2	realize the advantages of traditional organic farming over modern system of farming	4 , 6	An
CO-3	identify and formulate mechanical and biological managements of insects/pests/ weeds.	4	An
CO-4	recognize the importance of composting and bio fertilizers over chemical fertilizers for soil sustainability	2,7	Ev
CO-5	understand and implement crop protection techniques of fruits and vegetables	4, 6	Un
CO-6	know the process of food certification and to assess the socioeconomic benefit of organically grown foods and enhance self employability and improve their economy	6	Ap

Programme: M.Sc Botony

Semester II			
Core V	Horticulture , Plant breeding and Evolution		
19PBOC21	Hrs/week:5	Hrs/Semester : 75	Credits : 4

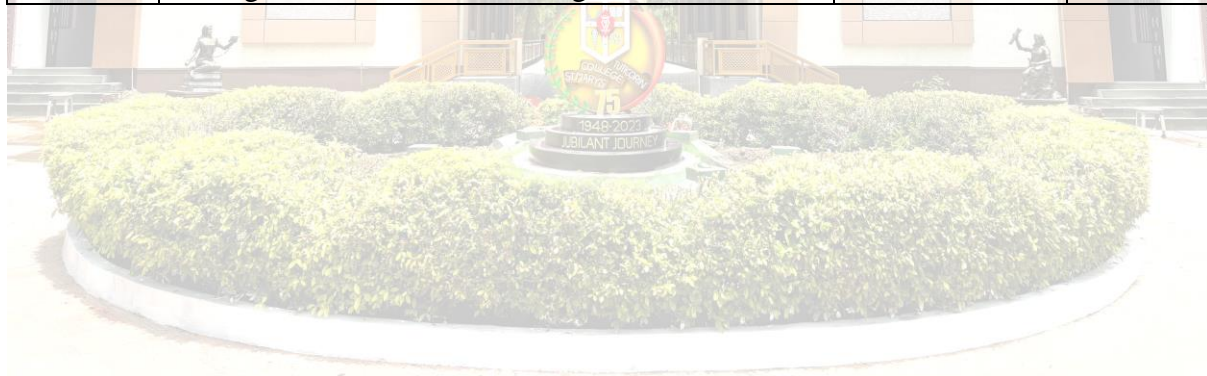
Course Outcome:

CO. No	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	use the garden implements using in horticultural techniques	4	An
CO-2	identify good and healthy plants and seeds for propagation and develop skill in propagation of useful vegetable, fruit and garden plants.	4	Ap
CO-3	understand basic concepts of gardening and able to layout different types of gardens and suggest plant choices	4	Un
CO-4	understand the use of modern technologies on raising horticultural plants for economic benefits and adapt modern methods of irrigation system in order to conserve water	4, 7	Un
CO-5	equip knowledge on disease management, improved production, storage strategies and business practices.	7	An
CO-6	describe various selection techniques and methods that can be used in genetic improvement of self and cross pollinated crops	6	Ap
CO-7	describe various molecular breeding technique and method that could be used for genetic improvements of crops	2	Ap
CO-8	understand the genetic basis of evolution and evolutionary process	1	Ap

SEMESTER - III			
Core XII		Ecology and Conservation Biology	
Course Code: 21PBOC34	Hrs / Week:5	Hrs / Semester: 75	Credits:4

Course Outcome

CO. No	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	reveal the range of plant diversity in terms of structure, function and their environmental relationships.	3	Un
CO-2	describe the climatic and edaphic factors and ecological succession	2	Un
CO-3	address the global environment crisis and the strategies applicable for environmental problem mitigation	7	Ev
CO-4	learn the global level environmental summit organized that focused for sustainable future	7	Ev
CO-5	know the importance of remote sensing in finding the current status of global health	7	Ev
CO-6	recognize the causes of environmental problems manage and conserve the biological resources	2	Un



SEMESTER IV

Core XIV Horticulture and Seed Technology

Course Code: 21PBOC42	Hrs/week:4	Hrs/Semester: 60	Credits: 4
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Course Outcome:

CO. No	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	define the term horticulture, pomology and olericulture and explain about integrated nutrient management	1	Re, Un
CO-2	illustrate different systems of planting in orchard and suggest plant choices	4	Ap
CO-3	demonstrate the methods and types of pruning and explain the basics of soil science and justify the role of soil as a medium for plant growth	4, 7	Un
CO-4	identify the diseases and pest of crops and their management	6	Ap
CO-5	acquire skills & handling operations of different equipment's in seed science laboratory	2	Ap
CO-6	learn the techniques of seed processing for quality up gradation and of storage for maintenance of seed quality.	1	Un

Programme: B. Sc. Chemistry

SEMESTER III			
Core Skill Based		Agricultural Chemistry and Water Management	
Code :18UCHS31	Hrs./Week:4	Hrs/ Sem : 60	Credits:4

Course Outcome

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO - 1	understand the importance of soil its constituents, fertility and to promote agriculture.	1, 7	Un
CO - 2	know the preparation and importance of fertilizers in agriculture	1, 7	Re
CO - 3	realize the importance of pesticides and insecticides	1, 7	Ap
CO - 4	understand the water quality standards and water quality parameters.	2, 3, 7	Un
CO - 5	aware of the harmful effects of pollutants Produce vermi compost and gobar gas	2, 3, 8	An,Cr
CO - 6	understand the processes used for purification of municipal water	4	Un
CO - 7	treat waste water by using different methods	4, 7, 8	Cr
CO - 8	estimate the amount of carbonate, chloride, nitrate, phosphate, zinc and calcium present in soil.	4, 7	Ap

SEMESTER- III			
NME I		Industrial Chemistry	
Code :18UCHN31	Hrs/Week:2	Hrs/ Sem: 30	Credits:2

Course Outcome

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO - 1	understand the process of refining of petroleum and they can develop knowledge of different refining processes	2	Un
CO -2	aware of the importance as well as the impacts of residual chemicals related with petroleum industry	2, 5	Ap
CO - 3	know the adverse effects of corrosion and study the means to prevent it	1	Re
CO - 4	understand the difference and usage of paints, varnishes and lacquers	2	Un
CO - 5	know the fundamental knowledge about rubbers and fibres.	2, 5	Re
CO - 6	understand and apply the various processing and manufacturing techniques of rayons, nylons and polyesters	2, 5	Un
CO - 7	know the chemistry of oils, fats and waxes and their manufacturing process	1, 2	Re
CO - 8	know the government regulations required for the usage of food additives in food products.	5	Re

SEMESTER- IV**NME II****Everyday Chemistry****Code :18UCHN41****Hrs./Week: 2****Hrs/ Sem: 30****Credits: 2****Course Outcome**

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO - 1	differentiate between hard and soft water in terms of origin and content	2	Ap
CO - 2	analyse samples of water to assess their suitability for drinking	5	An
CO - 3	know the importance of some common drugs	5	Un
CO - 4	understand the chemistry behind mouth washes, antacids, analgesics, antipyretics, sedatives and hypnotics	2, 5	Un
CO - 5	correlate the importance of colloids in day to day life	1	Cr
CO - 6	know the preparation of some special milks		Re
CO - 7	understand the basic principles behind the preparation of some useful compounds	1	Un
CO - 8	knowledge on the preparation of commercial products such as candle, Tooth paste, Blackboard chalk, Moth balls, Cleaning powder, Face powder, Lipstick and Eyetex	2, 7	Cr

SEMESTER- III**Skill Based Elective****Agricultural Chemistry****Course Code : 21UCHS31****Hrs/Week : 2****Hrs/ Sem : 30****Credits : 2****Course Outcome:**

CO No.	Upon completion of this course, students should be able to	PSO addressed	CL
CO- 1	identify the importance of soil constituents and have an overview of the macro and micronutrients to promote agriculture.	1, 7	Re
CO- 2	compare the preparation and importance of chemical fertilizers and biofertilisers in agriculture	1, 7	Un
CO-3	aware of eco friendly vermi compost and gobar gas	2, 3	An,Cr
CO- 4	realize the importance of pesticides and rationalise their environmental hazards	1, 7	Ap
CO-5	understand the water quality standards and water quality parameters and analyse the case studies of heavy metal pollution like Hg, As, and Cd.	1,2,7	Un
CO-6	understand the processes used for purification of municipal water and treat waste water by using different methods	4,7	Un,Cr

SEMESTER III

Part III Skill -based Elective Dairy Chemistry

Course Code :21UCHS32

Hrs/Week : 2

Hrs/ Sem : 30

Credits : 2

Course Outcome:

CO. No.	Upon completion of this course, students should be able to	PSO addressed	CL
CO - 1	know the quality parameters of milk	1,5	Re
CO - 2	categorize the types of different types of milk processing techniques	1, 3	An
CO - 3	understand the theory behind non fermented milks	1, 2	Un
CO - 4	determine the different constituents in milk	2, 4	Ap
CO - 5	estimate fat and solids in milk	5	Ap
CO - 6	assess the properties of different milk products	1 , 7	Ev



SEMESTER-III			
NME I		Everyday Chemistry	
Course Code : 21UCHN31	Hrs/Week:2	Hrs/ Sem: 30	Credits:2

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO - 1	interpret the biological importance of water and relate the ill effects of water borne diseases and prevention	1, 5	Un, Ap
CO - 2	describe the ignition temperature and flash point of fuels.	1,4,5	Re
CO - 3	identify the characteristics of solid liquid and gaseous fuels.	1	Re
CO - 4	recall the fundamental knowledge about constituents of paints and varnishes and their functions and predict fluorescent paints (traffic signal) and fire retardant paints.	2, 5	Re, Ap
CO - 5	explain the recovery of alcohol from molasses and sequence the chemistry of manufacture of paper.	2, 4, 5	Un, Re
CO - 6	describe the preparation and uses of Candle, Tooth Powder, Liquid blue, Black board chalk, Moth balls soap, shampoo, lipstick	1, 4,5	Re

