



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 Local developmental needs during the assessment period



Total number of courses: 76

Lina Rose

Principal

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

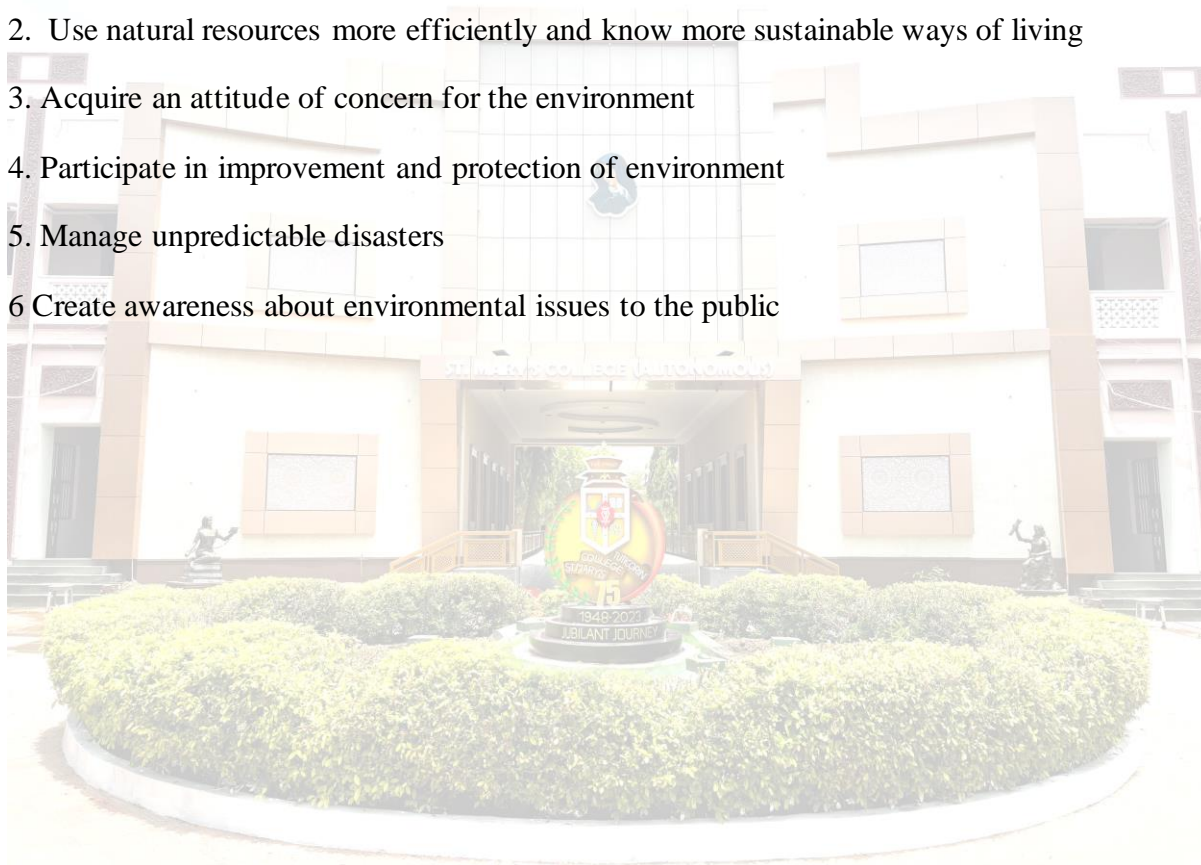
Programme: BBA

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
- 6 Create awareness about environmental issues to the public

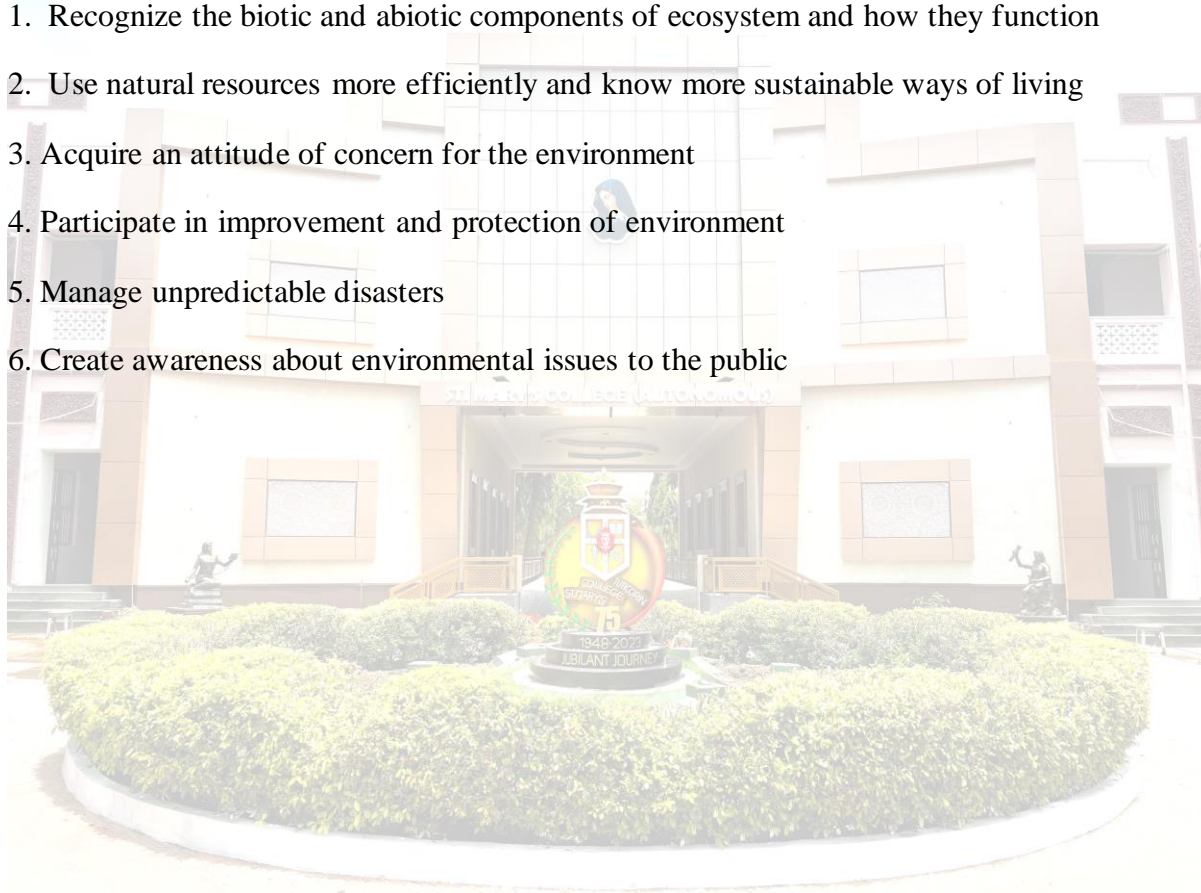


Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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SEMESTER III			
CORE SB		Logistics Management	
Course Code :21UBAS31	Hrs/Week : 4	Hrs/Sem :60	Credits :4

Course outcomes:

CO.No.	Upon completion of this courses, students will be able to	PSO addressed	CL
CO - 1	understand the concept of logistics management and its evolution	1	Un
CO – 2	impart the knowledge on logistics transportation	7	Un
CO – 3	understand the importance of logistics to the economy	2	Re
CO – 4	gain knowledge on performance measurement and logistics audit	5	Un,Cr
CO – 5	provide knowledge on types of inventory among global logistics	3, 5, 7	Cr, Re
CO – 6	know about supply chain management	2,4	Cr

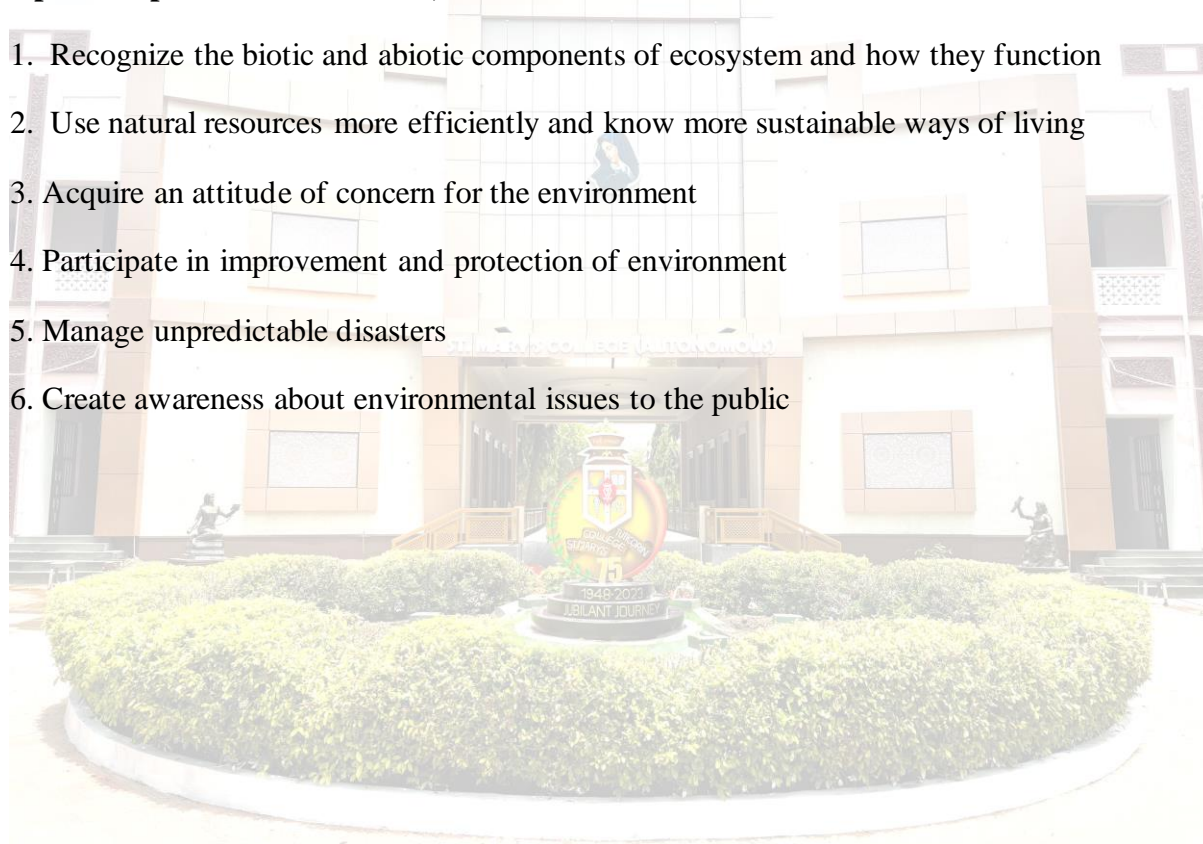
Programme: B. Sc. Botany

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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SEMESTER VI			
Core XI		Marine Botany	
Code:18UBOC62	Hrs/week: 5	Hrs/semester: 75	Credits: 4

Course Outcome

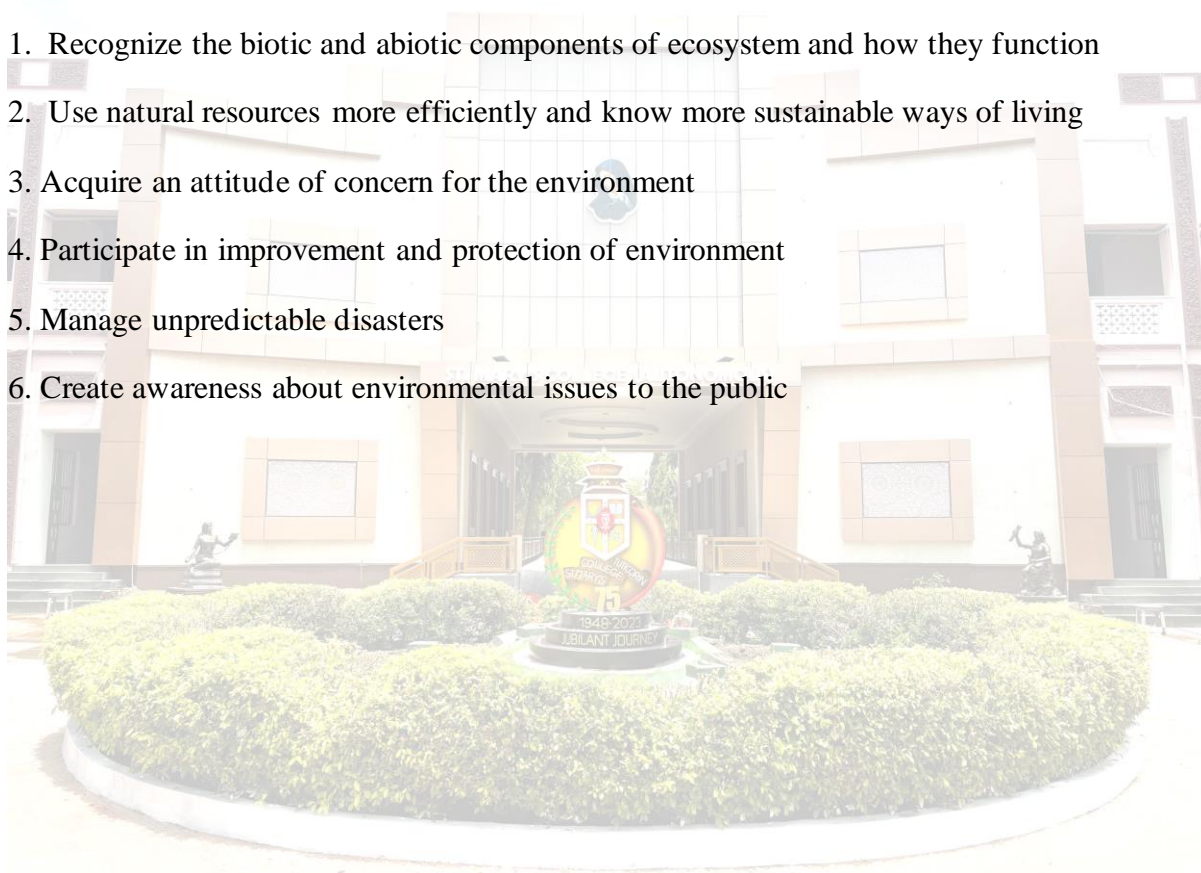
CO. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO-1	analyze how marine organism adapt to their dynamic environment	5	Un
CO-2	understand the marine environment and classify them	7	Un
CO-3	able to signify the characteristic feature of sandy shore and sand dunes and their economic importance	1	An
CO-4	achieve practical skills in processing, preserving and culturing marine plants	6	Ev
CO-5	evaluate the uses of marine resources and realize the role of marine plants in the economy of the ocean	5	Ap
CO-6	able to signify the characteristic feature of coral reefs and their role in biodiversity conservation	1	An
CO-7	able to identify and understand the role of mangroves in coastal protection and their adaptation to its hostile environment	5	Ap
CO-8	explain the ecological relationship between organisms and their environment	2	An

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
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4. Participate in improvement and protection of environment
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SEMESTER VI			
Core XII		Marine Biology	
Course Code: 21UBOC64	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 marine environment and classify them and analyze how marine organism adapt to their dynamic environment	1	Un, An
CO-2	able to signify the characteristic feature of phytoplanktons sea weeds sea grass their ecology and their economic importance	5	Re
CO-3	achieve practical skills in processing, preserving and culturing marine plants	6	Ev
CO-4	evaluate the uses of marine resources and realize the role of marine plants in the economy of the ocean	5	Ap
CO-5	able to signify the characteristic feature of mangroves, coral reefs and their role in coastal protection and biodiversity conservation	5	An
CO-6	explain the ecological relationship between organisms and their environment	2	An

Programme: M.Sc Botony

SEMESTER III			
Core IX		Marine Biotechnology	
19PBOC31	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	analyze how marine organism adapt to their dynamic environment	5	Un
CO-2	recall how natural events and human activities affect coastal habitats	7	Re
CO-3	critically analyze and evaluate pollution issues, their sources and the influences humans have with the dynamic marine environment	7	An
CO-4	achieve practical skills in processing, preserving and culturing marine plants	6	Ev
CO-5	evaluate the uses of marine resources and realize the role of phytoplankton and bacteria in the economy of the ocean	5	Ap
CO-6	able to signify the characteristic feature of coral reefs and their role in biodiversity conservation	1	An
CO-7	able to identify and understand the role of mangroves in coastal protection and their adaptation to its hostile environment	5	Ap
CO-8	explain the ecological relationship between organisms and their environment	2	An

SEMESTER II			
Core VI		Marine Botany	
Course Code: 21PBOC22	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	analyze how marine organism adapt to their dynamic environment	5	An
CO-2	critically analyze and evaluate pollution issues, their sources and the influences humans have with the dynamic marine environment	7	An
CO-3	achieve practical skills in processing, preserving and culturing marine plants	6	Ev
CO-4	evaluate the uses of marine resources and realize the role of phytoplankton and bacteria in the economy of the ocean	5	Ap
CO-5	able to signify the characteristic feature of coral reefs and understand the role of mangroves in coastal protection and their adaptation to its environment their role in biodiversity conservation	5	An
CO-6	explain the ecological relationship between organisms and their environment	3	An