SEMESTER- IV			
NME II		Industrial Chemistry	
Course Code :21UCHN41	Hrs/Week:2	Hrs/ Sem: 30	Credits:2

Course Outcome:

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	recall the composition of petroleum and refining of petroleum and explain the octane number and cetane number.	1	Re, UnUn
CO-2	outline the manufacture of rubber and Gutta-percha. recall the importance of reclaimed rubber and foam rubber.	1,5	UnAn
CO-3	analyze fats and oils.	5, 8	An
CO-4	interpret the knowledge about saponification value and RM value.	5	Un
CO-5	explain the characteristics of food colorants and categorize the artificial and natural food colorants.	6, 5, 8	Un,An
CO-6	summarize the knowledge of PFA, FPO, FDA, drug license and relate essential commodities act, consumer protection act, AGMARK.	2,5	Un, Ap

Programme: M.Sc. Chemistry

SEMESTER - II			
Elective I A		Energy and Environmental Chemistry	
19PENC11	Hrs / Week: 6	Hrs / Semester: 90	Credits: 4

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO - 1	compare heterogeneous liquid- liquid and heterogeneous solid- liquid reactions	2	An
CO - 2	distinguish between renewable and non- renewable energy resources.	5,6	An
CO - 3	explain the construction, working and applications of primary and secondary batteries.	4,8	Ap
CO - 4	classify and compare the fuels based on their appearance such as solid, liquid and gas.	7	Cr
CO - 5	demonstrate the Orsat process for flue gas analysis.	8	Ap
CO - 6	identify a catalyst used in fine chemical synthesis.	4,6	Un
CO - 7	sketch the natural cycles of environment such as the hydrological, oxygen and nitrogen cycles.	6	Cr
CO - 8	differentiate chemical and photochemical reactions occurs in atmosphere.	1,5	An

Semester III			
Elective III		B. Chemical Instrumentation	
Course Code:21PCHE32	Hrs/Week:4	Hrs/Sem:60	Credits:4

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO1	demonstrate automatic operation and computer control	1,5	Ap
CO2	precise control of current and voltage.	6,8	Ap
CO3	differentiate modulation and demodulation	5	An
CO4	point out limitation on amplifier performance	1	Cr
CO5	predict binary logic concepts, logic gates and multi-vibrators	7	Un
CO6	distinguish visual, filter and spectrophotometers. interpret the optimal value of adjustable parameters	7,8	Ap



Semester III	
Self-Study Course – Course on Competitive Exams	
Code: 21PCHSS31	Credits: 2

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO 1	solve real life problems requiring interpretation and comparison of various representations of ratios	2	Ap
CO 2	distinguish between proportional and non-proportional situations and when appropriate apply proportional reasoning	1, 2	An
CO 3	solve problems applying probabilistic reasoning to make decisions	2	Ap
CO 4	evaluate claims based on empirical, theoretical and subjective probabilities	1, 4	Re
CO 5	solve problems using high speed mental calculations	7	Ap
CO 6	understand the basic concepts of logical reasoning skills	1, 2	Un

Programme: B.Com

SEMESTER –III			
Part III	Core-VI	Modern Banking	
Code:18UCOC32	Hrs/Week: 6	Hrs/Sem: 90	Credits : 4

Course outcome:

CO. No.	Upon completion of this course, students will be able to:	PSO addressed	Cognitive Level
CO-1	know about banker, customer relationship.	1,2,3	Un
CO-2	understand the various types and features of negotiable instruments like promissory note, bill of exchange and cheque.	1,2,3	Un
CO-3	know the constitution, management and functions of RBI and commercial banks.	1,2,5	Ev
CO-4	understand the present banking system of e-banking, its' merits and constraints.	1,2,5,6	An
CO-5	understand the duties, responsibilities and negligence of collecting banker.	1,2	Ev
CO-6	know about the pros and cons of e-banking.	1,8	An
CO-7	understand e- banking transactions.	1,8	An
CO-8	understand the mode of operation of mobile banking.	1,2,5	Ev

SEMESTER –III			
Part III	Core IX	Modern Banking	
Course Code: 21UCOC52	Hrs/Week: 5	Hrs/Sem: 90	Credits : 4

Course Outcomes:

CO. No.	Upon completion of this course, students will be able to:	PSO addressed	Cognitive Level
CO-1	discuss the constitution, management and functions of RBI and commercial banks.	1,2,3	Un
CO- 2	know about banker, customer relationship	1,2,3	Un
CO-3	assess the duties, responsibilities of and statutory protection to paying and collecting banker.	1,2,5	Ev
CO-4	demonstrate and explain the usage of technology in banking	1,2	Ev
CO-5	examine the uses of Automated Teller Machine, Point of Sale and Cash Deposit Machine.	1,8	Ap
CO-6	assess the mode of operation of mobile banking.	1,2,5	Ev



Programme: B.Com – Batch II

SEMESTER –III			
Part III	Core-VI	Modern Banking	
Code:18UCOC32	Hrs/Week: 6	Hrs/Sem: 90	Credits : 4

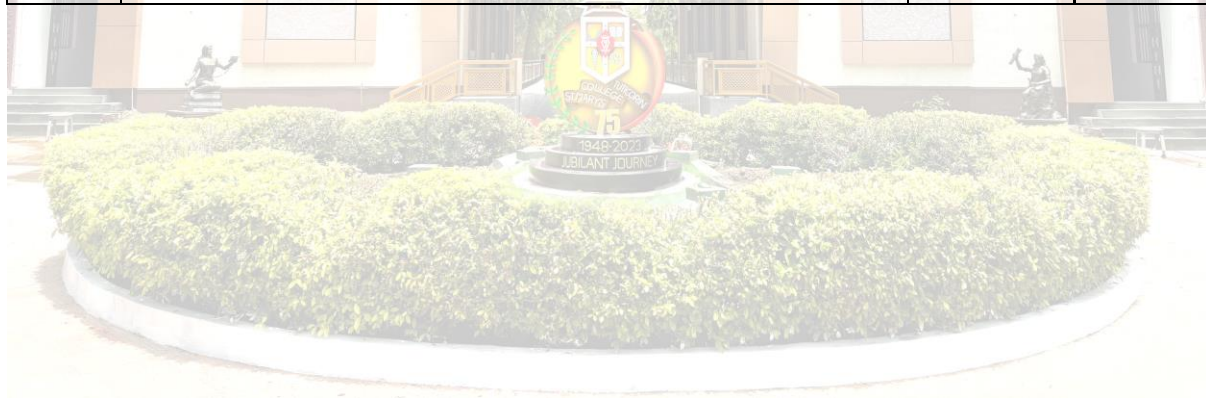
Course outcome:

CO. No.	Upon completion of this course, students will be able to:	PSO addressed	Cognitive Level
CO-1	know about banker, customer relationship.	1,2,3	Un
CO-2	understand the various types and features of negotiable instruments like promissory note, bill of exchange and cheque.	1,2,3	Un
CO-3	know the constitution, management and functions of RBI and commercial banks.	1,2,5	Ev
CO-4	understand the present banking system of e-banking, its' merits and constraints.	1,2,5,6	An
CO-5	understand the duties, responsibilities and negligence of collecting banker.	1,2	Ev
CO-6	know about the pros and cons of e-banking.	1,8	An
CO-7	understand e- banking transactions.	1,8	An
CO-8	understand the mode of operation of mobile banking.	1,2,5	Ev

SEMESTER –III			
Part III	Core IX	Modern Banking	
Course Code: 21UCOC52	Hrs/Week: 5	Hrs/Sem: 90	Credits : 4

Course Outcomes:

CO. No.	Upon completion of this course, students will be able to:	PSO addressed	Cognitive Level
CO-1	discuss the constitution, management and functions of RBI and commercial banks.	1,2,3	Un
CO- 2	know about banker, customer relationship	1,2,3	Un
CO-3	assess the duties, responsibilities of and statutory protection to paying and collecting banker.	1,2,5	Ev
CO-4	demonstrate and explain the usage of technology in banking	1,2	Ev
CO-5	examine the uses of Automated Teller Machine, Point of Sale and Cash Deposit Machine.	1,8	Ap
CO-6	assess the mode of operation of mobile banking.	1,2,5	Ev



Programme: B.Com – Batch III

SEMESTER –III			
Part III	Core-VI	Modern Banking	
Code:18UCOC32	Hrs/Week: 6	Hrs/Sem: 90	Credits : 4

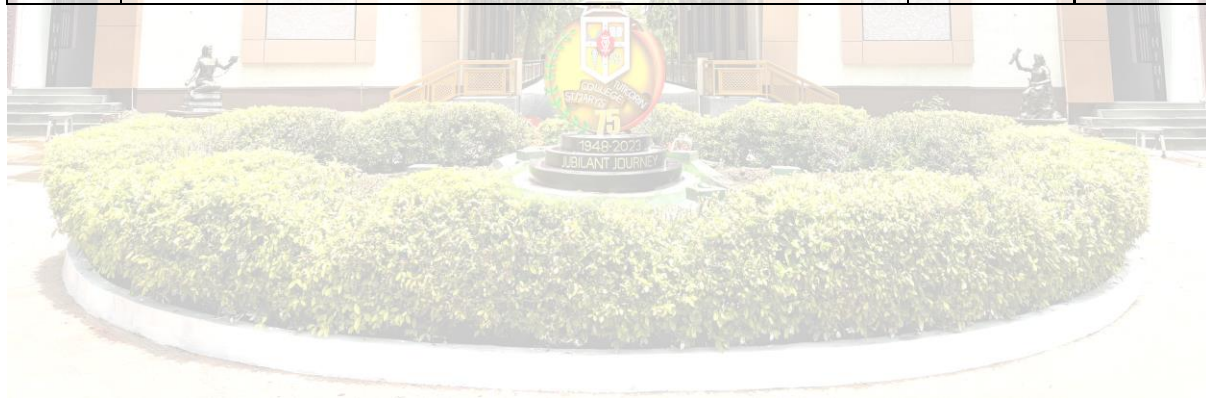
Course outcome:

CO. No.	Upon completion of this course, students will be able to:	PSO addressed	Cognitive Level
CO-1	know about banker, customer relationship.	1,2,3	Un
CO-2	understand the various types and features of negotiable instruments like promissory note, bill of exchange and cheque.	1,2,3	Un
CO-3	know the constitution, management and functions of RBI and commercial banks.	1,2,5	Ev
CO-4	understand the present banking system of e-banking, its' merits and constraints.	1,2,5,6	An
CO-5	understand the duties, responsibilities and negligence of collecting banker.	1,2	Ev
CO-6	know about the pros and cons of e-banking.	1,8	An
CO-7	understand e- banking transactions.	1,8	An
CO-8	understand the mode of operation of mobile banking.	1,2,5	Ev

SEMESTER –III			
Part III	Core IX	Modern Banking	
Course Code: 21UCOC52	Hrs/Week: 5	Hrs/Sem: 90	Credits : 4

Course Outcomes:

CO. No.	Upon completion of this course, students will be able to:	PSO addressed	Cognitive Level
CO-1	discuss the constitution, management and functions of RBI and commercial banks.	1,2,3	Un
CO- 2	know about banker, customer relationship	1,2,3	Un
CO-3	assess the duties, responsibilities of and statutory protection to paying and collecting banker.	1,2,5	Ev
CO-4	demonstrate and explain the usage of technology in banking	1,2	Ev
CO-5	examine the uses of Automated Teller Machine, Point of Sale and Cash Deposit Machine.	1,8	Ap
CO-6	assess the mode of operation of mobile banking.	1,2,5	Ev

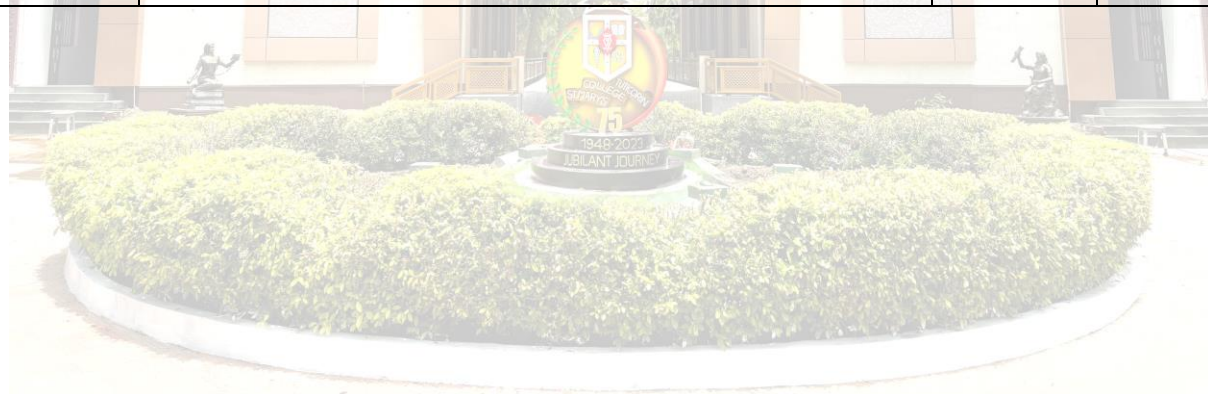


Programme: B. Com (Corporate)

SEMESTER –V			
Part III	Core Elective	Corporate Compliance Management	
Course Code:21UCCE51	Hrs/Week: 5	Hrs/Sem: 60	Credits : 4

Course Outcome :

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	study the value in shaping Corporate Compliance	1,2	Un
CO-2	impart with the knowledge of Corporate Policies and Disclosures	2,3	Un
CO-3	develop the operational values and vision to the students	2,4	Un
CO-4	learn the duties & responsibilities of Corporate Secretary in Corporate Compliance Management	5,8	An
CO-5	understand the key elements to change in corporate Compliance	1,3,4	Un
CO-6	familiarize the students on different models of corporate Risk Management	1,5,7	Un



Programme: M.Com

SEMESTER –II			
Elective I		B. Green Marketing	
Code: 19PCOE21	Hrs/Week: 4	Hrs/Sem: 60	Credits : 3

Course Outcome:

Co.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand the concept of Green market and Green products.	1,3	Un
CO-2	have a broader understating of Green Marketing and its significance.	2,4	An
CO-3	learn the factors that affect purchase decision of consumers.	3,6	Un
CO-4	learn the laws that promote Green Marketing.	1,8	Ev
CO-5	manage e waste.	1,8	Ap
CO-6	useEco friendly products.	4,6	Un
CO-7	initiate adoption of green initiatives.	5,7	Ap
CO-8	understand the green environment policies.	1,7	An

SEMESTER – III			
Elective II		B Tourism Management	
Code: 19PCOE31	Hrs/Week: 4	Hrs/Sem: 60	Credits : 3

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	Cognitive Level
CO – 1	understand the importance of tourism.	1,3,6	Un
CO – 2	analyse the planning process of tourism.	1,8	An
CO - 3	understand staffing in tourism organization.	1,4	Un
CO-4	evaluate the leadership and communication in tourism organization.	1,8	Ev
CO-5	understand the functions of national tourist organization.	1,3,8	Un
CO - 6	evaluate the accommodation management.	1,8	Ev
CO – 7	understand the setting up of travel agency.	1,8	Un
CO – 8	know about the tour operators in India.	1,8	Un

SEMESTER –I**Core IV Entrepreneurial Training and Development****Course Code: 21PCOC14****Hrs/Week: 6****Hrs/Sem: 90****Credits : 4****Course Outcome:**

Co. No.	Upon completion of this course, students will be able to	PSO addressed	Cognitive Level
CO-1	understand the significance of entrepreneurial skills.	1,4	Un
CO-2	know the scope for Rural Entrepreneurship	2,4	Ap
CO-3	study the concept of Women Entrepreneur	3,4,5	Ev
CO-4	know the procedure for setting up of MSME'S.	1,4	Un
CO-5	describe Project Appraisal and prepare project report	1,6,8	Ap
CO-6	identify the institutional support provided to Entrepreneurs	2,6,,8	Ev

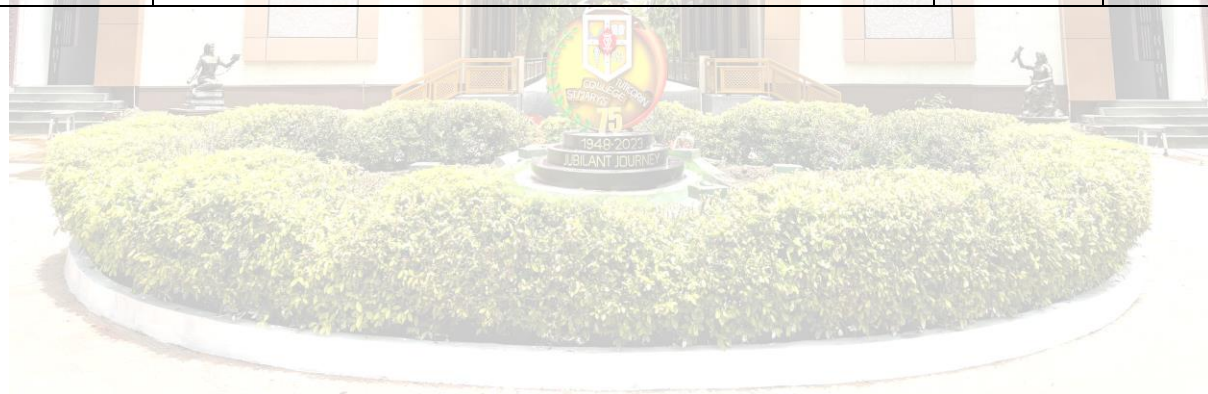


Programme: B. Sc. Computer Science

SEMESTER –III			
Part –IV Non Major Elective - Introduction to Computers			
Course Code: 21UCSN31	Hrs/week: 2	Hrs/Sem. : 30	Credits: 2

Course Outcomes:

CO No.	Upon completion of this course, students will be able to	PSOs addressed	CL
CO-1	understand the various type of computers	1	Un
CO-2	practicing with the concept number system	1	Ap
CO-3	understand the input and output devices of computer and there uses	1	Un
CO-4	explain basic concepts of computer software and the various types of software	2	Un
CO-5	classify operating system software and their functions	1	Un
CO-6	outline the concepts of computer networking and the devices used in computer networking	6	Un



Programme: B. A. Economics

Semester- III			
Core V-Tamil Nadu Economy			
Code: 18UECC31	Hours / week :6	Hrs / Sem.: 90	Credits :4

Course Outcome:

CO.No	Upon completion of this course, students will be able to	PSO addressed	CL
CO – 1	understand and realize the need to exploit and utilize through development and improvement of production	1, 2	Un
CO – 2	know the agricultural market and analyse the agricultural finance.	2	An
CO – 3	evaluate the major issues and development process in agriculture in Tamil Nadu	4	Ev
CO – 4	analyse the budgetary procedure.	6	An
CO – 5	deliver effectively the preparation of budget and how they are passed in the house. Understand the changes in size and flexibility of state and central budget along with the role played by Finance.	1,2,4	Un
CO – 6	give a basic knowledge about the industries in our economy.	7	An
CO – 7	discuss the role of government in industrial development	1,7	An
CO – 8	evaluate critically the growth process in Tamil Nadu	4	Ev

SEMESTER- VI**Core – XIV****SHIPPING MANAGEMENT****Course Code: 21UECC64****Hours / week :6****Hrs / Semester: 90****Credits :4****Course Outcomes**

CO No.	Upon completion of this course. students will be able to	PSOs addressed	CL
CO - 1	understand the economic aspects of maritime trade and shipping market.	2	Un
CO - 2	analyse the relationship between shipping and the shape and development of the world economy.	4	Ap
CO - 3	attain historic knowledge about how economic growth. international trade. and geopolitics have impact on demand for shipping services.	6	Un
CO - 4	have knowledge on the different shipping markets and the fundamental factors that shape supply and demand in these markets.	2	Un
CO - 5	analyse the market structure geographic structure. development and profitability of the different parts of the maritime industry.	9	Ap
CO - 6	calculate break-even rates for ships and calculate tonnage demand for a specific project based on given assumptions.	7	Un

Programme: M.A. Economics

Semester – I			
Elective I		Environmental Economics	
19PECE 11	Hrs/Week: 6	Hrs/ Semester: 60	Credits: 3

Course Outcome:

CO. No	Upon Completion of this course, students will be able to	PSO addressed	Cognitive Level
CO-1	apply microeconomic theory to the study of environmental issues.	6	Ap
CO-2	Identify and critically evaluate alternative environmental policy instruments.	4	Un
CO-3	develop written and verbal skills in communicating an environmental economic perspective.	5	An
CO-4	enhance the student's ability to conduct professional economic research and to develop and present professional proposals, papers, and presentations	4	Ap
CO-5	increase the student's ability to analyze environmental policies through a deeper understanding of economic behavior and incentives	8	Re
CO-6	analyze the environmental policy practices in the real world using economics methods and tools.	4	An
CO-7	demonstrate the ability to model environmental policy issues using fundamental environmental and economics skills.	6	Ap
CO-8	engage in self-directed research and learning about environmental economics.	4	An

Semester- IV			
Core XIV Demography			
19PECC42	Hrs/Week: 6	Hrs/ Semester: 90	Credits: 4

Course Outcome:

CO. No	Upon Completion of this course, students will be able to	PSO addressed	Cognitive Level
CO-1	compare the advantages and disadvantages of the different sources of demographic data	8	Ap
CO-2	present appropriate techniques to ensure comparability of the measures across population.	2	Un
CO-3	describe the basic demographic indicators and elaborate on their computation and interpretation	1	Ap
CO-4	discuss the key assumptions underlying techniques and tools.	4	Un
CO-5	describe the relations and calculate indicators in a stationary population.	8	Un
CO-6	estimate the rate of change in population.	1	Ev
CO-7	define and differentiate the demographic concepts.	7	Ap
CO-8	recognize and analyse typical demographic patterns arising from the data.	4	An

Semester – IV			
Core - XVII		ENVIRONMENTAL ECONOMICS	
Course Code: 21PECC42	Hrs/Week: 6	Hrs/ Semester: 90	Credits: 4

Course Outcome:

CO.No	Upon Completion of this course, students will be able to	PSO addressed	CL
CO - 1	apply microeconomic theory to the study of environmental issues.	4	Ap
CO - 2	identify and critically evaluate alternative environmental policy instruments.	3	Kn
CO - 3	develop written and verbal skills in communicating an environmental economic perspective.	2	An
CO - 4	enhance the student's ability to conduct professional economic research and to develop and present professional proposals, papers, and presentations	6	Ap
CO - 5	demonstrate the ability to model environmental policy issues using fundamental environmental and economics skills.	5	Kn
CO - 6	engage in self-directed research and learning about environmental economics.	2	Kn

Programme: B. A. English Literature

SEMESTER IV			
Core Skill Based		Media Writing	
Course Code: 21UENS41	Hrs/ Week: 4	Hrs/Semester: 60	Credits: 4

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO – 1	understand the ethics and techniques in media writing.	2	Un
CO – 2	update the recent trends in media writing	3	Un
CO – 3	distinguish the writing style for print media from broadcast media	3, 7	An, Ap
CO – 4	develop media ethics and contribute to social transformation	3, 5, 8	Ap, Cr
CO – 5	acquire the ability of editing, reporting and writing for media	2, 7	An, Cr
CO – 6	develop the employability skills	2	Cr

Programme: B. A. English Literature – Batch II

SEMESTER IV			
Core Skill Based		Media Writing	
Course Code: 21UENS41	Hrs/ Week: 4	Hrs/Semester: 60	Credits: 4

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO – 1	understand the ethics and techniques in media writing.	2	Un
CO – 2	update the recent trends in media writing	3	Un
CO – 3	distinguish the writing style for print media from broadcast media	3, 7	An, Ap
CO – 4	develop media ethics and contribute to social transformation	3, 5, 8	Ap, Cr
CO – 5	acquire the ability of editing, reporting and writing for media	2, 7	An, Cr
CO – 6	develop the employability skills	2	Cr

Programme: M. A. English Literature

SEMESTER – I			
Elective II	A	Eco Literature	
Code: 19PENE12	Hrs/week : 4	Hrs/Sem : 60	Credits : 3

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	Cognitive Level
CO-1	analyze eco- consciousness in literature.	3	An
CO-2	relate environment and living through literature.	3, 7	Ap
CO-3	analyse Literature in its universal context of the environment.	3, 4	An
CO-4	acquire an in-depth analysis and relationship between Literature and physical environment.	4, 8	Un
CO-5	explore the themes of Eco Literature.	7, 8	An
CO-6	acquaint themselves with the recent trends and current theories on Eco Literature.	2, 3	Un
CO-7	apply the current theories and analyse their impact on literature.	5, 7	Ap, An
CO-8	appreciate the literary value of Eco Literature.	4, 8	Re, Ap

SEMESTER – I**Elective II B Journalism and Mass Communication****Code:19PENE12****Hrs/week : 4****Hrs/Sem : 60****Credits : 3****Course Outcome:**

CO No.	Upon completion of this course, students will be able to	PSO addressed	Cognitive Level
CO-1	acquire knowledge in the theories and principles of Journalism.	5	Un
CO-2	acquire hands-on experience in reporting, editing and other aspects of journalism.	6, 8	Ap, Cr
CO-3	develop their communicative skills in print media with emphasis on writing, interviewing, observing, reacting and synthesizing.	5, 6	Ap, Cr
CO-4	acquire experience in written analysis, reporting and data collection.	5, 7	Ap, Cr
CO-5	contribute to journals and magazines.	7, 8	Cr
CO-6	understand the legal, moral and ethical responsibilities inherent in a free press.	3, 4	Un
CO-7	acquire an awareness of the world around him, both social and political.	2, 3	Un
CO-8	create and design emerging media products, including blogs, digital audio, digital video, social media, digital photography, and multimedia.	5, 6, 8	Ap, Cr

SEMESTER – I**Core V****Eco Literature****Course Code: 21PENC15****Hrs/week : 6****Hrs/Sem : 90****Credits : 4****Course Outcome:**

CO. No.	Upon completion of this course, students will be able to	PSO addressed	Cognitive Level
CO-1	understand the recent trends and theories in Ecological studies.	1	Un
CO-2	acquire an in-depth knowledge of the relationship between literature and the physical environment.	1, 2	Un
CO-3	explore the themes and relate the value of Eco Literature to recent global needs.	3, 7	Ap
CO-4	analyse literature in its universal ethical context of the environment.	4, 8	An
CO-5	analyse and evaluate any work of art in eco-conscious perspective.	8	An, Ev
CO-6	apply ecocriticism to analyse its impact on literature and the environment.	3	Ap, An

Programme: M. A. English Literature – Batch II

SEMESTER – I			
Elective II		A Eco Literature	
Code: 19PENE12	Hrs/week : 4	Hrs/Sem : 60	Credits : 3

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	Cognitive Level
CO-1	analyze eco- consciousness in literature.	3	An
CO-2	relate environment and living through literature.	3, 7	Ap
CO-3	analyse Literature in its universal context of the environment.	3, 4	An
CO-4	acquire an in-depth analysis and relationship between Literature and physical environment.	4, 8	Un
CO-5	explore the themes of Eco Literature.	7, 8	An
CO-6	acquaint themselves with the recent trends and current theories on Eco Literature.	2, 3	Un
CO-7	apply the current theories and analyse their impact on literature.	5, 7	Ap, An
CO-8	appreciate the literary value of Eco Literature.	4, 8	Re, Ap

SEMESTER – I**Elective II B Journalism and Mass Communication****Code:19PENE12****Hrs/week : 4****Hrs/Sem : 60****Credits : 3****Course Outcome:**

CO No.	Upon completion of this course, students will be able to	PSO addressed	Cognitive Level
CO-1	acquire knowledge in the theories and principles of Journalism.	5	Un
CO-2	acquire hands-on experience in reporting, editing and other aspects of journalism.	6, 8	Ap, Cr
CO-3	develop their communicative skills in print media with emphasis on writing, interviewing, observing, reacting and synthesizing.	5, 6	Ap, Cr
CO-4	acquire experience in written analysis, reporting and data collection.	5, 7	Ap, Cr
CO-5	contribute to journals and magazines.	7, 8	Cr
CO-6	understand the legal, moral and ethical responsibilities inherent in a free press.	3, 4	Un
CO-7	acquire an awareness of the world around him, both social and political.	2, 3	Un
CO-8	create and design emerging media products, including blogs, digital audio, digital video, social media, digital photography, and multimedia.	5, 6, 8	Ap, Cr