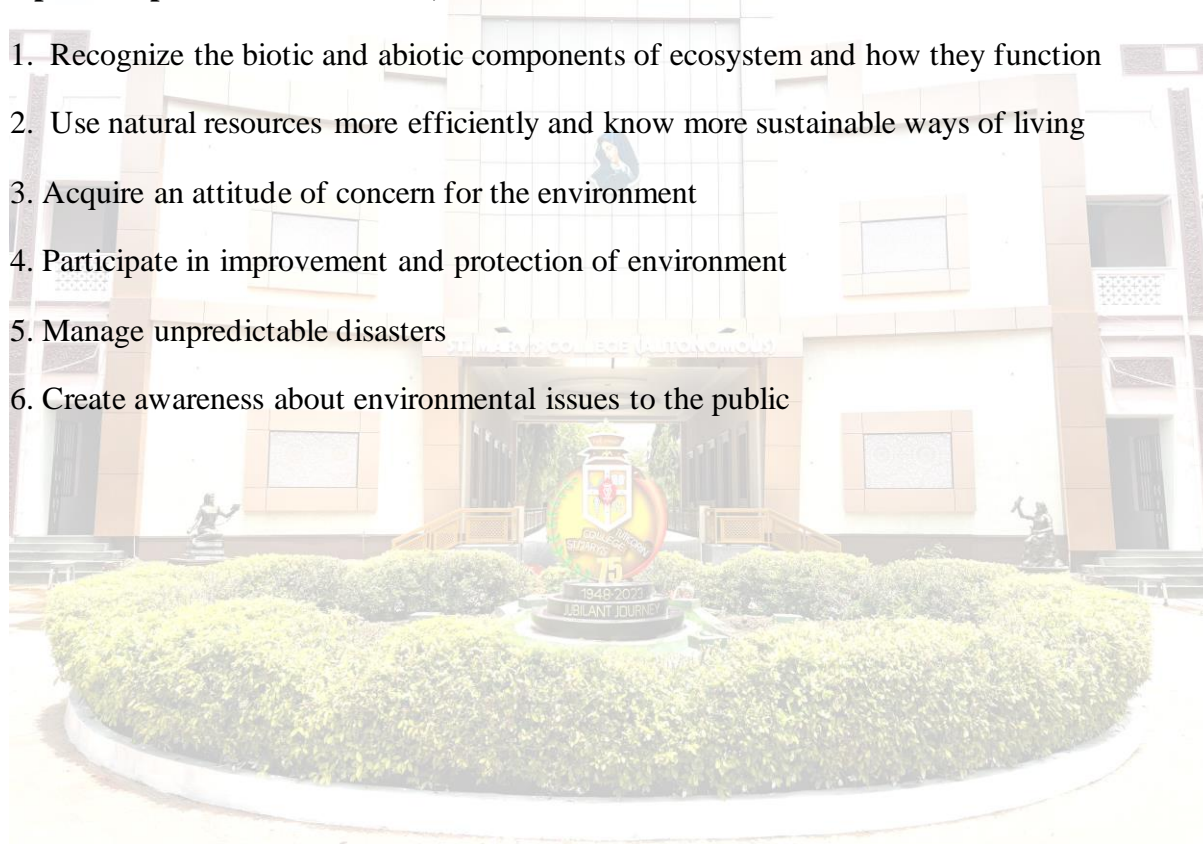
Programme: B. Sc. Chemistry

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public

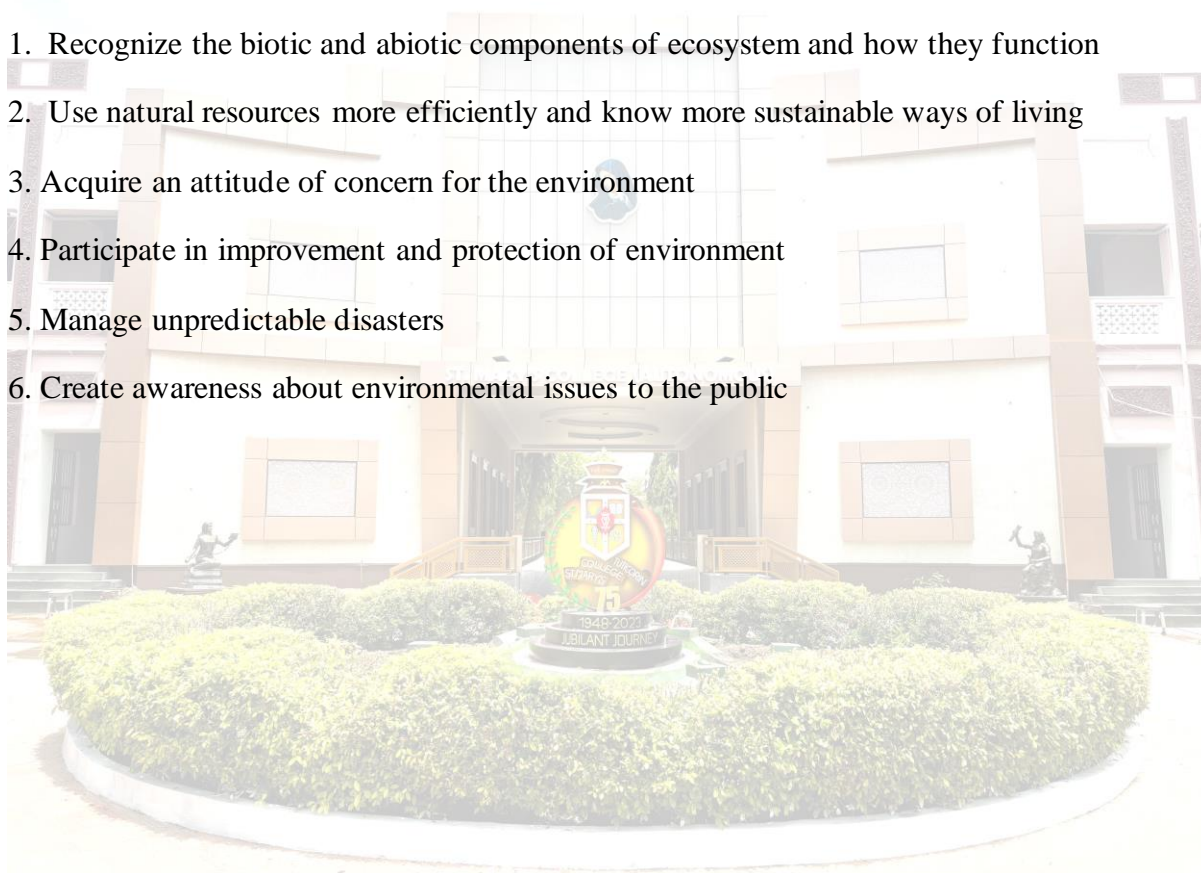


Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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Programme: M.Sc Chemistry

Semester – II			
Elective II		B Industrial Chemistry	
Code : 19PCHE21	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	learn some of the industrial products like cosmetics, paints, dyes and pigments and their manufacturing	1, 5	An
CO - 2	test the adulterants present in cosmetics and take care of skin and hair	6	An
CO - 3	get to know various types of alloys and its manufacture and applications	5	Ap
CO - 4	have sufficient knowledge on corrosion and the methods for preventing corrosion	1, 5	Ap
CO - 5	discuss the basic concepts of radiation chemistry	1	An
CO - 6	understand the concepts, importance and need of nuclear energy	1	Ev
CO - 7	aware of disposal techniques of nuclear wastes and safety in working with nuclear energy	6	An
CO - 8	know various power projects in India.	7	An

Semester – I			
Elective I		B. Food and Health Chemistry	
Course Code : 21PCHE12	Hrs / Week : 4	Hrs / Sem : 60	Credits : 4

Course Outcome:

CO No.	Upon completion of this course, students will be able to	PSOs addressed	CL
CO 1	classify nutrients, proteins, vitamins and minerals.	1	An
CO 2	examine physical and mental health.	6	An
CO 3	explain various metabolism of drugs.	2	Un
CO 4	compare hard and soft drugs.	1	Ev
CO 5	measure blood pressure and sugar and detect various blood group for different persons.	8	An
CO 6	calculate body mass fluid and give the factors which affect BMF and test the adulterants present in food items.	3, 5	Ap

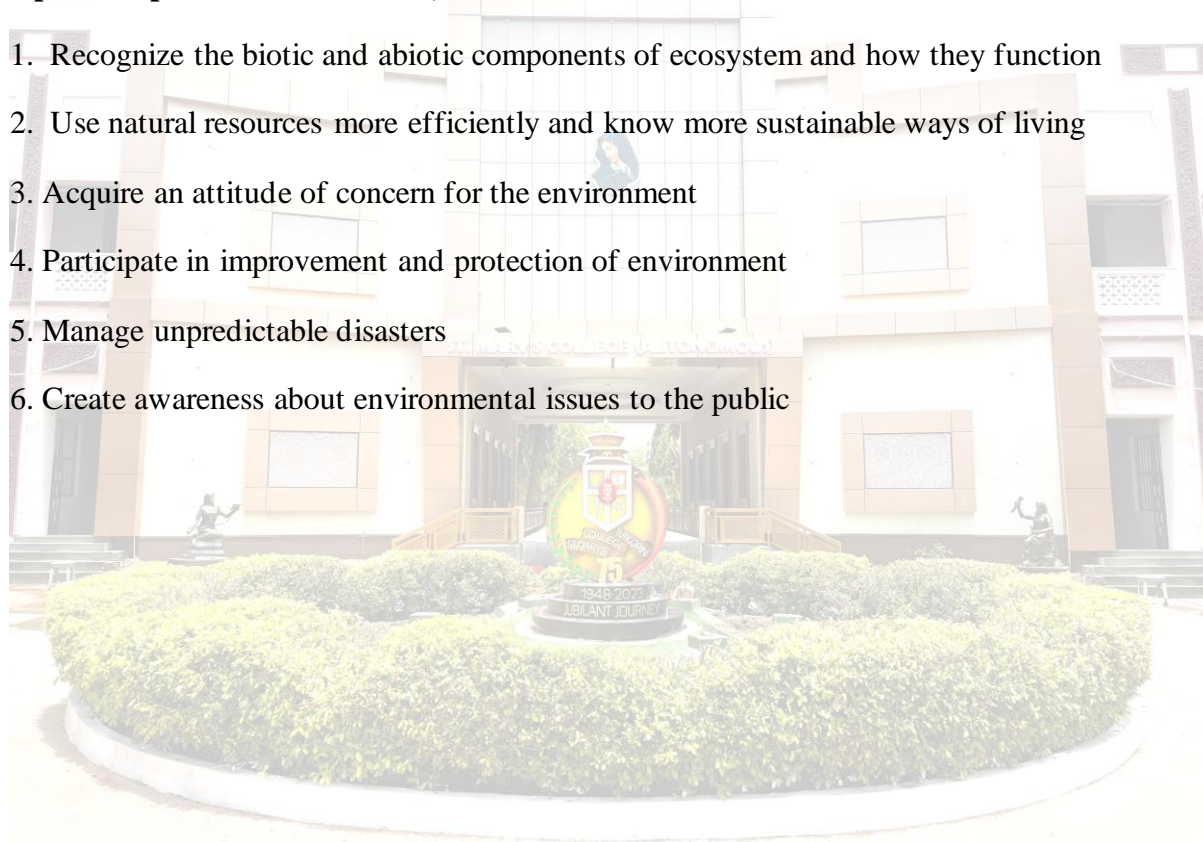
Programme: B. Com

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

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SEMESTER –IV

Part III Core X Logistics in Shipping Industries

Code:18UCOC43

Hrs/Week: 6

Hrs/Sem: 90

Credits : 4

Course Outcome:

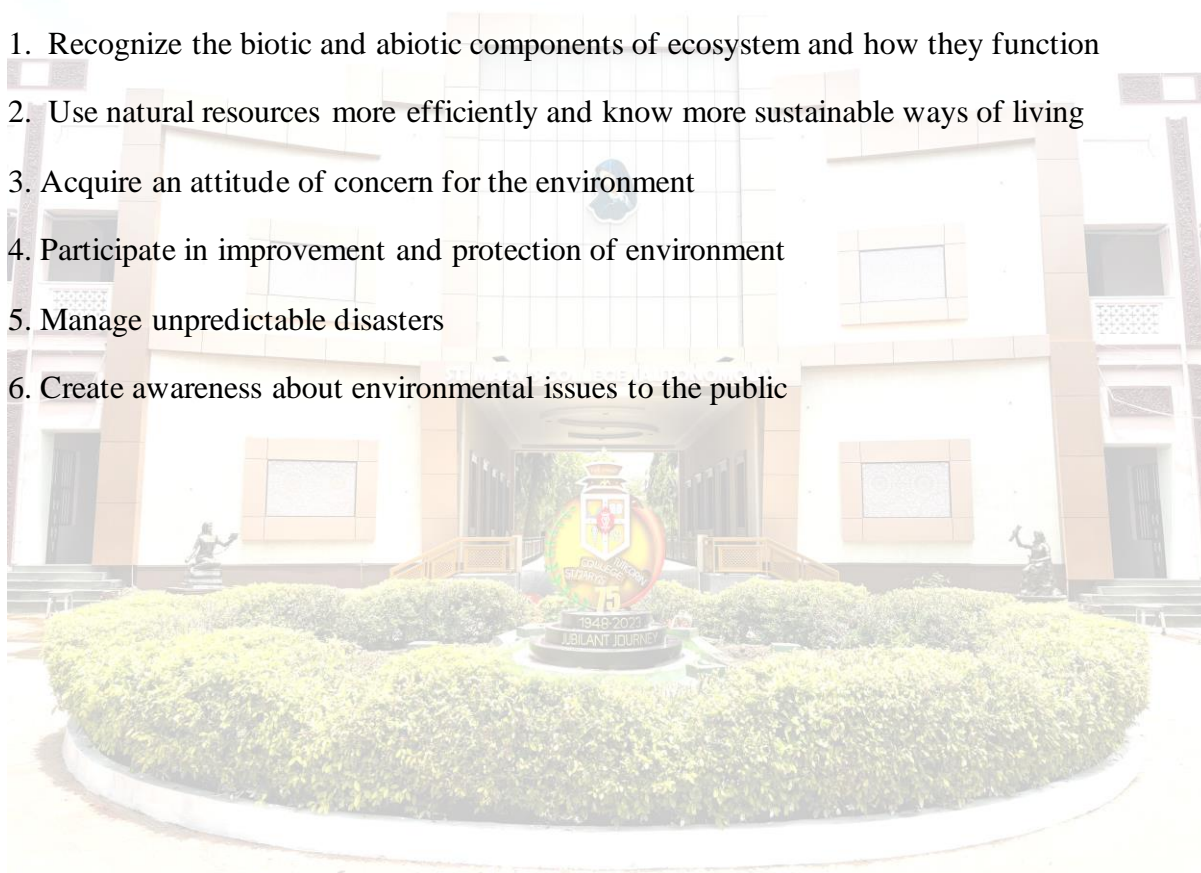
CO No.	Upon completion of this course, students will be able to	PSO addressed	Cognitive Level
CO – 1	introduce basic concepts in logistics with special emphasis on maritime shipping.	1,2	Ap
CO – 2	understand multimodal transport concept and ports of India.	1,2,5	Un
CO – 3	evaluate the role and functions of service providers in shipping industry.	4	Ev
CO – 4	familiarize with multi model transport and containerisation.	1,4	Ev
CO – 5	identify the role of intermediaries with their functions.	1	An
CO – 6	identify the career opportunities available in the Shipping sector.	6	An
CO – 7	familiarise the import and export procedures.	6	Ev
CO – 8	study the activities of various liners in the maritime trade.	4	Un

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

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SEMESTER –VI

Part III Core: XIV Logistics in Shipping Industries

Course Code: 21UCOC64

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	identify basic concepts in logistics with special emphasis on maritime shipping.	1,2	Un
CO - 2	classify the types of ships and identify the procedure for shipping of India.	1,2,5	Un
CO – 3	evaluate the role and functions of service providers in shipping industry.	4	Ev
CO – 4	assess the role of ICD and CFS towards containerization.	1,4	Ev
CO – 5	evaluate the role of intermediaries with their functions.	1	Ev
CO – 6	evaluate the import and export procedures.	6	Ev

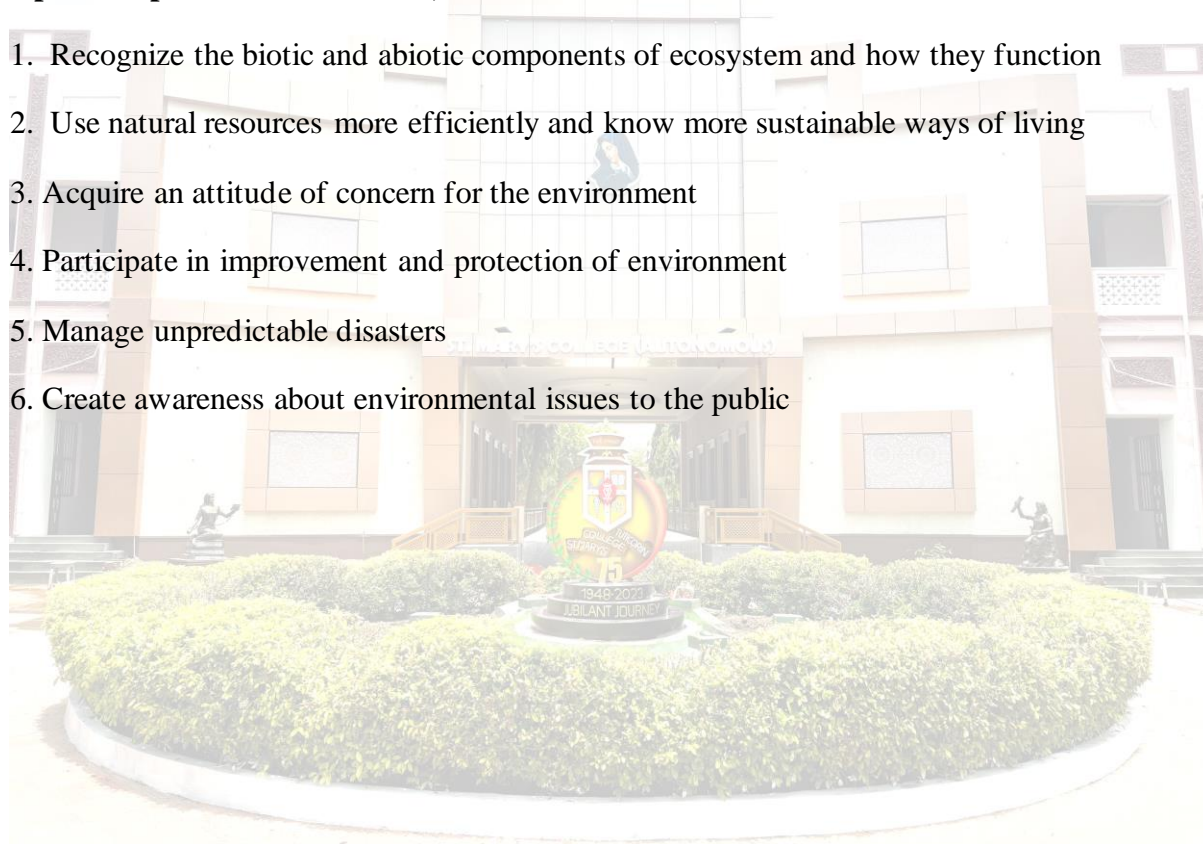
Programme: B. Com – Batch II

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

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SEMESTER –IV

Part III Core X Logistics in Shipping Industries

Code:18UCOC43

Hrs/Week: 6

Hrs/Sem: 90

Credits : 4

Course Outcome:

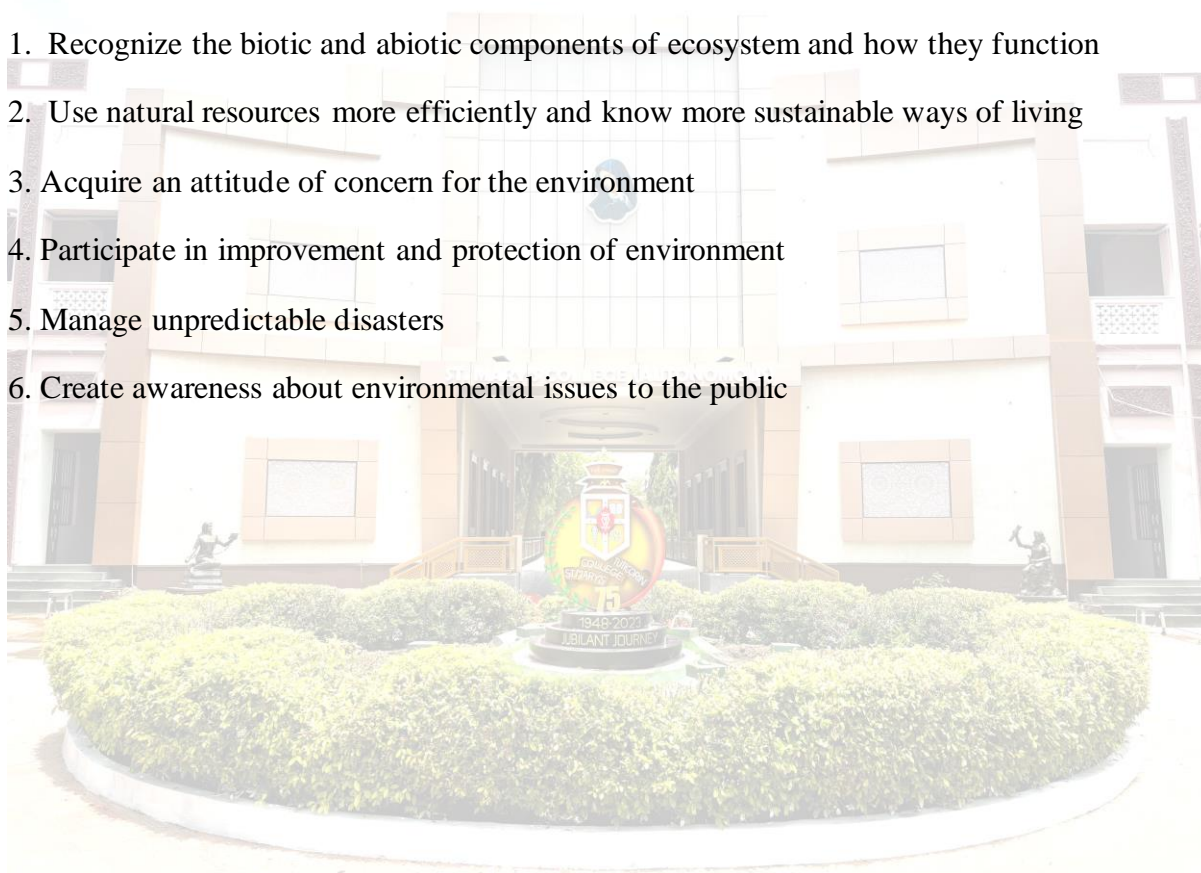
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CO – 3	evaluate the role and functions of service providers in shipping industry.	4	Ev
CO – 4	familiarize with multi model transport and containerisation.	1,4	Ev
CO – 5	identify the role of intermediaries with their functions.	1	An
CO – 6	identify the career opportunities available in the Shipping sector.	6	An
CO – 7	familiarise the import and export procedures.	6	Ev
CO – 8	study the activities of various liners in the maritime trade.	4	Un

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

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SEMESTER –VI

Part III Core: XIV Logistics in Shipping Industries

Course Code: 21UCOC64

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	identify basic concepts in logistics with special emphasis on maritime shipping.	1,2	Un
CO - 2	classify the types of ships and identify the procedure for shipping of India.	1,2,5	Un
CO – 3	evaluate the role and functions of service providers in shipping industry.	4	Ev
CO – 4	assess the role of ICD and CFS towards containerization.	1,4	Ev
CO – 5	evaluate the role of intermediaries with their functions.	1	Ev
CO – 6	evaluate the import and export procedures.	6	Ev

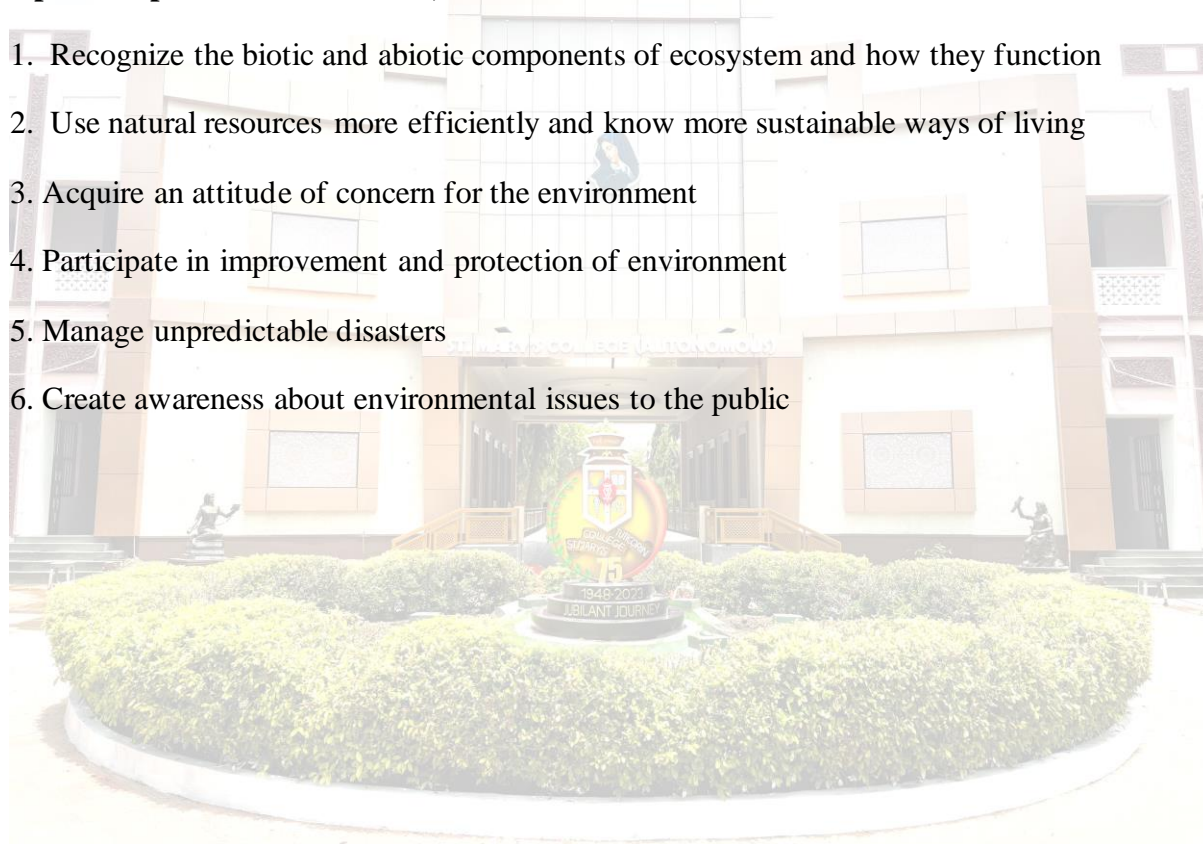
Programme: B. Com – Batch III

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

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SEMESTER –IV

Part III Core X Logistics in Shipping Industries

Code:18UCOC43

Hrs/Week: 6

Hrs/Sem: 90

Credits : 4

Course Outcome:

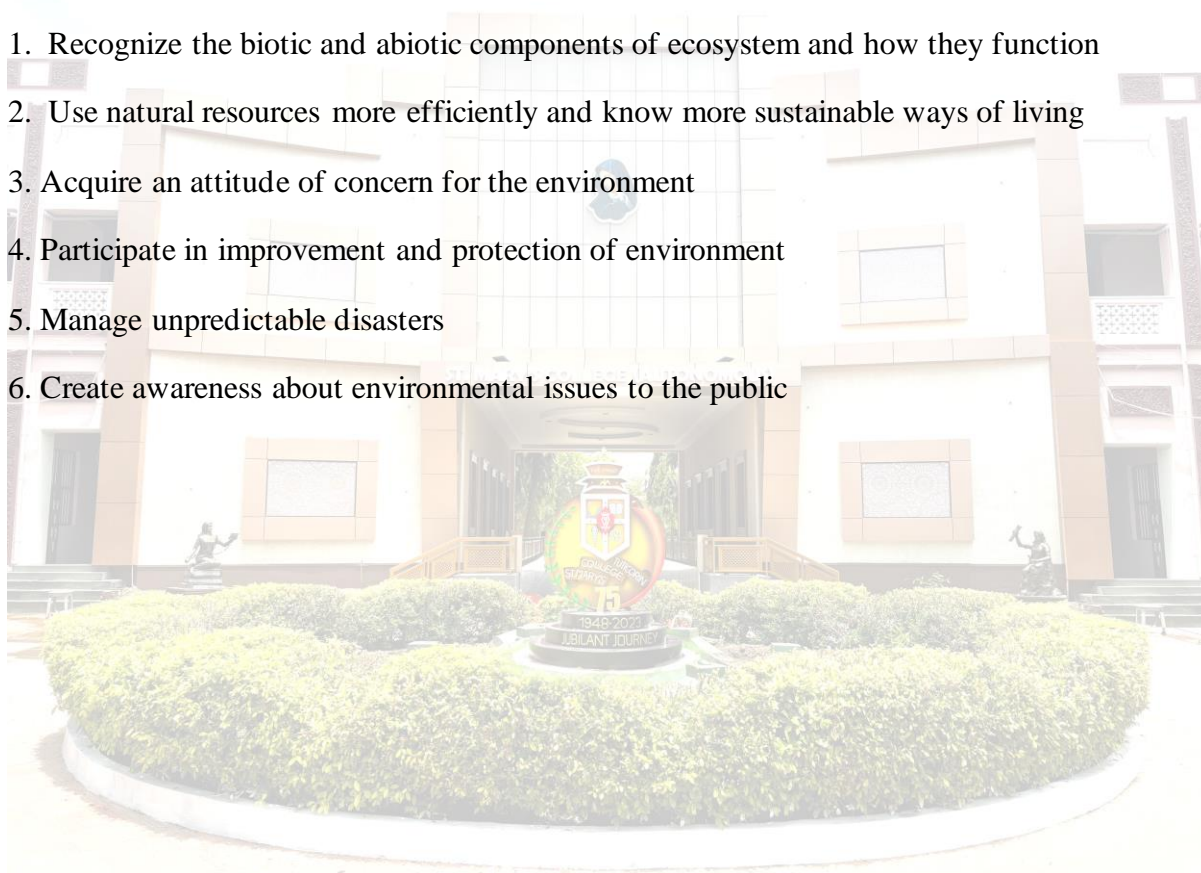
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CO – 3	evaluate the role and functions of service providers in shipping industry.	4	Ev
CO – 4	familiarize with multi model transport and containerisation.	1,4	Ev
CO – 5	identify the role of intermediaries with their functions.	1	An
CO – 6	identify the career opportunities available in the Shipping sector.	6	An
CO – 7	familiarise the import and export procedures.	6	Ev
CO – 8	study the activities of various liners in the maritime trade.	4	Un

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

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SEMESTER –VI

Part III Core: XIV Logistics in Shipping Industries

Course Code: 21UCOC64

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	identify basic concepts in logistics with special emphasis on maritime shipping.	1,2	Un
CO - 2	classify the types of ships and identify the procedure for shipping of India.	1,2,5	Un
CO – 3	evaluate the role and functions of service providers in shipping industry.	4	Ev
CO – 4	assess the role of ICD and CFS towards containerization.	1,4	Ev
CO – 5	evaluate the role of intermediaries with their functions.	1	Ev
CO – 6	evaluate the import and export procedures.	6	Ev

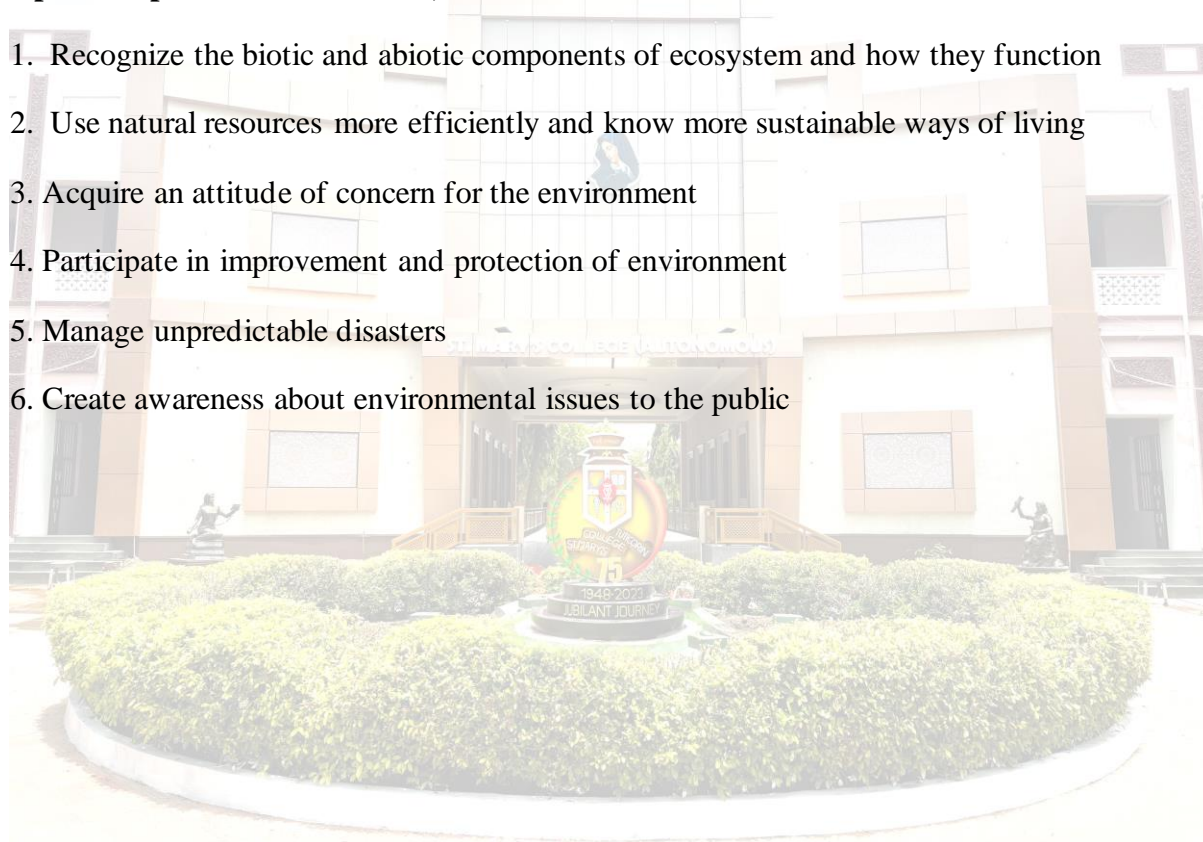
Programme: B. Com (Corporate)

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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SEMESTER –IV

Part III Core X Logistics in Shipping Industries

Code:18UCOC43

Hrs/Week: 6

Hrs/Sem: 90

Credits : 4

Course Outcome:

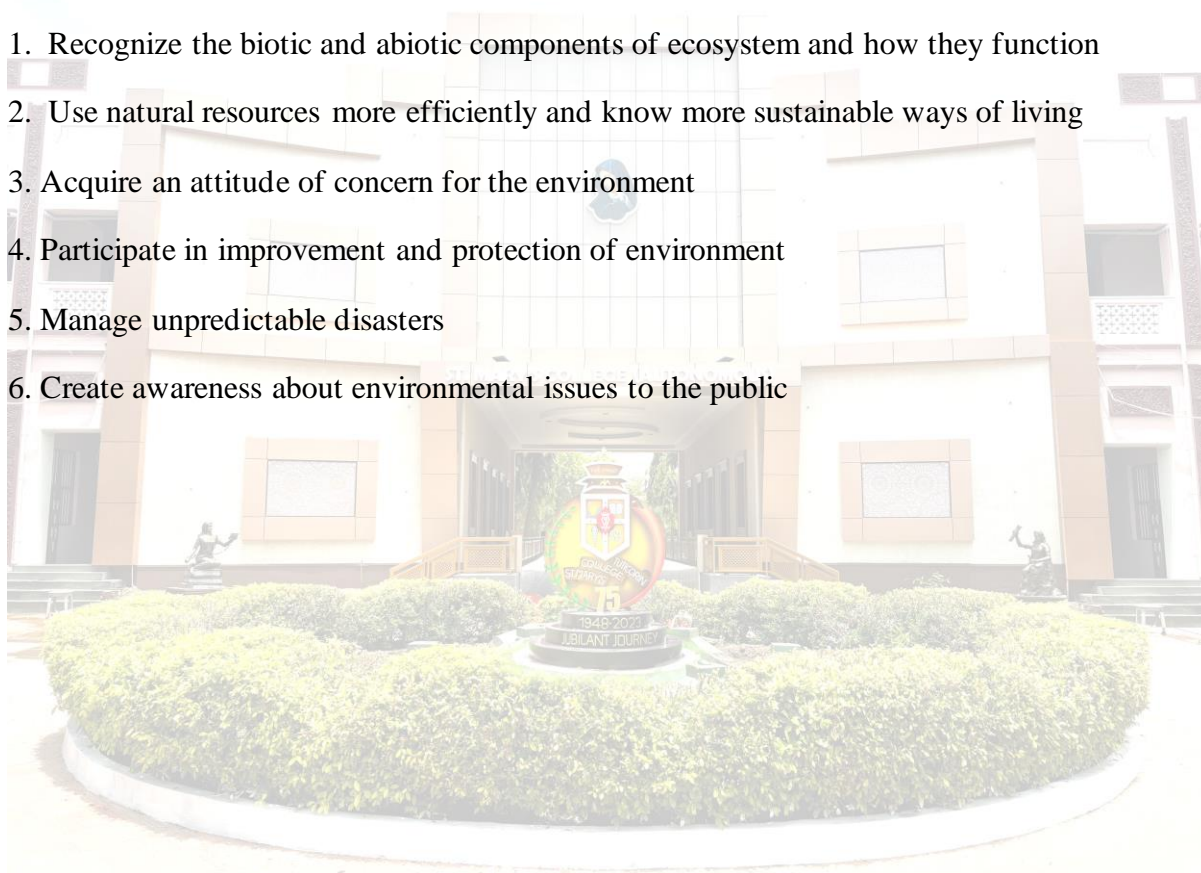
CO No.	Upon completion of this course, students will be able to	PSO addressed	Cognitive Level
CO – 1	introduce basic concepts in logistics with special emphasis on maritime shipping.	1,2	Ap
CO – 2	understand multimodal transport concept and ports of India.	1,2,5	Un
CO – 3	evaluate the role and functions of service providers in shipping industry.	4	Ev
CO – 4	familiarize with multi model transport and containerisation.	1,4	Ev
CO – 5	identify the role of intermediaries with their functions.	1	An
CO – 6	identify the career opportunities available in the Shipping sector.	6	An
CO – 7	familiarise the import and export procedures.	6	Ev
CO – 8	study the activities of various liners in the maritime trade.	4	Un