SEMESTER – I**Core V****Eco Literature****Course Code: 21PENC15****Hrs/week : 6****Hrs/Sem : 90****Credits : 4****Course Outcome:**

CO. No.	Upon completion of this course, students will be able to	PSO addressed	Cognitive Level
CO-1	understand the recent trends and theories in Ecological studies.	1	Un
CO-2	acquire an in-depth knowledge of the relationship between literature and the physical environment.	1, 2	Un
CO-3	explore the themes and relate the value of Eco Literature to recent global needs.	3, 7	Ap
CO-4	analyse literature in its universal ethical context of the environment.	4, 8	An
CO-5	analyse and evaluate any work of art in eco-conscious perspective.	8	An, Ev
CO-6	apply ecocriticism to analyse its impact on literature and the environment.	3	Ap, An

Programme: B. A. History

Semester – VI			
Core – X		History of Tamil Nadu from A.D. 1336 to 2000 A. D	
Code : 18UHIC61	Hrs / Week : 6	Hrs / Sem : 90	Credits : 4

Course Outcome:

CO. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	obtain the historical background of the Tamil Nadu State.	1	Un, Re
CO-2	estimate the legacy of various dynasties.	5	Ev
CO-3	know about the history of Tamil Nadu in British India.	1	Un, Re
CO-4	appreciate the work of various ministries after Independence.	1	Un, Re
CO-5	visit historical sites in Tamil Nadu.	3	Ap
CO-6	analyse the cultural heritage of Tamils.	4	An
CO-7	assess the legacy of architecture.	5	Ev
CO-8	compare the past and present political condition of Tamil Nadu.	4	An

Semester – VI

Core – XII History of Tamil Nadu from A.D. 1336 to 2000 C.E

Course Code : 21UHIC61	Hrs / Week : 6	Hrs / Sem : 90	Credits : 4
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Course Outcomes:

Co. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	know about the historical background of the Tamil Nadu State.	1	Un
CO-2	estimate the legacy of various dynasties.	5	Ev
CO-3	analyse the cultural heritage of Tamils.	4	An
CO-4	assess the legacy of Dravidian architecture.	5	Ev
CO-5	evaluate the course of Dravidian movement	5	Ev
CO-6	compare the past and present political condition of Tamil Nadu.	4	An



Programme: M. A. History

SEMESTER - I			
Core II Dravidian Movement up to A. D. 1969			
Sub. Code: 19PHIC12	Hrs / Week: 6	Hrs / Semester: 90	Credits: 4

Course Outcome:

C.O.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand the contribution of Tamil scholars.	1,2	Un, Re
CO-2	know the rich heritage of Tamils and promote their antiquity.	1,2	Un, Re
CO-3	analyse politics and society in Madras Presidency.	4	An
CO-4	evolve various associations of Non-Brahmin Movement.	1,2	Un, Re
CO-5	analyse the legislations passed.	4	An
CO-6	appreciate the work of Justice Party.	1,2	Un, Re
CO-7	enhance the role of EVR and Self-Respect Movement.	1,2	Un, Re
CO-8	understand the emergence of DMK.	1	Un, Re
CO-9	analyse social welfare schemes.	4	An

Semester – II			
Core – VIII		History of Tamil Nadu up to 1336 A. D.	
Sub Code : 19PHIC24	Hrs / Week : 4	Hrs / Sem : 60	Credits : 4

Course Outcome:

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand the impact of geographical features of Tamil Nadu.	1,2	Un, Re
CO-2	know about the Kalabhra interregnum.	1,2	Un, Re
CO-3	appreciate the contribution of Pallavas, Cholas and Pandyas.	1,2	Un, Re
CO-4	study the impact of Muslim invasions.	1,2	Un, Re
CO-5	appreciate Bhakti Movement.	1,2	Un, Re
CO-6	know the various styles of architecture.	1,2	Un, Re
CO-7	evaluate the rule of Madurai Sultanate.	5	Ev
CO-8	analyse the administration of various dynasties.	4	An



Semester – III**Core – XI****Epigraphy****Sub Code : 19PHIC33****Hrs / Week : 6****Hrs / Sem : 90****Credits : 4****Course Outcome:**

Co.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	identify the ancient scripts to determine history.	3	Un, Ap
CO-2	explain the skills of estampaging and learn its historical importance.	1,3	Un, Ap
CO-3	appreciate the importance of epigraphical evidence.	1,2	Un, Re
CO-4	assess the dating methods of various Eras.	4	An
CO-5	understand the sample study of selected inscriptions.	1,2	Un, Re
CO-6	highlight the significance of copper plates.	1,2	Un, Re
CO-7	understand the Genealogy of various dynasties.	1,2	Un, Re
CO – 8	make aware of Eras in historical writings.	1,2	Un, Re

Semester – IV			
Core XVI		History of Tami Nadu from 1336 to 2000 A. D	
Sub Code : 19PHIC44	Hrs / Week : 5	Hrs / Sem : 75	Credits : 4

Course Outcome:

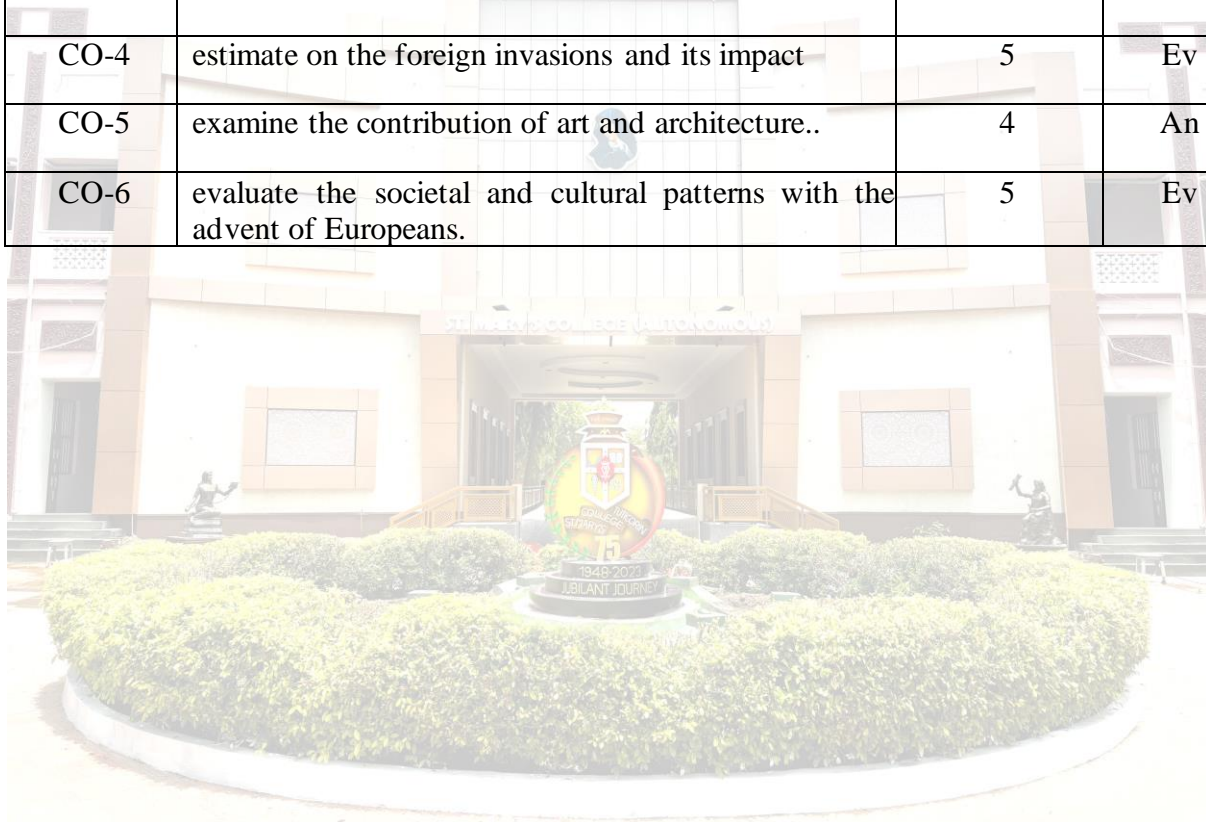
Co.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand Tamil dynasties and their legacy.	1,2	Un, Re
CO-2	evaluate their problems and interpret to solve it.	5	Ev
CO-3	assess the contribution of the Nayaks to administration and architecture.	5	Ev
CO-4	analyze the services of Christian missionaries .	4	An
CO-5	acquire the knowledge of Tamil Integration movement.	1,2	Un, Re
CO-6	make aware of the cultural diversity in Tamil Nadu.	1,2	Un, Re
CO-7	analyze the policy of the British revenue, educational and judiciary system.	4	An
CO-8	understand the impact of political parties in Tamil Nadu.	1,2	Un, Re



Semester – I			
Core – III		History of Tamil Nadu upto 1336 C.E	
Course Code : 21PHIC13	Hrs / Week : 6	Hrs / Sem : 90	Credits : 4

Course Outcome:

CO. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand regional history through the ages and take pride of rich cultural heritage of the past.	1	Un
CO-2	appreciate the intellectual ideas of the ancestors..	2	Re
CO-3	analyse the development of vernacular literature.	4	An
CO-4	estimate on the foreign invasions and its impact	5	Ev
CO-5	examine the contribution of art and architecture..	4	An
CO-6	evaluate the societal and cultural patterns with the advent of Europeans.	5	Ev