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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SEMESTER VI

Part III	Core VIII	Export and Import Logistics	
Course Code: 21UCCC64	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	introduce basic concepts in logistics with special emphasis on maritime shipping.	1,2	Ap
CO-2	understand the multimodal transport concepts and shipping in India	1,2,5	Un
CO-3	familiarize the business establishing concepts and export licensing	1,4	Ev
CO-4	identify the role of clearing and forwarding agents and their procedures	6	An
CO-5	evaluate the import procedures and techniques and documentation procedures	4	Ev
CO-6	analyzing the Indian custom electronic data interchange system (ICES)- Import& Export	8	An

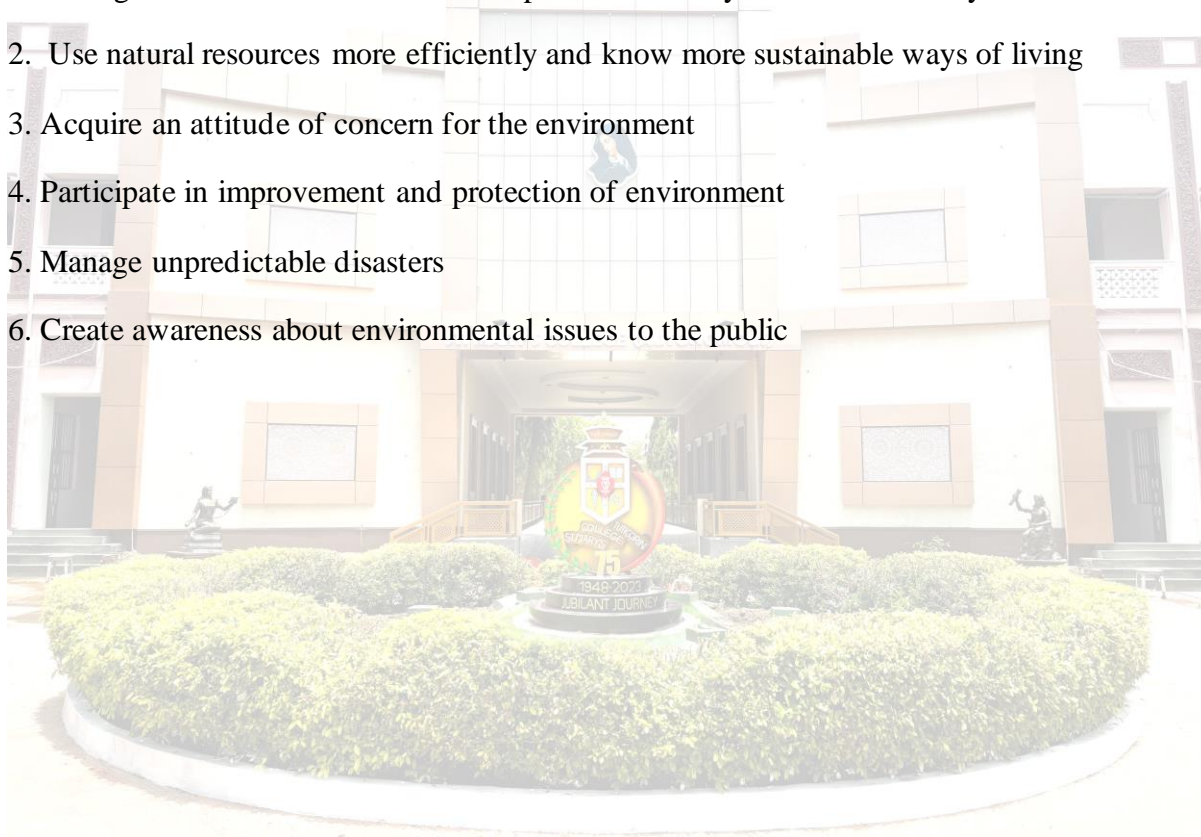
Programme: B. Sc. Computer Science

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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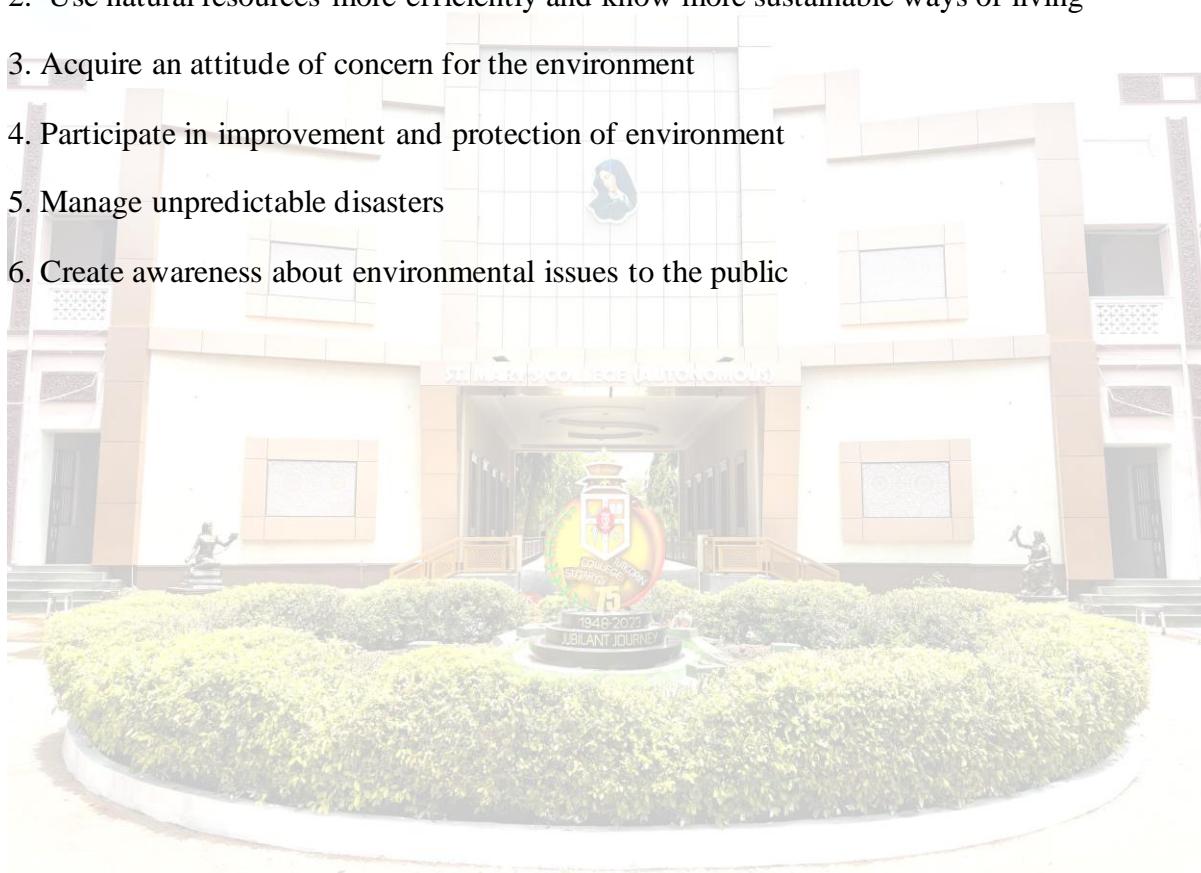


Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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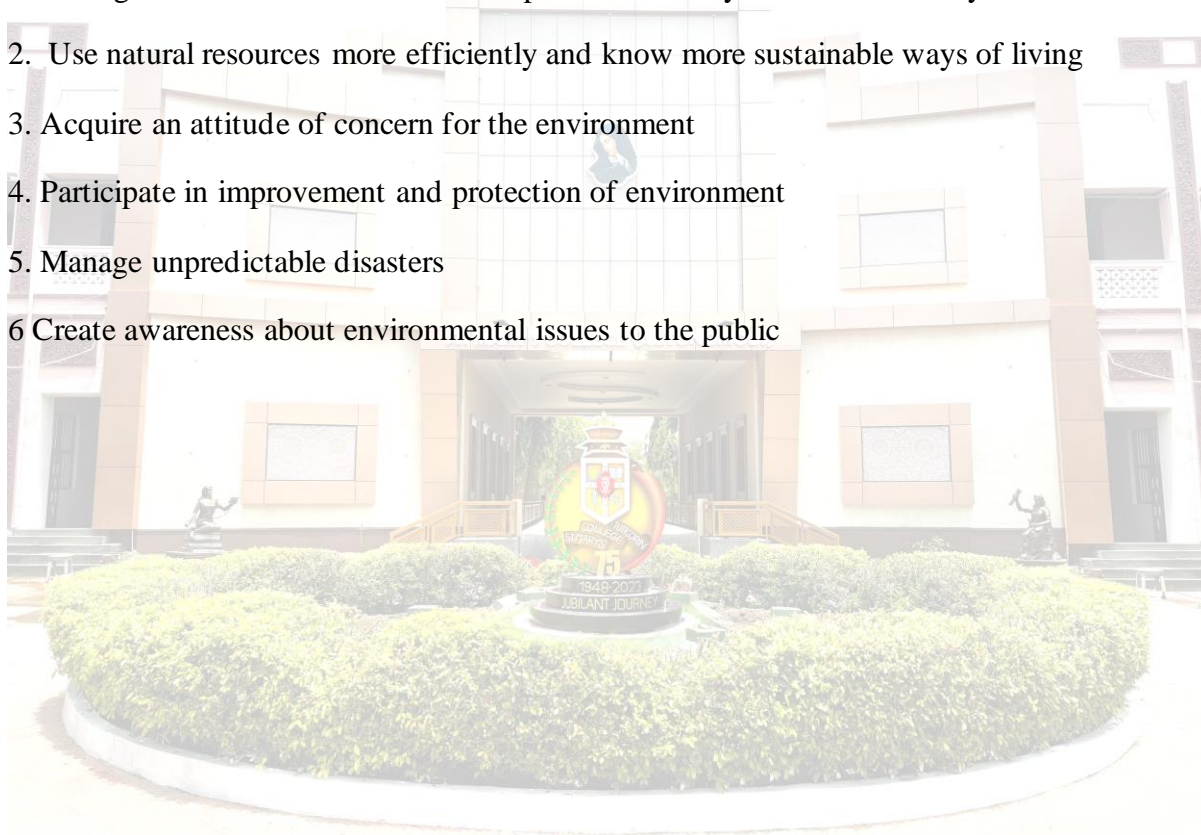
Programme: B. A. Economics

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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- 6 Create awareness about environmental issues to the public



Semester- V			
Core Integral I - Rural Economics			
Code: 18UECI51	Hours / week :5	Hrs / Semester: 75	Credits :4

Course Outcome:

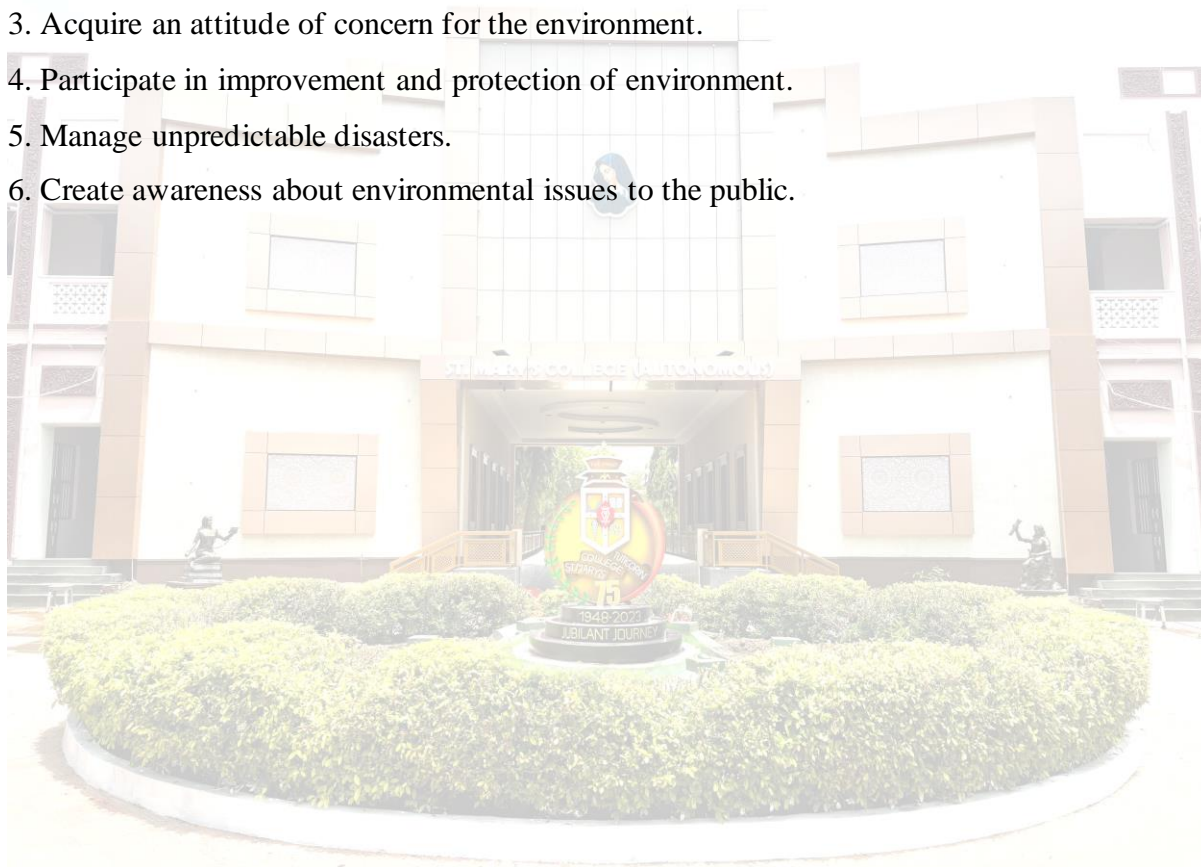
CO. No	Upon completion of this course, students will be able to	PSO addressed	CL
CO - 1	discuss the importance and Significance of rural development	1, 2	Ap
CO - 2	know the aims and features of National Agricultural	2	An
CO- 3	apply their knowledge and understanding, and problem-solving abilities, to independently identify rural development issues from a geographical perspective	2, 6	Ap
CO - 4	analyze present problems and provide solutions based on a rural industrial environment.	6	An
CO - 5	identify and analyse specific problems of agricultural labour.	3,6	Cr
CO- 6	describe the current problems of rural marketing & regulate the market structure.	2,3	Ev
CO-7	know the Community Development Programme	2	An
CO-8	understand rural development programme	1,4	Un

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

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SEMESTER- III

Self-Study / MOOC / Internship (Compulsory) Salesmanship

Course Code: 21UECSS1

Credits :2

Course Outcomes:

CO No	Upon completion of this course, students will be able to	PSO's addressed	CL
CO 1	define salesmanship and evaluate the individual qualities a salesperson must possess to succeed in building long-term customer relationships	1, 2	Un
CO 2	understand and relate selling with the Principle of Contingency Benefits.	2, 4	Un
CO 3	identify specific techniques involved in selling, i.e. prospecting, planning and making a sales presentation, negotiating buyer resistance, closing a sale, organizing a territory and managing time.	1, 4, 6	Cr
CO 4	understand the importance of building partnering relationships with potential customers.	2, 4	Un
CO 5	examine the ethical and legal issues in selling.	4	Ev
CO 6	demonstrate the ability to identify, analyze, and evaluate the four objectives of an effective sales approach	2, 4, 5, 6	An

SEMESTER-IV	
Self-Study paper (Optional)	Economics of Advertising
Course Code : 21UECSS2	Credit : 2

Course Outcomes:

CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO 1	understand what advertising is and its role in advertising and brand promotion and the economic effects of advertising.	1, 2, 4	Un
CO 2	create advertisement copy and appreciate the growth of modern advertising	4, 7	Cr
CO 3	be able to identify, analyze, and understand the advertising environment	1, 4	An
CO 4	prepare the advertising message and fully integrate the creative process.	6, 8	Cr
CO 5	understand the importance of placing the message in conventional and “new” media.	2, 4	Ev
CO 6	know the importance of budget and analyse the factors affecting budget.	4, 6, 8	An



Programme: M.A. Economics

Semester – I			
Elective I – Basic Econometric Analysis			
Code:19PECE11	Hours / Week :4	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	have the knowledge to research with econometrics	1	An
CO-2	explain econometrics concepts and results intuitively	8	Ap
CO-3	easily derive econometric results mathematically	6	Ap
CO-4	have a deeper understanding of economic statistics, econometrics, and have greater confidence in its application.	4	Un
CO-5	learn the basics of ordinary least squares model estimation, with its advantages and disadvantages.	3, 2	Un
CO-6	learn appropriate alternatives to ordinary least squares, when assumptions underlying the classical linear regression model are violated.	5	Ap
CO-7	learn model construction and estimation, with applications in consumer and producer theory.	6	Un
CO-8	gain insights into the relationship between econometric estimation and diagnostic testing.	1	Un

Semester- II			
Elective II		Health Economics	
19PECE22	Hrs/Week: 4	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	analyze and evaluate complex policy and organizational challenges at both the micro level and at higher levels within health care systems	4	An
CO-2	differentiate between the functions, roles and responsibilities of healthcare managers	6	Ap
CO-3	make successful negotiations	7	Ev
CO-4	define and apply key quality concepts in health care organizations	3	Ap
CO-5	manage organizational processes, including redesigning organizations	3	Ap
CO-6	effectively and efficiently foster innovation within care settings	2	An
CO-7	demonstrate personal and professional ethical responsibility in all managerial and organizational decision making	8	Ev
CO-8	use economic models to understand behaviors of actors in the health care sector and do analyses of needs for health care services	6	An

Semester - III**Elective II Logistic Management****19PECE32****Hrs/Week: 4****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	Understand the concepts of Logistics and Supply Chain Management.	8	Un
CO-2	understand the relationship between logistics and supply chain management	8	Un
CO-3	understand the principles of Procurement and Outsourcing	2	Ap
CO-4	apply the principles of Inventory Management	1	Ap
CO-5	use the principles of Warehousing to improve their Warehousing Operations	7	Ap
CO-6	relate to Marketing and Physical Distribution concepts	4	Ev
CO-7	apply Packaging and Materials handling Principles to Logistics Operations	1	Ap
CO-8	recognise the requirements for Transportation and International Logistics	4	Re

Semester- II			
Core - IX		DEMOGRAPHY	
Course Code: 21PECC24	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	compare the advantages and disadvantages of the different sources of demographic data	1	Un
CO - 2	present appropriate techniques to ensure comparability of the measures across population.	2	Kn
CO - 3	describe the basic demographic indicators and elaborate on their computation and interpretation	3	Ap
CO - 4	discuss the key assumptions underlying techniques and tools.	4	Kn
CO - 5	describe the relations and calculate indicators in a stationary population.	6	Kn
CO - 6	recognize and analyse typical demographic patterns arising from the data.	7	Un

Semester – III			
Core - XIII		RURAL DEVELOPMENT	
Course Code: 21PECC33	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 different categories of rural development policies and programmes and its impact on rural poverty and unemployment.	1	Un
CO - 2	know the various advantages with regard to social upliftment especially in rural areas	3	Kn
CO - 3	inculcate about the scope, importance and sources of Rural Development Programmes	2	An
CO - 4	acquire the knowledge on rural industries and entrepreneurship and appraise the value of participatory rural appraisal and conventional methodology in solving human problems	4	Ap
CO - 5	understand the problem of rural sector, backwardness, income inequalities, regional imbalances, gender disparities and remedial measures.	5	Un
CO - 6	doctorate in Rural Development increases the chances to obtain a high profile job in future	7	Kn

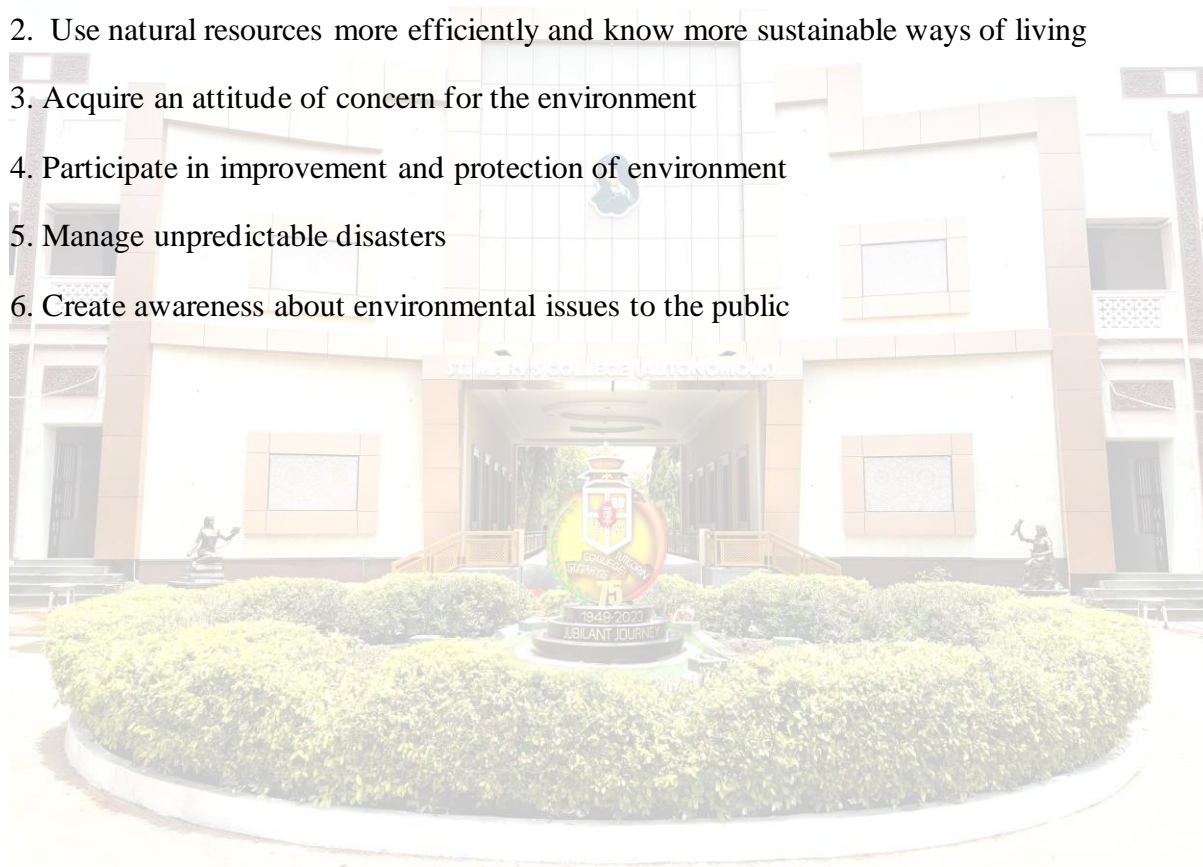
Programme: B. A. English Literature

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public



SEMESTER IV**Allied VIII****Media Writing****Code: 18UENA42****Hrs/ Week: 3****Hrs/Semester: 45****Credits: 3****Course Outcomes:**

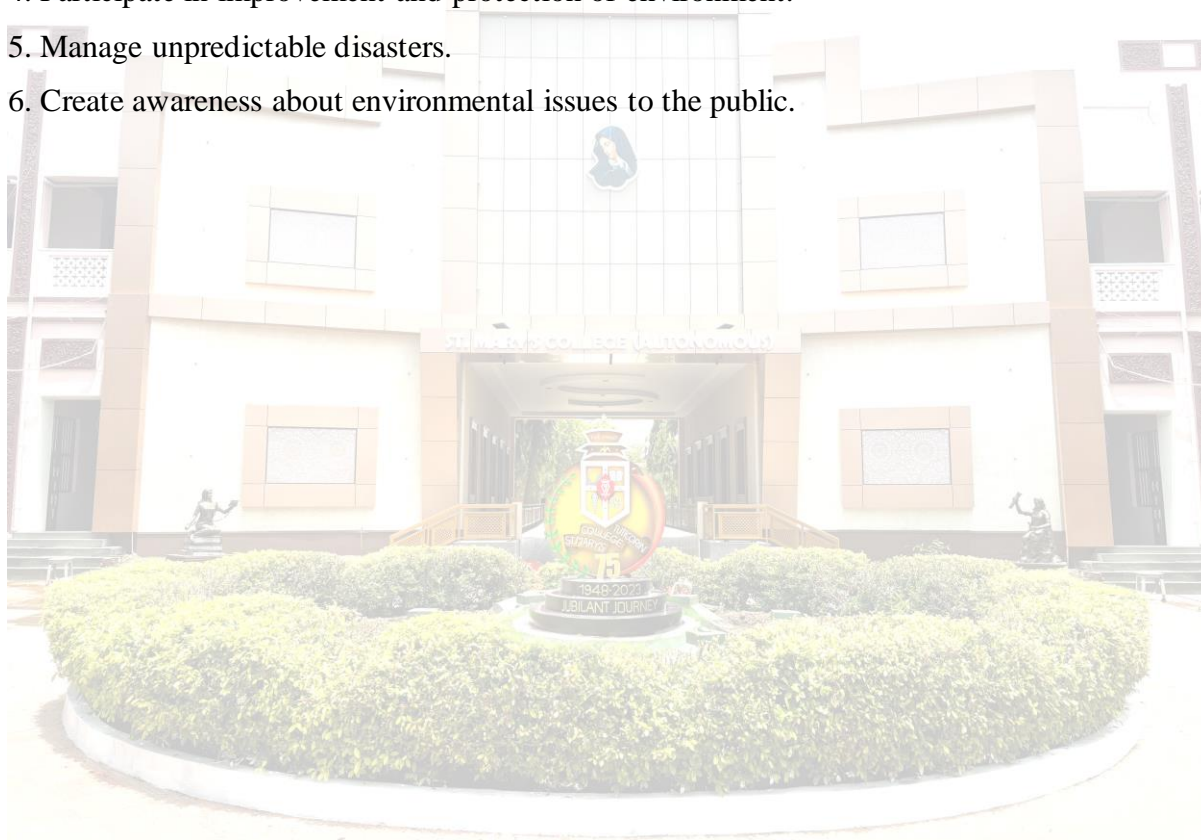
CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO – 1	develop the ability to write articles in journals and magazines.	1, 3	Cr
CO – 2	apply the acquired knowledge in writing columns and editorials	6	Ap
CO – 3	distinguish the writing style for print and broadcast media	4	An
CO – 4	exhibit a command over language and general knowledge	2, 3	Ap
CO – 5	develop their communication skills.	3, 9	Cr
CO – 6	examine people related issues.	2, 5	An
CO – 7	analyse the required criteria for publishing.	1, 5	An
CO – 8	evaluate different kinds of advertisements.	6	Ev

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function.
2. Use natural resources more efficiently and know more sustainable ways of living.
3. Acquire an attitude of concern for the environment.
4. Participate in improvement and protection of environment.
5. Manage unpredictable disasters.
6. Create awareness about environmental issues to the public.



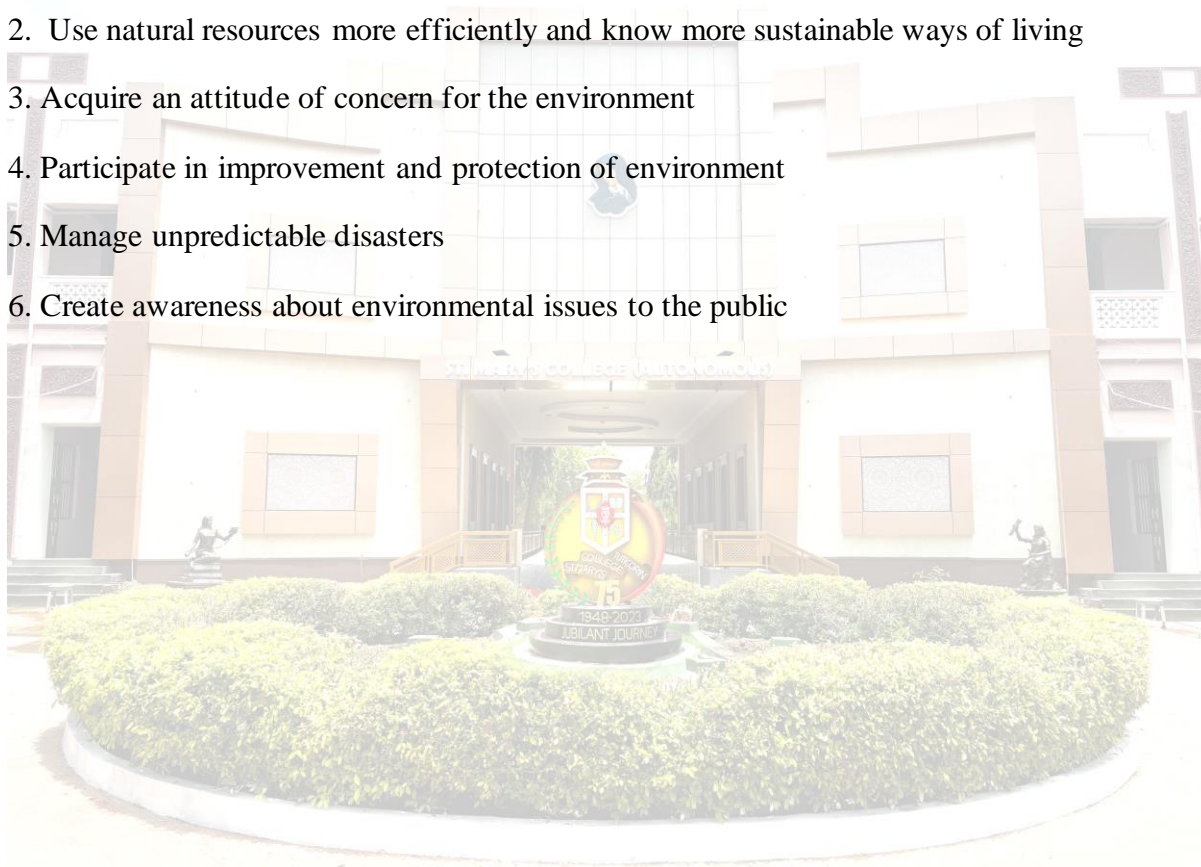
Programme: B. A. English Literature – Batch II

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public



SEMESTER IV**Allied VIII****Media Writing****Code: 18UENA42****Hrs/ Week: 3****Hrs/Semester: 45****Credits: 3****Course Outcomes:**

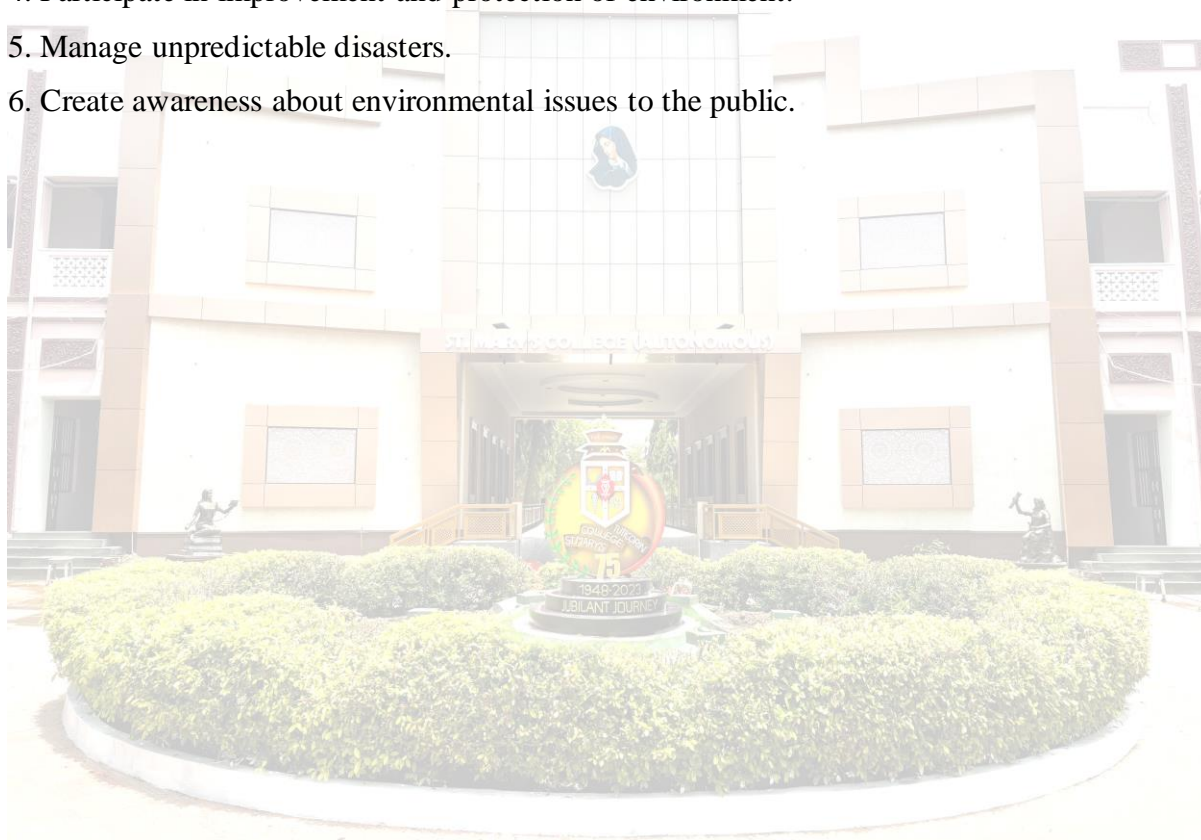
CO No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO – 1	develop the ability to write articles in journals and magazines.	1, 3	Cr
CO – 2	apply the acquired knowledge in writing columns and editorials	6	Ap
CO – 3	distinguish the writing style for print and broadcast media	4	An
CO – 4	exhibit a command over language and general knowledge	2, 3	Ap
CO – 5	develop their communication skills.	3, 9	Cr
CO – 6	examine people related issues.	2, 5	An
CO – 7	analyse the required criteria for publishing.	1, 5	An
CO – 8	evaluate different kinds of advertisements.	6	Ev

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function.
2. Use natural resources more efficiently and know more sustainable ways of living.
3. Acquire an attitude of concern for the environment.
4. Participate in improvement and protection of environment.
5. Manage unpredictable disasters.
6. Create awareness about environmental issues to the public.