SEMESTER – II**Core VII History of Tamil Nadu from 1336 to 1806 C.E****Course Code: 21PHIC22****Hrs / Week:5****Hrs / Semester: 75****Credits:4****Course Outcome:**

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand Tamil dynasties, Tamil Integration movement and their legacy.	1	Un
CO-2	learn the impact of political parties in Tamil Nadu.	1	Un
CO-3	assess the contribution of the Nayaks to administration and architecture.	5	Ev
CO-4	evaluate their problems and interpret to solve it	5	Ev
CO-5	estimate the services of Christian missionaries.	5	Ev
CO-6	analyse the policy of the British revenue, educational and judiciary system.	4	An

Semester – II			
Core IX Intellectual History of Tamil Nadu			
Course Code : 21PHIC24	Hrs / Week : 5	Hrs / Sem : 75	Credits : 4

Course Outcome:

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand political ideas and philosophical ideas of the religions and its impact.	1	U n
CO-2	analyse cultural deep insights and its impact	4	A n
CO-3	promote social and cultural conscious and rights	3	A p
CO-4	estimate the role of intellectuals in history.	5	E v
CO-5	evaluate the intellectual ideas in different perspectives.	5	E v
CO-6	analyse of pool of ideas in various disciplines.	4	A n



Semester–III			
Core XII		History of Tamil Nadu from 1806 to 2001 C.E	
Course Code:21PHIC32	Hrs/Week:5	Hrs/Sem: 75	Credits:4

Course Outcome:

Co.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand Tamil dynasties and their legacy.	1	Un
CO-2	understand the past and present cultural diversity in Tamil Nadu.	1	Un
CO-3	assess the contribution of the Nayaks to administration and architecture.	5	Ev
CO-4	analyze the services of Christian missionaries.	4	An
CO-5	estimate the impact of political parties in Tamil Nadu.	5	Ev
CO-6	examine the policy of the British revenue, educational and judiciary system.	4	An



Semester–III			
Core – XIV		Epigraphy	
Course Code: 21PHIC34	Hrs/Week: 5	Hrs/Sem: 75	Credits:4

Course Outcome:

CO.NO	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	identify the ancient scripts to determine history.	3	Un, Ap
CO-2	learn and apply the skills of estampaging and its historical importance.	3	Ap
CO-3	appreciate the importance of epigraphical evidence.	1	Un
CO-4	assess the dating methods of various Eras.	5	Ev
CO-5	examine the sample study of selected inscriptions.	4	An
CO-6	estimate the significance of copper plates and the genealogy of various dynasties.	1,2	Un,Re

SEMESTER-IV			
Core XVIII		Dravidian Movement upto 1969 C.E	
Course Code: 21PHIC43	Hrs/Week:6	Hrs/Semester: 90	Credits:4

Course Outcome:

CO.NO.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	understand the contribution of Tamil scholars and the rich heritage of Tamils and promote their antiquity..	1	Un
CO-2	analyse politics and society in Madras Presidency.	4	An
CO-3	analyse the role of EVR and Self-Respect Movement	4	An
CO-4	examine various associations of Non-Brahmin Movement.	4	An
CO-5	analyse the legislations passed during British rule.	4	An
CO-6	estimate the work of Justice Party and its social welfare measures.	5	Ev

Programme: M.Sc Mathematics

Semester III			
Core XIV		Research Methodology	
Course Code: 21PMAC35	Hrs/ week: 4	Hrs/Semester: 60	Credits: 4

Course Outcome:

CO. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	implement Mathematical and Statistical techniques for research.	5,8	Ap
CO-2	acquire knowledge in research publication and thesis writing.	5	Un
CO-3	understand the basic aspects in research.	5	Un
CO-4	practice and improve the research presentation skills with latest tools.	5	Re
CO-5	investigate research in a more appropriate manner.	5	An
CO-6	analyse appropriate research topics.	5	An

Programme: B. Sc. Microbiology

SEMESTER - I			
Allied – I - Dairy Technology			
Code -18UMIA11	Hrs/ Week: 4	Hrs/ Sem: 60	Credits: 3

Course Outcome :

CO.No.	Upon completion of this course, students will be able to	PSO addressed	C L
CO-1	understand the process involved in production of milk and milk products	1,2	Un
CO -2	classify and explain the different types of milk products	2	Un
CO-3	understand purpose and functions of hygiene in dairy industry	2	Un
CO-4	produce flow chart for the production processes of various milk products	1, 2	Ap
CO-5	explain organization and operations involved in milk processing units	2	Co
CO-6	outline precautions when processing milk and dairy products	2	An
CO-7	organize students to processing of milk and its products	2, 3,4	Sy
CO-8	analyse the importance of quality control in dairy science	2, 3,4	An

SEMESTER-III			
NME I - Food Microbiology			
Code : 18UMIN31	Hrs/Week: 2	Hrs/Sem:30	Credit: 2

Course Outcome:

CO. N o	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	to provide knowledge on the importance of food microbiology	1,4	Un, An
CO-2	acquire a brief knowledge on food microbes and their importance.	1	Un
CO-3	acquire knowledge on various types of preservation.	6	Co
CO-4	provide information about the principles of preservation.	1,6	Un
CO-5	acquire knowledge on contamination and spoilage problems	1,6	Un
CO-6	provide interpretation of laboratory tests in the diagnosis of infectious diseases.	2	Co
CO-7	to understand the mode of transmission of food poisoning and food infections	6	Co
CO-8	provide information about the quality control principles and importance.	1,2	Un

SEMESTER- IV**Core VI - Agricultural Microbiology****Code : 18UMIC41****Hrs/week: 4****Hrs/Sem: 60****Credit:4****Course Outcome:**

CO No	Upon completion of this course, students will be able to	PSO addressed	CL
CO -1	analyze the soil microorganism and their properties.	1	An
CO- 2	determine the role of microbes on environment.	1	Ev
CO -3	distinguish positive and negative interactions	1	An
CO- 4	outline the interaction between microbes and soil.	4	Un
CO- 5	discuss about the plant diseases such as bacterial, fungal and viral disease.	6	Cr
CO- 6	summarize the causative agents and control measures of the plant disease.	6	Un
CO -7	determine the Biopesticide and Biofertilizer development	2	Ev
CO -8	evaluate the microbes used as Biopesticide and Biofertilizer	4	Ev

SEMESTER – IV			
Allied – IV – Mushroom Technology			
Code : 18UMIA41	Hrs/Week : 4	Hrs/Sem : 60	Credit : 3

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	explain about the detailed information of edible and non – edible mushroom.	4	Un
CO-2	compare the cultivation of various types of mushrooms.	5	Un
CO-3	construct the mushroom house.	6	Cr
CO-4	compare different types of mushroom cultivation techniques and pure culture preparation.	7	An
CO-5	explain about economics of mushroom cultivation and their precaution.	6	Un
CO-6	interpret about the different modes of storage of mushroom.	5	Un
CO-7	illustrate about the various nutrition content present in mushroom.	4	Un
CO-8	make use of various types of foods prepared from mushroom.	6	Ap

SEMESTER - I**Allied – I****Dairy Technology****Course Code -21UMIA11****Hrs/ Week: 4****Hrs/ Sem: 60****Credits: 3**

CO.No.	Upon completion of this course, students will be able to	PSO addressed	C L
CO-1	understand the process involved in production of milk and milk products	1,2	Un
CO-2	classify and explain the different types of milk products	2	Un
CO-3	understand purpose and functions of hygiene in dairy industry	2	Un
CO-4	explain organization and operations involved in milk processing units	2	Co
CO-5	organize students to processing of milk and its products	2 ,3,4	Un
CO-6	understand the various agents causing food infection, toxi-infection and intoxication that can be transmitted through consumption of milk and milk products which be immensely useful in preventing the food borne illnesses ensuring the safety of the consumers.	2 ,3,4	Un

Course Outcome:

SEMESTER-III			
NME I		Food Microbiology	
Course Code:21UMIN31	Hrs/Week:2	Hrs/Sem:30	Credit:2

Course Outcome:

CO. No	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	provide knowledge on the importance of Food microbiology	1,4	Un, An
CO-2	acquire brief knowledge on food microbes And their importance.	1	Un
CO-3	provide information about the principles of preservation.	1,6	Un
CO-4	acquire knowledge on contamination and Spoilage problems	1,6	Un
CO-5	understand the mode of transmission of food Poisoning and food infections	6	Co
CO-6	provide information about the quality control Principles and importance.	1,2	Un

SEMESTER – IV			
Allied – IV		Mushroom Technology	
Course Code: 21UMIA41	Hrs/Week : 4	Hrs/Sem : 60	Credit : 3

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	explain about the detailed information of edible and non – edible mushroom.	4	Un
CO-2	compare the cultivation of various types of mushrooms.	5	Un
CO-3	construct the mushroom house.	6	Cr
CO-4	compare different types of mushroom cultivation techniques and pure culture preparation.	7	An
CO-5	explain about economics of mushroom cultivation and their precaution.	6	Un
CO-6	interpret about the different modes of storage of mushroom.	5	Un



SEMESTER- VI			
Core XI Environmental and Agricultural Microbiology			
Course Code : 21UMIC63	Hrs/week: 4	Hrs/sem: 60	Credit:4

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO -1	analyze the soil microorganism an their properties.	1	An
CO- 2	determine the role of microbes on environment.	1	Ev
CO- 3	outline the interaction between microbes and soil.	4	Un
CO- 4	discuss about the types of waste and waste treatment	6	Cr
CO -5	determine the Biopesticide and Biofertilizer development	2	Ev
CO -6	evaluate the microbes used as Biopesticide and Biofertilizer	4	Ev