Programme: M. A. English Literature

Semester IV			
Core XIX		Subaltern Literature	
Course Code : 21PENC44	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	comprehend the unique features of subaltern literature	1	Un
CO-2	discuss the contemporary subaltern writers and their key concepts.	1, 2	Un
CO-3	analyse the cultural and psychic problems of the marginalized people.	2, 3	An
CO-4	examine the economic problems and oppression of the exploited.	3, 5, 7	An
CO-5	investigate the issues of gender, race, and identity crisis of the outcast.	6, 8	An
CO-6	create awareness about the social and political problems of the oppressed.	4, 8	Cr

Programme: M. A. English Literature – Batch II

Semester IV			
Core XIX		Subaltern Literature	
Course Code : 21PENC44	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	comprehend the unique features of subaltern literature	1	Un
CO-2	discuss the contemporary subaltern writers and their key concepts.	1, 2	Un
CO-3	analyse the cultural and psychic problems of the marginalized people.	2, 3	An
CO-4	examine the economic problems and oppression of the exploited.	3, 5, 7	An
CO-5	investigate the issues of gender, race, and identity crisis of the outcast.	6, 8	An
CO-6	create awareness about the social and political problems of the oppressed.	4, 8	Cr

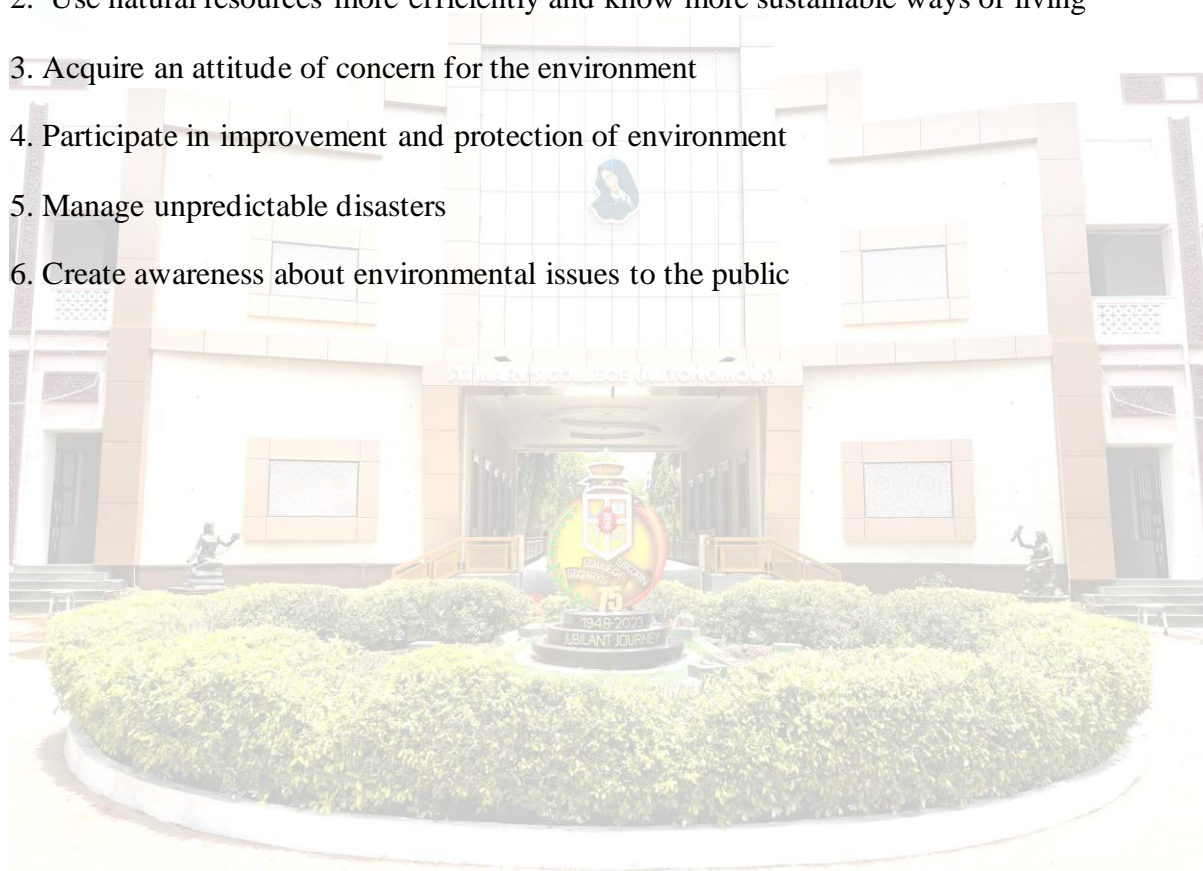
Programme: B.A. History

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public



Semester – V			
Core Integral I		History of Thoothukudi	
Code : 18UHII51	Hrs / Week : 5	Hrs / Sem : 75	Credits : 4

Course Outcome:

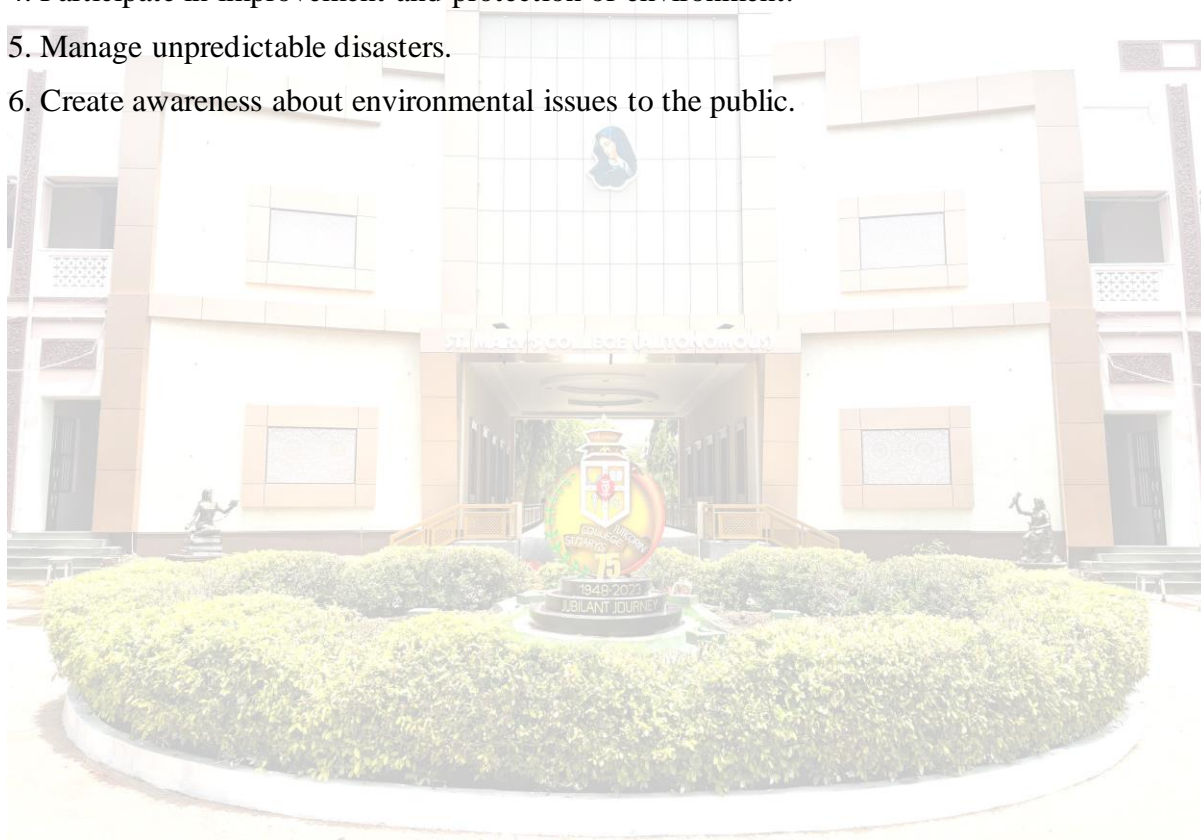
CO. No.	Upon completion of this course, students will be able to	PSO addressed	CL
CO -1	appreciate the freedom fighters of Thoothukudi.	1	Un, Re
CO -2	understand Swadeshi Movement in Thoothukudi.	1	Un, Re
CO -3	analyse the mass conversion in Thoothukudi.	4	An
CO -4	know the significance of pearl fishing and trade and commerce.	1	Un, Re
CO -5	learn coastal policy of the Portuguese, Dutch and British in Thoothukudi.	6	Cr
CO -6	assess the role of missionaries in Thoothukudi.	4	An
CO -7	appreciate the historical monuments in Thoothukudi.	1	Un, Re
CO -8	understand the forgotten freedom fighters in Thoothukudi.	1	Un, Re

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function.
2. Use natural resources more efficiently and know more sustainable ways of living.
3. Acquire an attitude of concern for the environment.
4. Participate in improvement and protection of environment.
5. Manage unpredictable disasters.
6. Create awareness about environmental issues to the public.



Semester – V

Core Elective A

History of Thoothukudi

Course Code : 21UHIE51

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	appreciate the freedom fighters and historical monuments of Thoothukudi.	1	Un
CO -2	comprehend the forgotten freedom fighters in Thoothukudi.	1	Un
CO -3	analyse the mass conversion in Thoothukudi.	4	An
CO -4	assess the significance of pearl fishing and trade and commerce.	5	Ev
CO -5	estimate coastal policy of the Portuguese, Dutch and British in Thoothukudi.	5	Ev
CO -6	assess the role of missionaries in Thoothukudi.	5	Ev



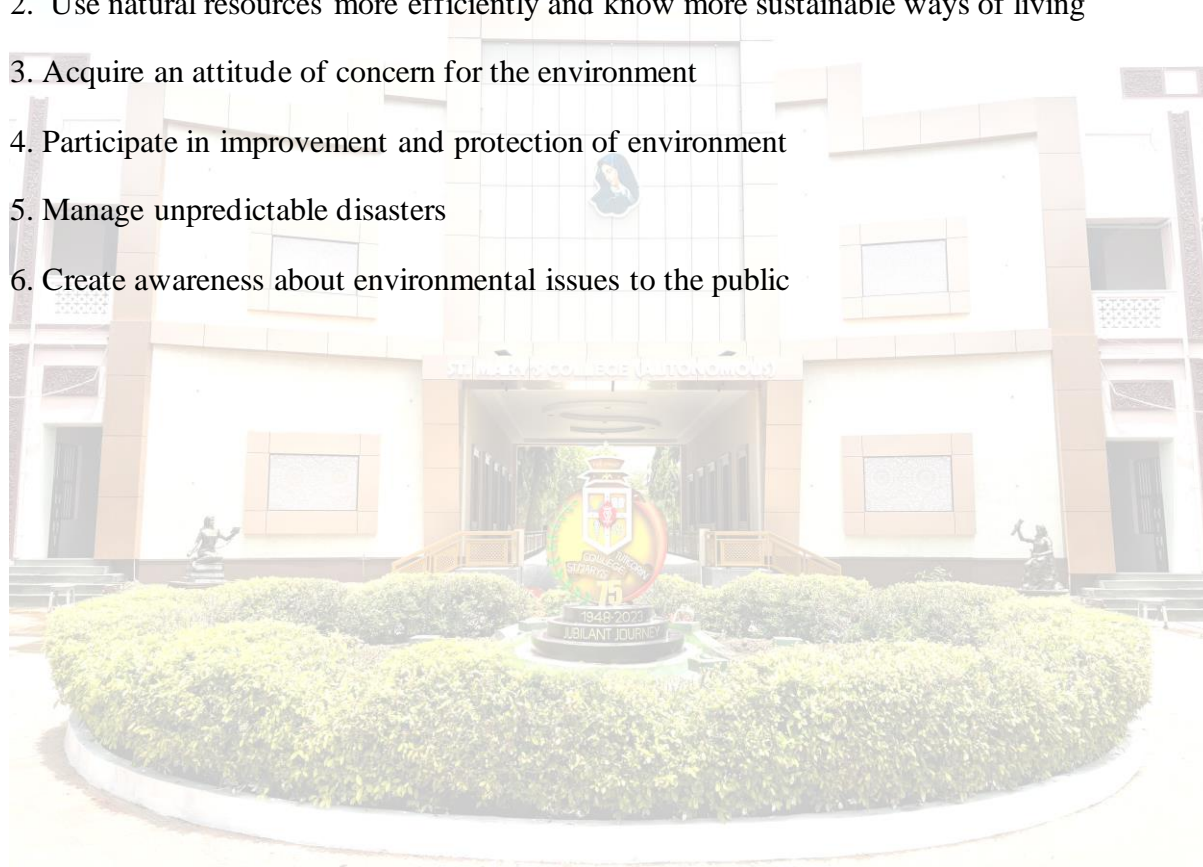
Programme: B. Sc. Mathematics

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public

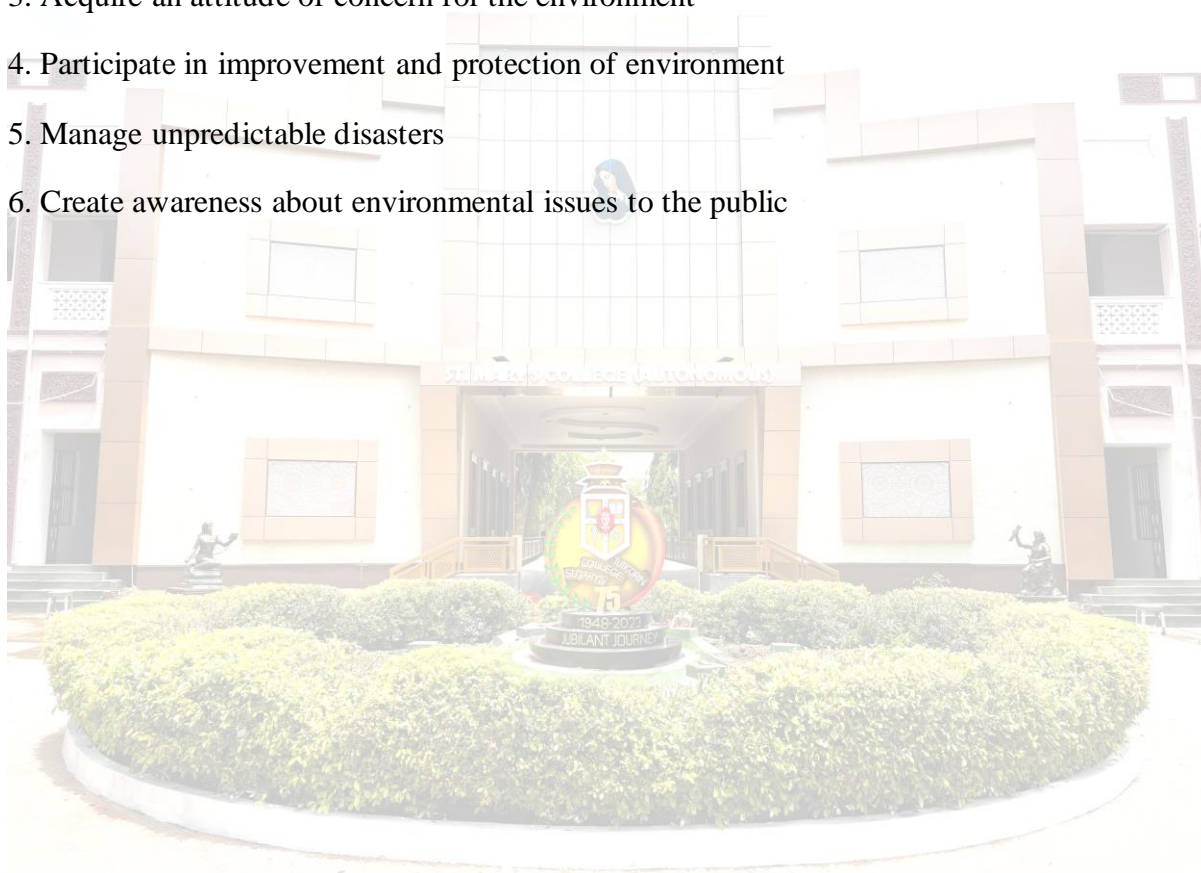


Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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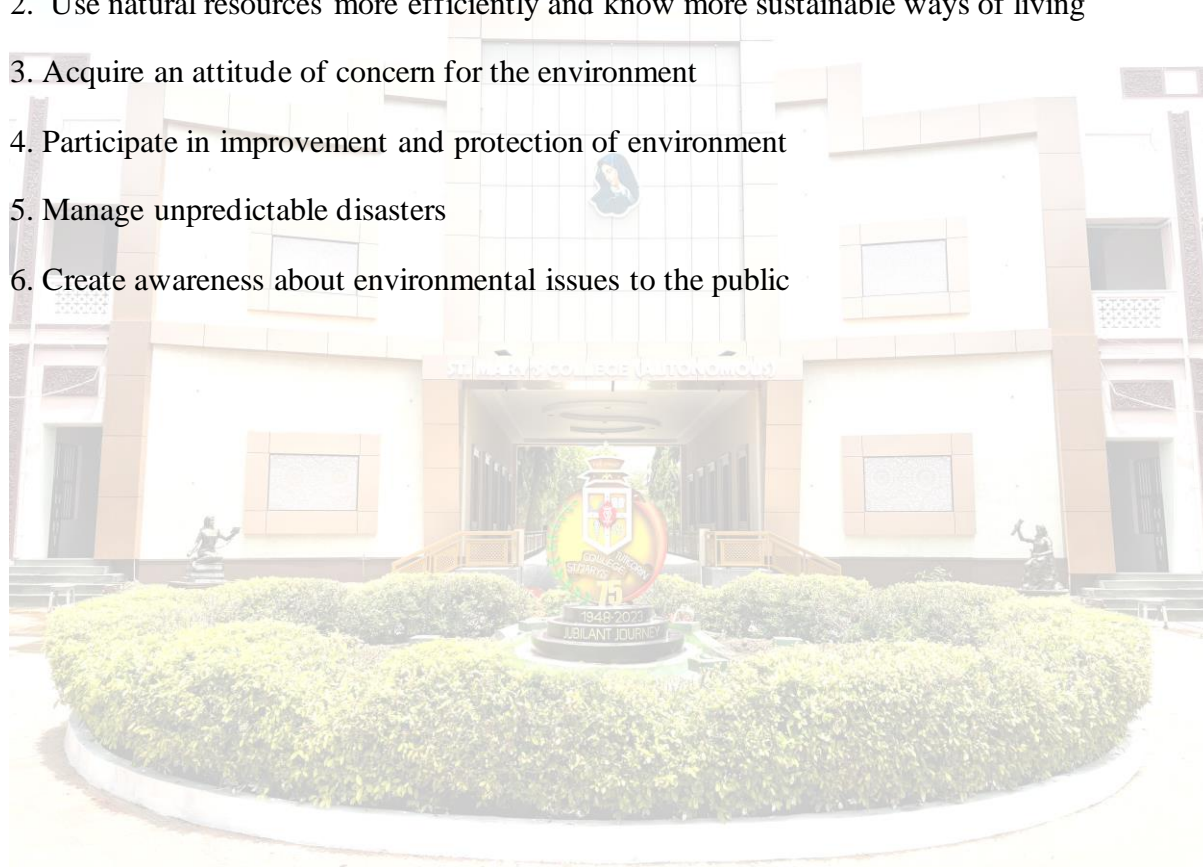
Programme: B. Sc. Mathematics – Batch II

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
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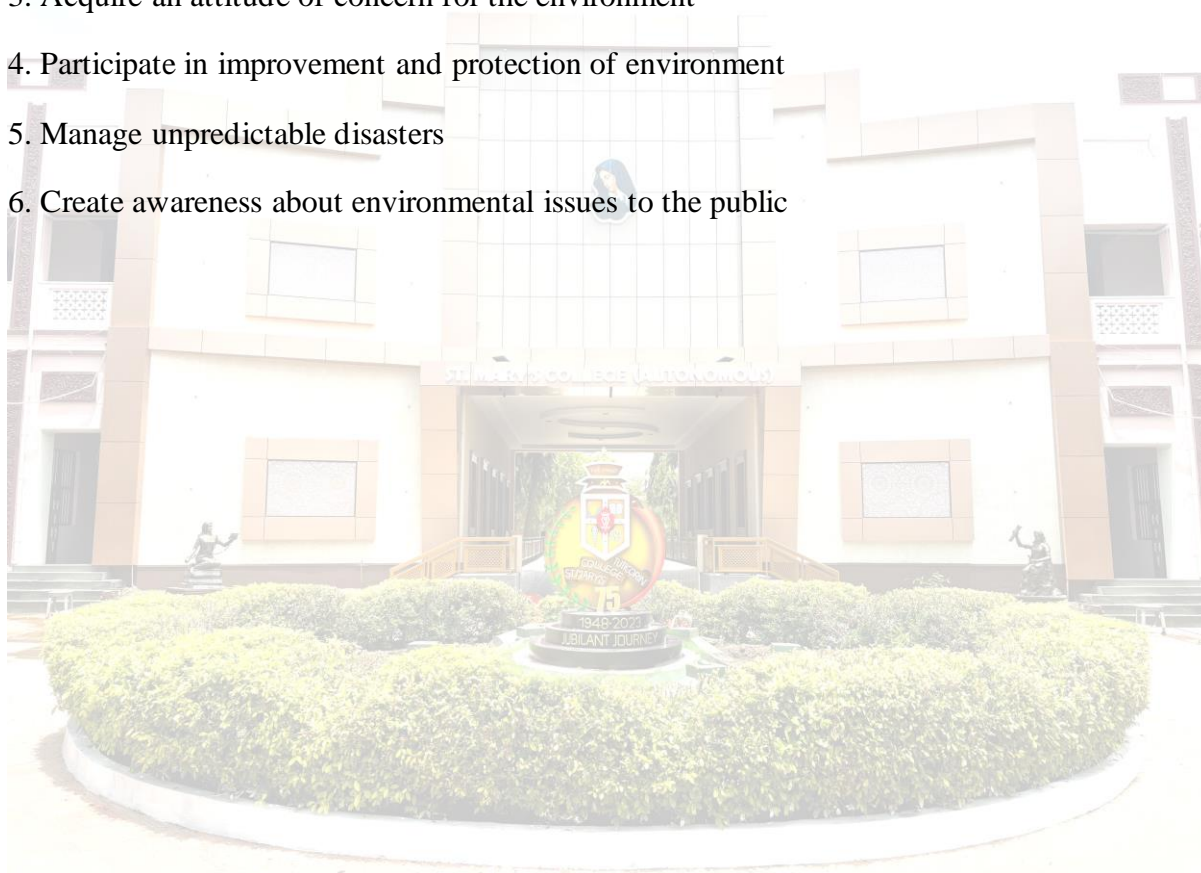


Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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Programme: M.Sc Mathematics

Semester III	
Self-Study Course	Course on Competitive Exams
Course Code: 21PMSS31	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.	2,6	Ap
CO-2	distinguish between proportional and non-proportional situations and when appropriate apply proportional reasoning	6	An
CO-3	solve problems applying probabilistic reasoning to make decisions	2	Ap
CO-4	evaluate claims based on empirical, theoretical and subjective probabilities	6,4	Re
CO-5	solve problems using high speed mental calculations	6	Ap
CO-6	understand the basic concepts of logical reasoning skills.	1,4	Un

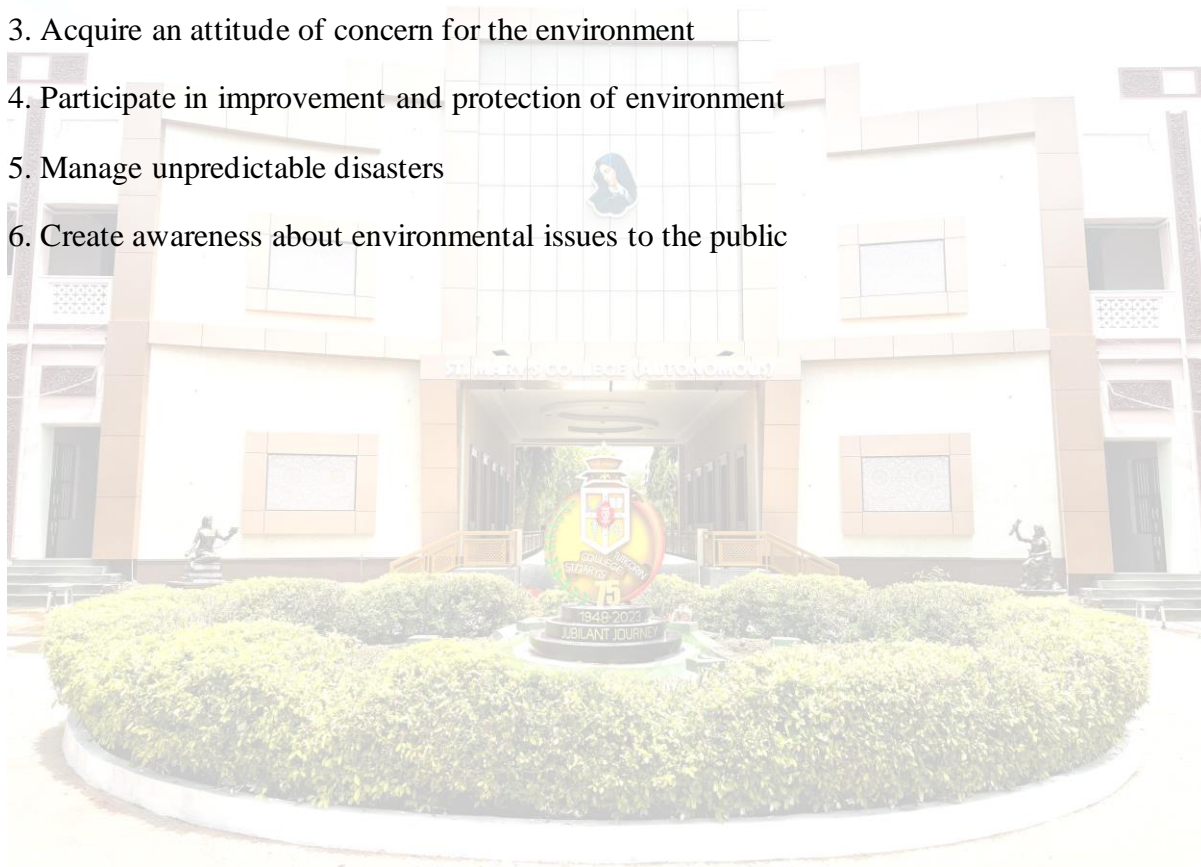
Programme: B. Sc. Microbiology

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public



SEMESTER-VI**Core XI- Industrial Microbiology****Code:18UMIC62****Hrs/Week:5****Hrs/Sem: 75****Credits:4****Course Outcome**

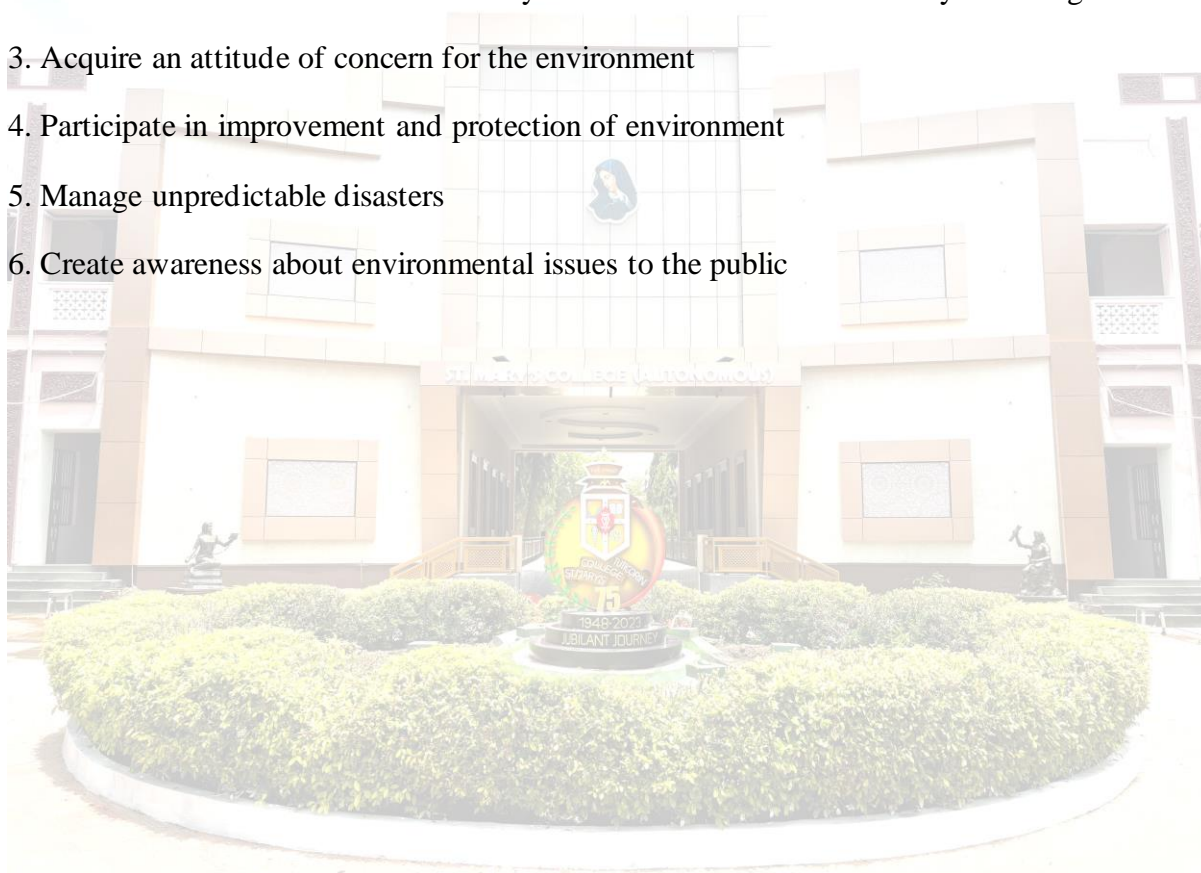
CO No	Upon completion of this course, students will be able to	PSO addressed	CL
CO -1	revise the idea about the usage of microorganisms in the field of industrial microbiology	3	Ap
CO- 2	analyse the knowledge of various industrial products and its impacts on the society.	4	Un
CO- 3	acquire knowledge in industrial fermentation	3	An
CO -4	have an insight on industrial microbiological techniques	2	Cr
CO- 5	understands the in the field of industrial microbiology	1	Un
CO-6	acquire knowledge of basics and applied microbiological aspects of food industries.	1	Un
CO-7	have knowledge on antibiotic production	2,4	Cr
CO-8	get knowledge about analysis of industrial waste and sewage treatment and disposal	2,4	Cr

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

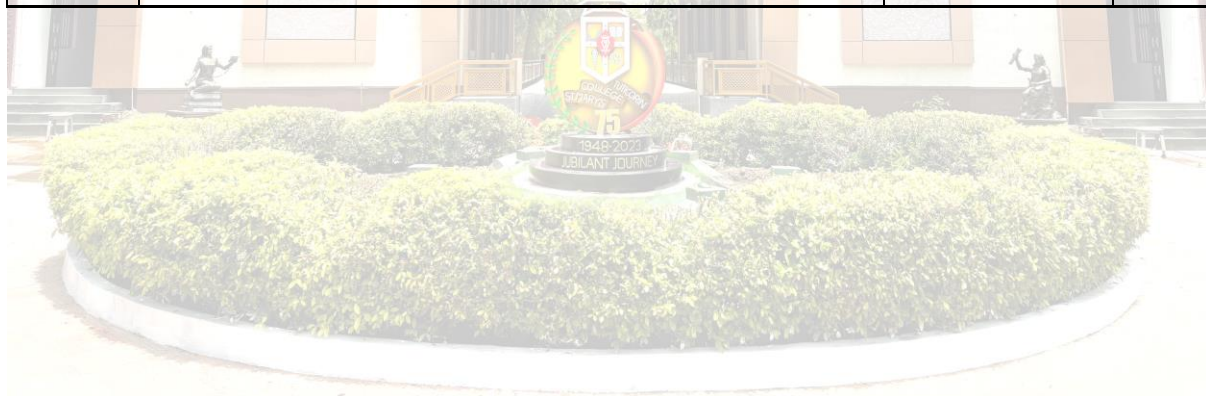
1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public



SEMESTER-VI			
Core X	Industrial Microbiology		
Course Code:21UMIC62	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	Ap
CO-2	analyse the knowledge of various industrial products and its impacts on the society.	4	Un
CO-3	acquire knowledge in industrial fermentation	3	An
CO-4	have an insight on industrial microbiological techniques	2	Cr
CO-5	understands the in the field of industrial microbiology	1	Un
CO-6	have knowledge on antibiotic production	2,4	Cr



Programme: M.Sc Microbiology

SEMESTER – II			
Core VIII -Marine Microbiology			
Code :19PMIC24	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	describe the basic knowledge on marine ecosystem.	1	Re
CO -2	acquire the knowledge about diversity of marine ecosystem	1,2	Kn
CO-3	can analyses the aware of bio fouling and prevention.	2,3,4	Ev
CO-4	interpret the knowledge on marine microorganisms.	1,2	Ap
CO-5	determines the microbial indicator organisms.	1	Kn
CO-6	explain the concept of marine pollution	2,3,4	Co
CO-7	grasp the knowledge about bioactive compounds.	2,3,4	An
CO-8	know the wealth of the sea	2	Kn

SEMESTER –III**Core- XI - Food and Dairy Microbiology**

Code : 19PMIC33	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	recall the techniques in food microbiology.	1	An
CO- 2	explain the about microorganisms important in food	2,5	Un
CO -3	knowledge about the microbial contamination of food.	1,2,4	Un
CO- 4	knows about the techniques in food preservation and fermented foods	3,4,6	Re
CO -5	knowledge about beneficial and harmful aspects of microbes in dairy products	2,4,5,6	Cr
CO -6	communicate the recent techniques on good manufacturing.	2,4,5,6	Un
CO-7	grasp the quality and safety assurance in food industry and the hazard analysis and critical control point	2,3	Re, Un
CO-8	grasp microbial examinations in food	4,5	Un,Ap

SEMESTER – II**Core VIII****Marine Microbiology****Course Code :21PMIC24****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	describe the basic knowledge on marine ecosystem.	1	Re
CO -2	acquire the knowledge about diversity of marine ecosystem	1,2	Kn
CO-3	can analyses the aware of bio fouling and prevention.	2,3,4	Ev
CO-4	interpret the knowledge on marine microorganisms.	1,2	Ap
CO-5	explain the concept of marine pollution	2,3,4	Co
CO-6	grasp the knowledge about bioactive compounds.	2,3,4	An