Programme: M.Sc Microbiology

SEMESTER-III			
Core-IX- Industrial and Pharmaceutical Microbiology			
Code:19PMIC31	Hrs/Week:5	Hrs/Sem:75	Credits:4

Course outcome:

CO No	Upon completion of this course, students will be able to	PSO addressed	CL
CO -1	revise the idea about the usage of microorganisms in the field of industrial microbiology	3	An
CO -2	analyse the knowledge of various industrial	4	Un
CO -3	knowledgeable in industrial fermentation	3	Un
CO -4	have an insight on industrial microbiological techniques	2	Re
CO -5	understands in the field of pharmaceutical microbiology	1	Un
CO-6	knowledge of basics and applied microbiological aspects of industries.	1	Un
CO-7	acquire the knowledge about production of various industrial and pharmaceutical products	4,5	Un
CO-8	know the detail knowledge about antibiotics	2,3,4	Un,Ap

SEMESTER – IV**Core – XIII- Environmental Microbiology****Code :19PMIC41****Hrs/ Week: 4****Hrs/ Sem: 60****Credit: 4****Course Outcome:**

CO.No	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	recall the ecological groups of microbes	1	Re,
CO -2	have knowledge about the interaction between microbes and organisms at other tropic level.	1,2	Un, An
CO-3	interpret the microbiology of sewage and its treatment	2,3	Co
CO-4	explain about aero microbiology and microbial ecology	2	Un, An
CO-5	acquire basic knowledge about water purification	2	Ap
CO-6	gets knowledge about diversity in anoxic ecosystem.	2,4	Co
CO-7	understanding about biodegradation.	2	Sy
CO-8	develop the application of biodegradation and bioremediation.	5	Ap, Cr

SEMESTER –III			
Core- XI Food and Dairy Microbiology			
Course Code : 21PMIC33	Hrs/Week: 4	Hrs/Sem: 60	Credits: 4

Course Outcome:

CO. No	Upon completion of this course, students will be able to	PSO addressed	CL
CO- 1	explain the about microorganisms important in food	2,5	Un
CO- 2	knowledge about the microbial contamination of food.	1,2,4	Un
CO -3	knows about the techniques in food preservation and fermented foods	3,4,6	Re
CO- 4	knowledge about beneficial and harmful aspects of microbes in dairy products	2,4,5,6	Cr
CO -5	communicate the recent techniques on good manufacturing.	2,4,5,6	Un
CO -6	grasp the quality and safety assurance in food industry and the hazard analysis and critical control point	2,3	Re, Un

SEMESTER – IV			
Core – XIII		Environmental Microbiology	
Course Code :21PMIC41	Hrs/ Week: 4	Hrs/ Sem: 60	Credit: 4

Course Outcome:

CO.No	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	have knowledge about the interaction between microbes and organisms at other tropic level.	1,2	Un, An
CO -2	interpret the microbiology of sewage and its treatment	2,3	Co
CO-3	explain about aero microbiology and microbial ecology	2	Un, An
CO-4	acquire basic knowledge about water purification	2	Ap
CO-5	gets knowledge about biogeochemical cycles	2,4	Co
CO-6	develop the application of biodegradation and bioremediation.	5	Ap, Cr



Programme: B. Sc. Physics

SEMESTER VI			
Core XII Microprocessor 8086 and Microcontroller			
Course Code : 21UPHC65	Hrs./Week : 5	Hrs./Sem : 75	Credits : 4

Course Outcome:

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO –1	conclude the architecture of 8086 microprocessor (K5)	4	Ev
CO –2	categorize addressing modes of the 8086 microprocessor (K4)	4	An
CO –3	discuss the instruction set of the 8086 microprocessor (K2)	4	Un
CO –4	recall the basic introduction to 8051 microcontroller (K1)	4	Re
CO –5	compile the assembly level programs using instruction set (K3)	4	Ap
CO –6	compare timers and counters (K4)	4	An



Programme: B. Sc. Psychology

SEMESTER - III			
Non Major Elective I - Psychology for Life			
Code : 18UPSN31	Hrs/week : 2	Hrs/Sem:30	Credits: 2

Course Outcome:

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	learn the basic concepts and principles of psychology	1	Re
CO-2	compare and learn the various branches of psychology	1	Un
CO-3	apply knowledge about concepts of memory and forgetting	1 , 4	Ap
CO-4	analyze the need of psychology in daily life	1 , 8	An
CO-5	evaluate the means of developing an understanding about human behavior	3 , 4	Ev
CO-6	create new theories and concepts of intelligence	4	Cr
CO-7	create a good understanding about psychological aptitude among students	1 , 8	Cr
CO-8	develop and create psychological interest among other major students.	8	Cr

SEMESTER IV**Non Major Elective II Self Development Skills****Code:18UPSN41 Hrs/Week:2 Hrs/Sem: 30 Credits: 2****Course Outcome:**

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	learn the basic concepts and principles of self development skills	8	Re
CO-2	compare and contrast the various skills of life management	8	Un
CO-3	apply knowledge about self enhancement in daily life	7	Ap
CO-4	analyze the need of knowledge of time and anger management in daily life	4	An
CO-5	evaluate the means of developing self awareness and motivation	4	Ev
CO-6	create new theories and concepts of self development	4	Cr
CO-7	create methods of self development.	8	Cr
CO-8	create a feeling of one with the society	8	Cr

SEMESTER - III**Non Major Elective I - Psychology for Life****Code : 21UPSN31****Hrs/week : 2****Hrs/Sem:30****Credits: 2****Course Outcome:**

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	learn the basic concepts and principles of psychology	1	Re
CO-2	compare and learn the various branches of psychology	1	Un
CO-3	apply knowledge about concepts of memory and forgetting	1, 2	Ap
CO-4	analyze the need of psychology in daily life	1, 7	An
CO-5	evaluate the means of developing an understanding about human behavior	3, 4	Ev
CO-6	create new theories and concepts of intelligence	1, 8	Cr

SEMESTER IV**Non Major Elective II****Self Development Skills****Code:21UPSN41****Hrs/Week:2****Hrs/Sem: 30****Credits: 2****Course Outcome:**

CO. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	learn the basic concepts and principles of self development skills	3	Re
CO-2	compare and contrast the various skills of life management	3, 7	Un
CO-3	apply knowledge about self enhancement in daily life	7	Ap
CO-4	analyze the need for knowledge of time and anger management in daily life	4	An
CO-5	evaluate the means of developing self awareness and motivation	4	Ev
CO-6	create new theories and concepts of self development	3, 4	Cr

Programme: M.Sc Psychology

SEMESTER IV			
Core XIII		Human Resource Management	
Code: 21PPSC41	Hrs/Week:4	Hrs/ Sem: 60	Credit: 4

Course Outcome:

CO No	Upon completion of this course, the person will be able to	PSO Addressed	CL
CO 1	learn the basic concepts of human resource management	7	Re
CO 2	gain knowledge about the various methods of handling human resources	4 & 7	Re, Un
CO 3	analyse the various causes of inter personal work issues	4, 6 & 7	An
CO 4	create new methods of treating employees	4 & 7	Un, Cr
CO 5	learn the skill of handling people from diverse environments	4	Un
CO 6	understand and analyse the basic thinking processes of people	5 & 7	Un, An

Programme: B. Sc. Zoology

SEMESTER V			
Core Integral I : Marine Biology			
Code: 18UZOI51	Hrs/Week: 4	Hrs/Sem: 60	Credits: 4

Course Outcome

CO.No	Upon completion of this course, students will be able to	PSO addressed	CL
CO - 1	classify the different ecological zones of marine environment, diversity of marine organisms and their adaptations	1,2	Un
CO - 2	explain the physical and chemical properties of sea water and their significance to marine life	1,4	Un, Ev
CO - 3	appraise the ocean production, characteristics and types of coral reefs, mangroves and estuaries	3	Ev
CO - 4	outline the formation, types and properties of the dynamics of ocean	1,2	Un
CO - 5	analyse various types of marine resources and assess the various environmental concerns related to the use and abuse of marine resources	5,6	An, Cr
CO - 6	gain specialized skills in a range of theoretical and practical applications	8,	Cr
CO - 7	develop awareness of scientific issues in marine biology within the larger social context	6	Ap, Cr
CO - 8	design and implement effective solutions to problems in marine environment	7,8	Cr

SEMESTER IV			
Skill Based Elective		B. Nutrition and Health	
Course Code : 21UZOS42	Hrs /Week : 2	Hrs /Sem : 30	Credits : 2

Course Outcomes

CO. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO- 1	describe basic concepts of nutrients and their functions	2	Re
CO -2	discuss the sources of micro and macro nutrients	2	Un
CO – 3	analyse nutritional requirements during different stages of life	2	An
CO – 4	compare the recommended dietary allowances of micro and macro nutrients	5	An
CO – 5	analyse the role of various minerals important in maintaining health	5	An
CO – 6	recommend dietary management for nutrition related disorders	6	Ev



SEMESTER VI

Core XI

Marine Biology

Course Code : 21UZOC63

Hrs / week : 4

Hrs / sem : 60

Credits : 4

Course Outcomes

CO. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO- 1	discuss the different ecological zones of marine environment, diversity of marine organisms and their adaptations	1	Un
CO -2	explain the physical and chemical properties of seawater and their significance to marine life	2	Un
CO - 3	appraise the ocean production, characteristics and types of coral reefs, mangroves and estuaries	3	An
CO - 4	examine the formation, types and properties of the dynamics of ocean	3	An
CO - 5	analyse various types of marine resources and assess the various environmental concerns related to the use and abuse of marine resources	5	An
CO - 6	design and implement effective solutions to problems in marine environment	8	Cr

Programme: M.Sc Zoology

SEMESTER – III			
Core X : Aquaculture Practices and Farm Management			
Code : 19PZOC32	Hrs / week : 6	Hrs / Sem : 90	Credits : 4

Course Outcome:

CO. No	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	design aquaculture systems	1	Cr
CO-2	develop practical skills for management of culture ponds	3	Ap
CO-3	apply techniques involved in breeding and culture of various organisms	1,2	Cr,Ap
CO-4	demonstrate competency in live feed culture and feed formulation	2,3	Un,Ev
CO-5	evaluate and manage aquaculture diseases, health and safety issues in aquaculture ventures	1,6	Un Ev
CO-6	discuss important factors for performing a sustainable aquaculture	1,3	Un, Ap
CO-7	compare the principles of genetic improvement of fish stock	1	Un
CO-8	analyse aquaculture economics and marketing strategies	1,3	An,Ap



SEMESTER IV**Core XIV : Conservation Biology****Code: 19PZOC42****Hrs / Week: 5****Hrs/Sem : 75****Credits : 4****Course Outcome:**

CO.No	Upon completion of this course, students will be able to	PSO addressed	CL
CO - 1	infer the problems of unsustainable development	1	Un
CO - 2	justify that human survival depends on developing practices that will achieve sustainable systems	3	Ev
CO - 3	explore the biological, sociological and legislative perspectives for the management of flora and fauna to conserve wildlife.	5	An
CO - 4	evaluate the importance of natural resources on conservation of biodiversity	3	Ev
CO - 5	analyse the conservation management of various resources	3	An
CO - 6	gain knowledge on values and threats of biodiversity	2	Ap
CO - 7	learn the role of various organization in conservation of biodiversity	6	Un
CO - 8	apply scientific principles and modern technologies to resolve problems in disaster management	8	Ap

SEMESTER - IV**Elective - I****A Poultry**

Code :19PZOE41	Hrs /Week: 4	Hrs/ Sem : 60	Credits :4
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Course Outcome:

CO.No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO 1	attain an insight on the present status of poultry industry	1	Un
CO 2	acquire knowledge on the technological advancements in poultry farming	2	Un
CO 3	identify the problems in handling poultry	3	Un
CO 4	analyse the management techniques and handle various situations	3	An
CO 5	able to get career choices in bird production, processing, research and business	8	Ap
CO 6	attain the skill to manage the farm in a profitable manner	6	Ap
CO 7	apply the skills to become entrepreneurs	6	Ap
CO 8	manage to get a rewarding career in poultry industry or selfemployment	8	Ap

SEMESTER – IV**Elective - I****B Ornamental Fish Culture****Code : 19PZOE41****Hrs / Week : 4****Hrs / Sem : 60****Credits : 4****Course Outcome:**

CO.No	Upon completion of this course, students will be able to	PSO addressed	CL
CO - 1	explain the construction, fabrication and accessories required for setting up an aquarium tank	2,3	Un
CO - 2	apply the knowledge and skills in aquarium management	1	Ap
CO - 3	evaluate the types and culture of live feed organisms and formulate the artificial feed	3	Ev
CO - 4	describe the factor related with taxonomy and biology of ornamental fish	3	An
CO - 5	choose the commercially important fresh water and marine ornamental fishes and their transport	8	Ev, Cr
CO - 6	analyse the different varieties of ornamental fish	2,3	An
CO - 7	acquire confidence to become an entrepreneur in ornamental fish culture	3	Un
CO - 8	develop entrepreneurial skills and make aware of National and International export earnings	2,7	Cr

SEMESTER III

Core X Aquaculture Practices and Farm Management			
Course Code: 21PZOC32	Hrs/ Week:6	Hrs/Sem:90	Credits:4

Course Outcome:

CO.No	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	explain aquaculture system methods and management of culture ponds	1,2	Un
CO-2	apply techniques involved inbreeding and culture of various organisms	3	Ap
CO-3	demonstrate live feed culture and feed formulation	3	Ap
CO-4	categorize and manage aquaculture diseases, health and safety issues for a sustainable aquaculture	4	An
CO-5	compare the principles of genetic improvement of fish stock	6	An
CO-6	develop entrepreneurial skills in aquaculture	8	Cr



Programme: MHRM

SEMESTER I			
Core V		Industrial Relations	
Code: 19PHRC15	Hrs/Week: 4	Hrs/Sem: 60	Credits: 4

Course Outcome:

CONo.	Upon completion of this course, students will be able to	PSO addressed	C L
CO-1	understand the interaction pattern among labour, management and the State.	2 ,1	Un
CO-2	have a basic knowledge of the Indian Industrial Relations System and it's distinctive features	2 ,1	Un
CO-3	understand the various approaches to Industrial Relations.	2,3	Un
CO-4	examine the concepts, functions, structures and evaluate the problems of trade union.	2	Ev
CO-5	understand the importance, types and process of collective bargaining and discuss the negotiation process during collective bargaining.	2,3	Re , An
CO-6	analyse and apply the concept, forms ,levels of WPM and evaluate the reasons for failure of WPM.	2,3	An, Ap
CO- 7	be efficient enough to handle the grievance measures according to the changing scenario of social and industrial environment.	2,3	Un, Ap
CO -8	state the causes for indiscipline and analyse the code of discipline in Industry.	2,3	Un , Ap

SEMESTER III			
Core XV		Summer Internship	
Code: 19PHRI31	Hrs/Week 8	Hrs/Sem 105	Credit: 8

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	collect data and submit a comprehensive report on the objective of their internship topic.	8	Cr
CO-2	compare their theoretical knowledge with the professional environment.	8	An
CO-3	gain exposure about industry and understand the current management practices.	8	An , Ap

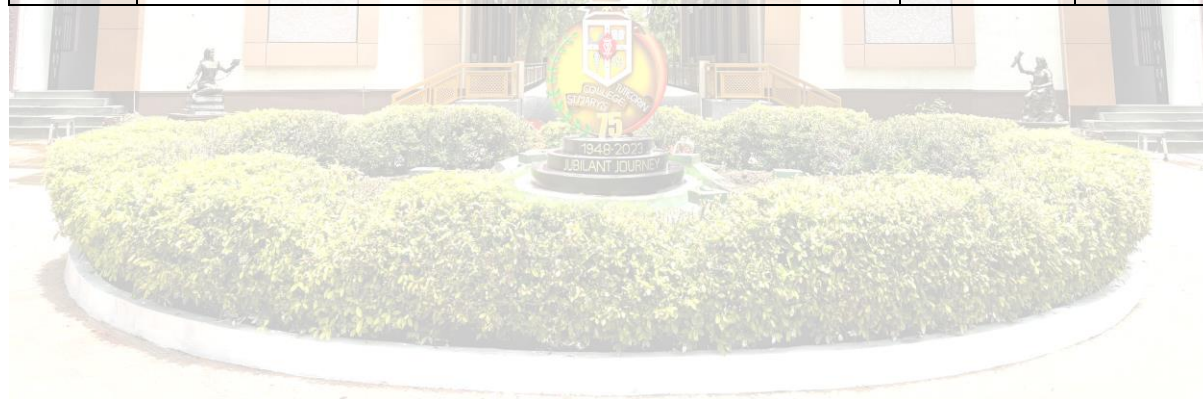


SEMESTER I**Core V****Industrial Relations****Code: 21PHRC15****Hrs/Week: 6****Hrs/Sem: 60****Credits: 4****Course Outcome:**

CO.No.	On completion of this course students will be able to	PSOs Addressed	C L
CO-1	understand the interaction pattern among labour, management and the State and have a basic knowledge of the Indian Industrial Relations System and its distinctive features.	2,1	Un
CO-2	understand the various approaches to Industrial Relations.	2,3	Un
CO-3	examine the concepts, functions, structures and evaluate the problems of trade union.	2	Ev
CO-4	understand the importance, types and process of collective bargaining and discuss the negotiation process during collective bargaining.	2,3	Re, An
CO-5	analyse and apply the concept, forms, levels of WPM and evaluate the reasons for failure of WPM.	2,3	An, Ap
CO-6	be efficient enough to handle the grievance measures according to the changing scenario of social and industrial environment.	2,3	Un, Ap

SEMESTER III**Elective II****Business Environment****Code: 21PHRE32****Hrs/Week: 4****Hrs/Sem: 60****Credits: 3****Course Outcome:**

CO.No.	On completion of this course students will be able to	PSOs Addressed	C L
CO-1	understand the Overview of Business Environment	4	Un
CO-2	gain knowledge of Business and Its Environment and the influence of the forces in the external environment.	4,6	An ,Ev
CO-3	understand the concept of Economic System and explain the Economics of development and help in preparing appropriate strategies for organisations to face the challenges.	4	Un ,Re
CO-4	understand the concept of Political Environment and gain knowledge of the technological developments and the impact of informational technology.	4	Un ,Ap
CO-5	gain knowledge of the Economic Environment	4,6	Un , An
CO-6	understand the influence of Social Environment in business.	4,6	Un ,Ap



SEMESTER III			
Core XV		Summer Internship	
Code: 21PHRI31	Hrs/Week 7	Hrs/Sem 105	Credits: 5

Course Outcome:

CO.No.	Expected Learning Outcome	PSOs Addressed	CL
	On completion of this course students will be able to		
CO-1	collect data and submit a comprehensive report on the objective of their internship topic.	8	Cr
CO-2	compare their theoretical knowledge with the professional environment.	8	An
CO-3	gain exposure about industry and understand the current management practices.	8	An , Ap



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