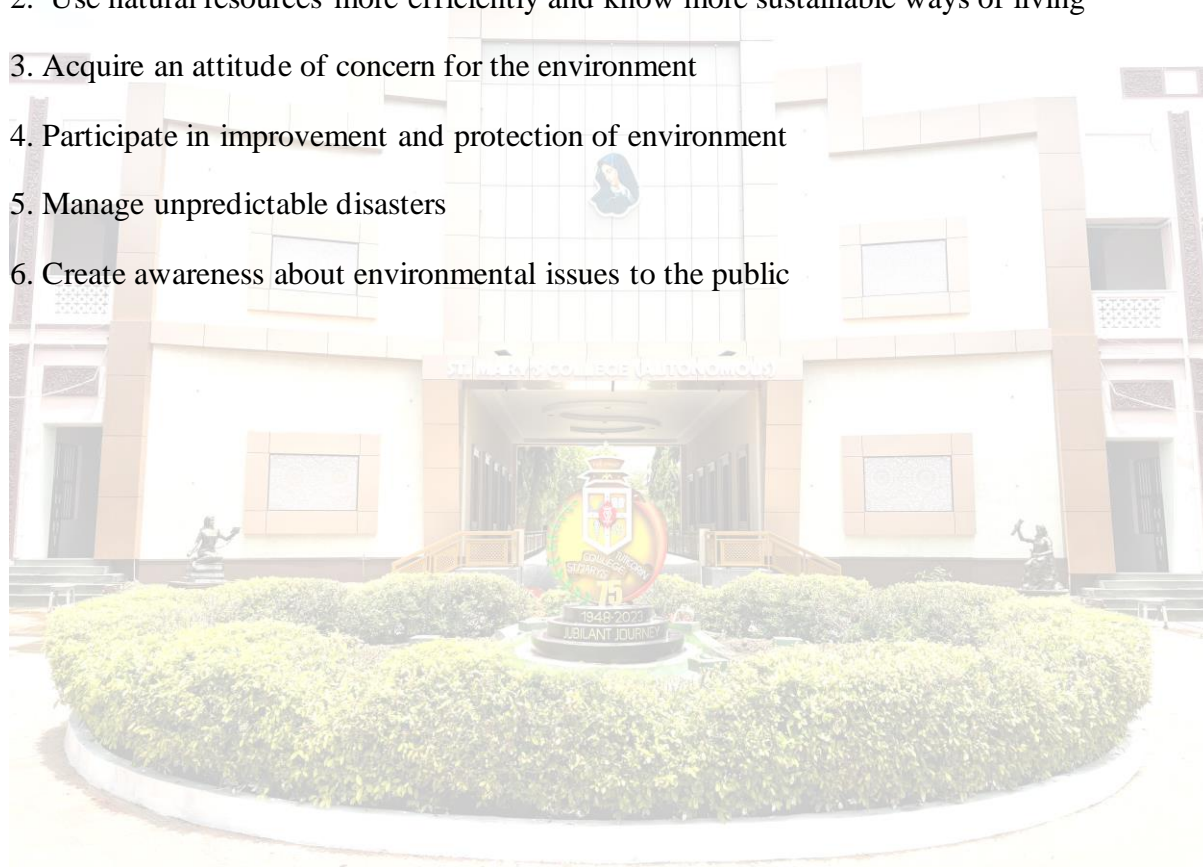
Programme: B. Sc. Physics

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public



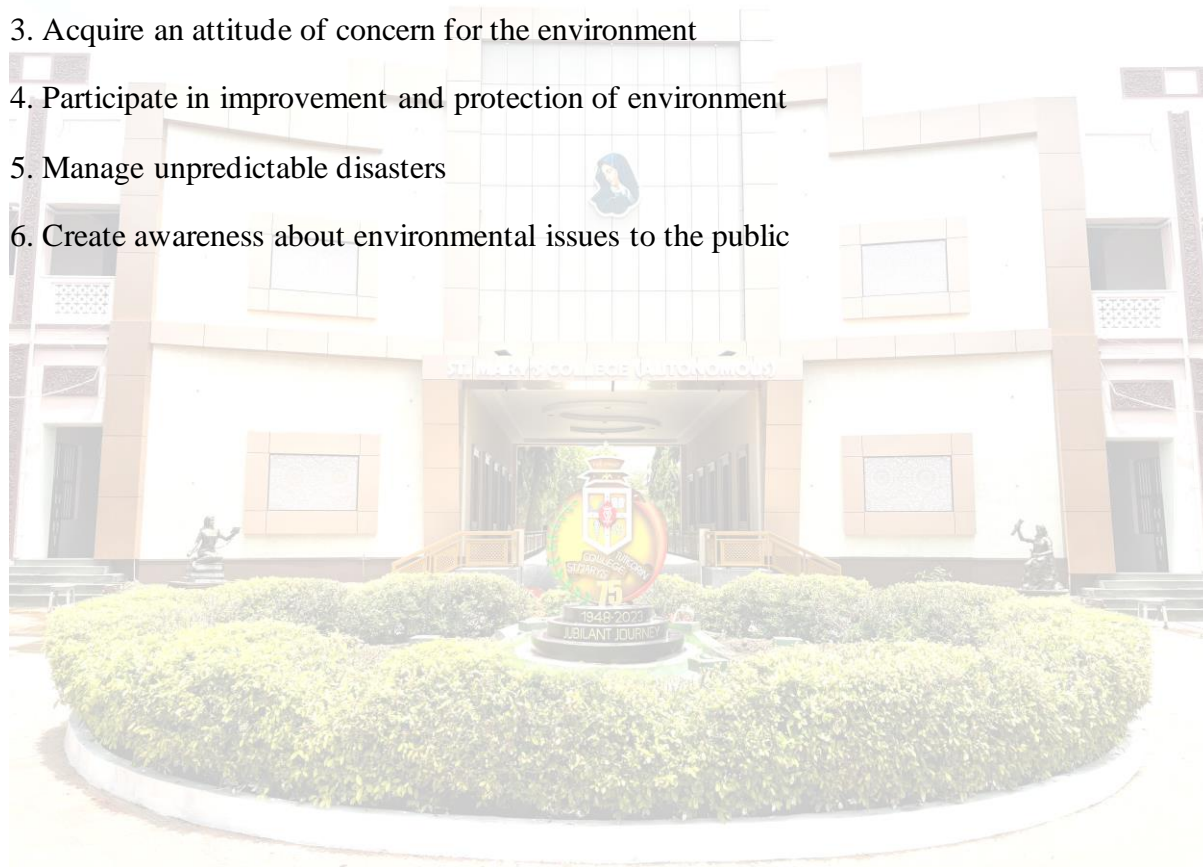
Programme: B. Sc. Psychology

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public

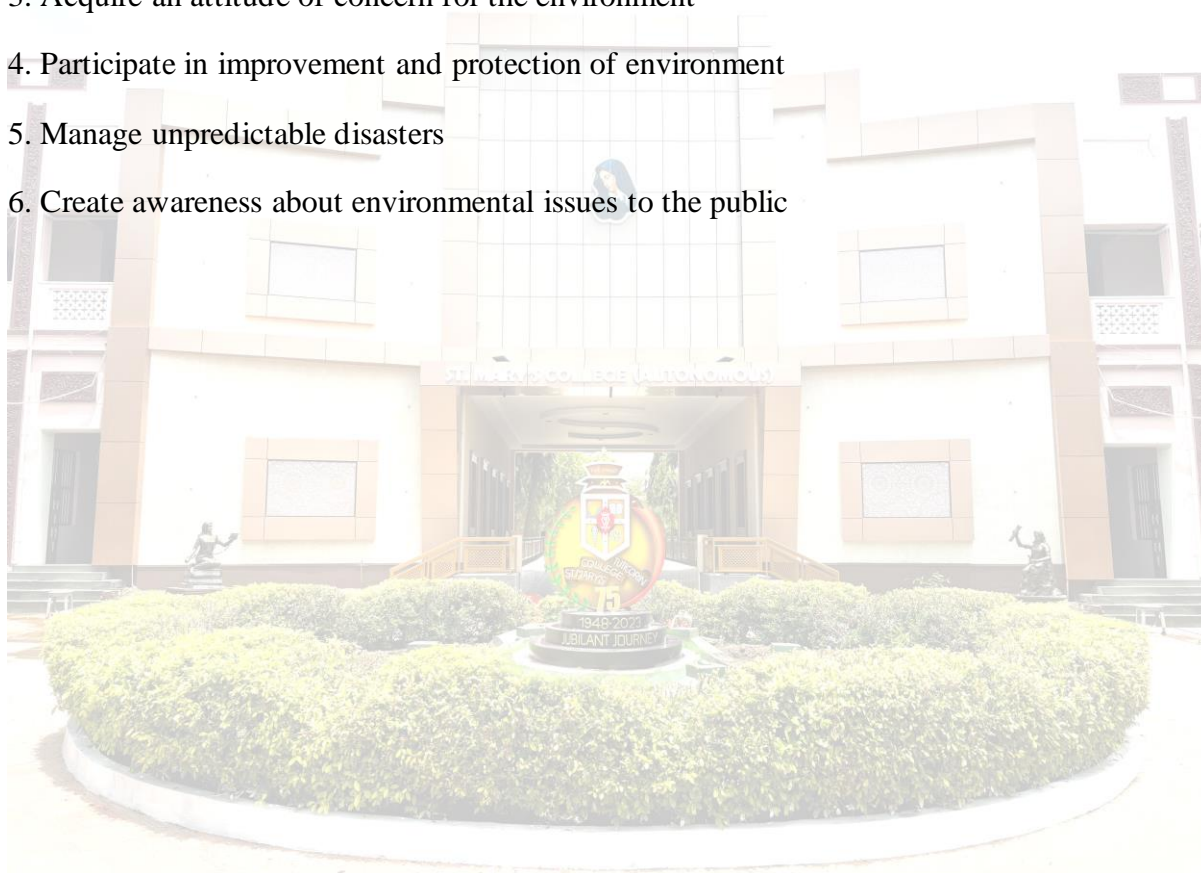


Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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4. Participate in improvement and protection of environment
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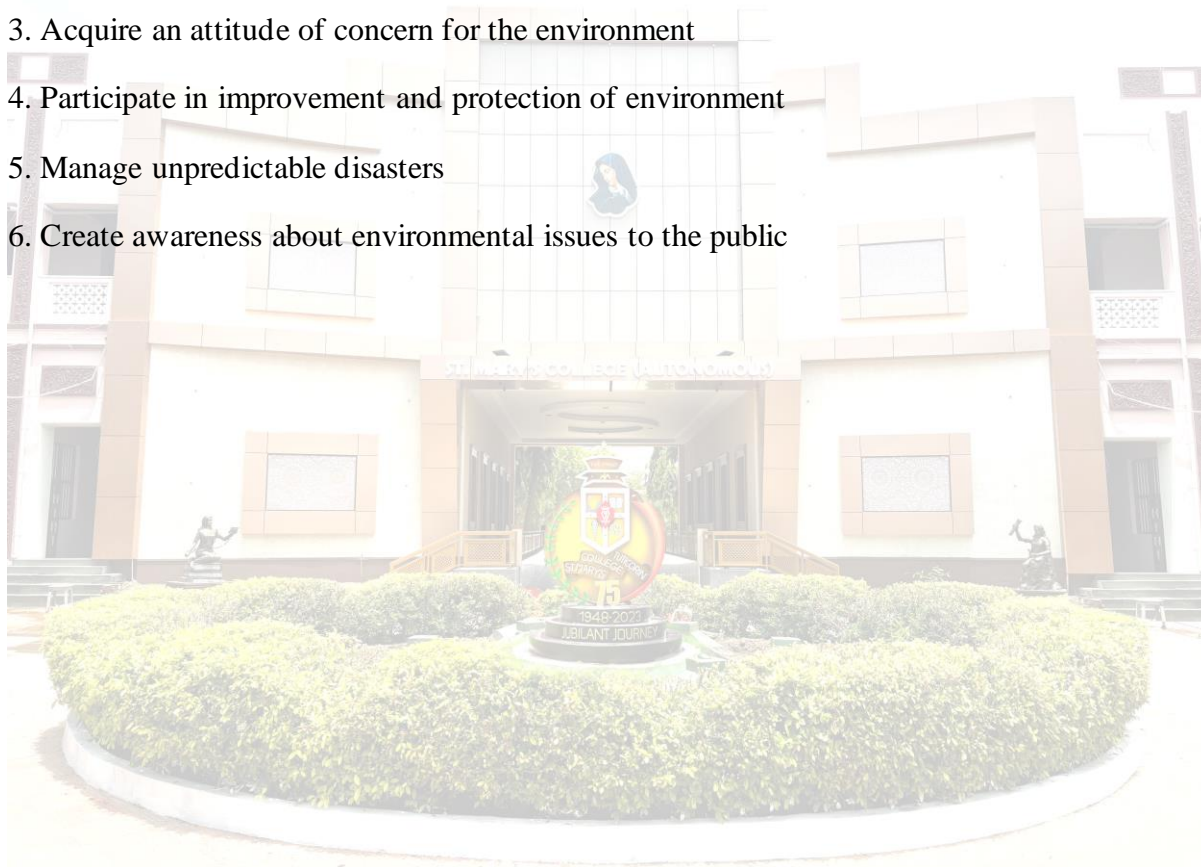
Programme: B. Sc. Zoology

Semester – II			
Environmental Studies			
Code : 18UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
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3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public



SEMESTER – III**Core Skill Based : Fishery Products****Code : 18UZOS31****Hrs/Week :4****Hrs/Sem : 60****Credits: 4****Course Outcome**

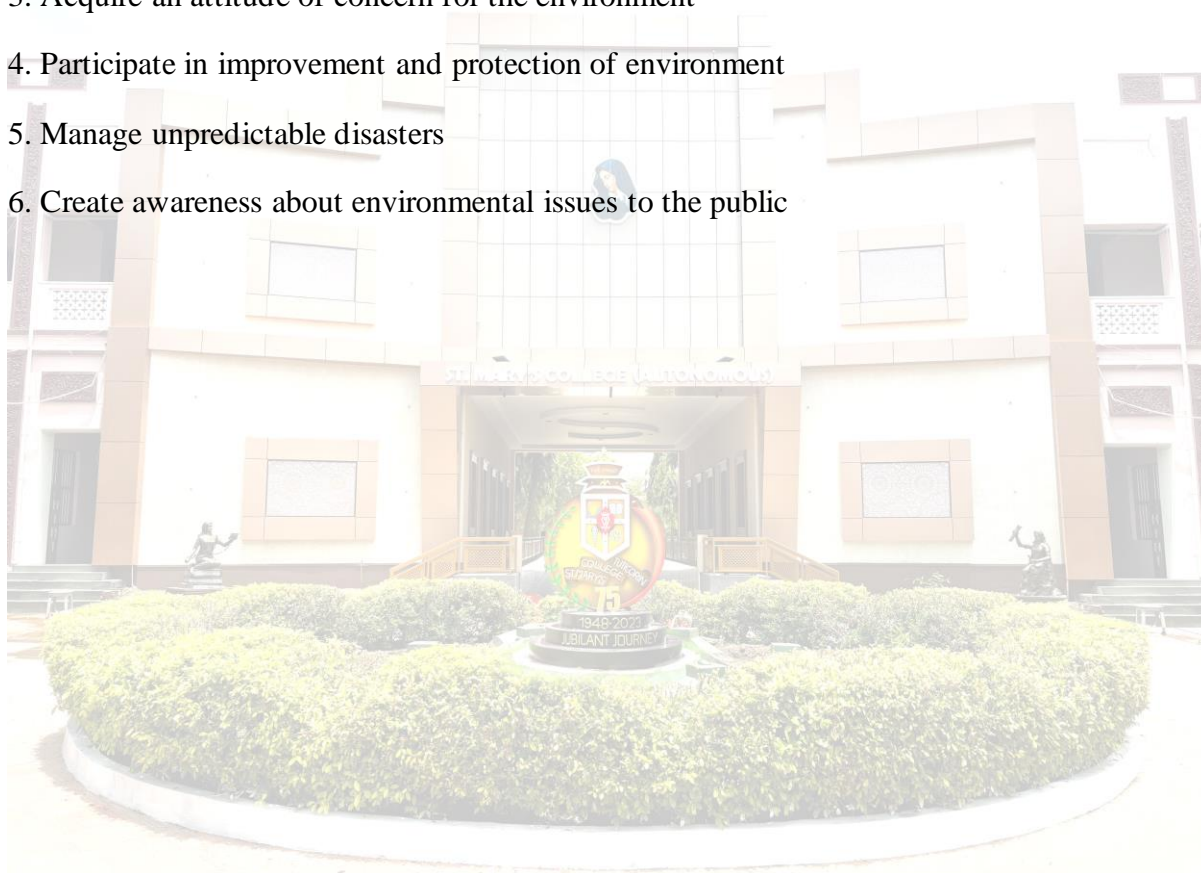
CO.No.	Upon completion of this course, the graduates will be able to	PSO addressed	CL
CO -1	acquire knowledge on products and by-products of fisheries.	1	Un
CO - 2	interpretation of the various processing and preservation of fisheries products.	7	Ap
CO - 3	attain information on the usage of fish by-products for industrial and domestic purposes.	7	Un
CO - 4	carry out study on seaweeds and their various usages in pharmaceutical and therapeutic industries.	7	Ev
CO - 5	practice the processing and preservation of various fish products.	1	Cr
CO - 6	implementation of sanitation and quality control techniques.	7	Cr
CO - 7	use the knowledge of preservation and processing techniques in day to day life.	7	Ev
CO- 8	comprehend and synthesize advanced knowledge on the outcomes of fisheries.	8	Un

Semester – II			
Environmental Studies			
Code : 21UAEV21	Hrs/ Week : 2	Hrs/Sem:30	Credits : 2

Course Outcomes:

Upon completion of this course, the students will be able to

1. Recognize the biotic and abiotic components of ecosystem and how they function
2. Use natural resources more efficiently and know more sustainable ways of living
3. Acquire an attitude of concern for the environment
4. Participate in improvement and protection of environment
5. Manage unpredictable disasters
6. Create awareness about environmental issues to the public



SEMESTER III			
Skill Based Elective		A. Fishery Products	
Course Code: 21UZOS31	Hrs/ Week: 2	Hrs/ Sem: 30	Credits: 2

Course Outcome

CO. No.	Upon completion of this course, the graduates will be able to	PSO addressed	CL
CO- 1	describe the products and by-products of fisheries	1	Re
CO-2	utilize information on processing and develop lab techniques for the usage of fish byproducts for industrial and domestic purposes	6	Cr
CO-3	carryout study on seaweeds and analyze their usage as food for human consumption	5	An
CO-4	develop skills to produce a variety of value added fishery products	7	Cr
CO-5	discuss and implement sanitation and quality control techniques	8	Ap
CO-6	acquire the knowledge of preservation and processing techniques and recommend their use in day to day life	8	Ev



SEMESTER VI**Core XII****Economic Zoology****Course Code: 21UZOC64****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 vermicomposting methods and the suitable species of earthworm for vermiculture	1	Un
CO-2	demonstrate skills on moriculture, silkworm rearing processes and harvesting of cocoons	7	Ap
CO-3	select the suitable species of bees for apiary and make use of bee keeping equipment	1	Ev
CO-4	describe cultivable organisms, nutritional requirements and formulate feed for aquaculture organisms and manage culture ponds	7	Re
CO-5	analyse the types of milk products, their nutritive value and outline the general management of dairy animals	8	An
CO-6	develop skills for self-employment and promote rural development	7	Cr

Programme: M.Sc Zoology

SEMESTER IV			
Core XIII : Marine Biology			
Code: 19PZOC41	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 various ecological zones of marine environment and their fauna and flora, their adaptations and distribution	2,3	Un
CO – 2	appraise the biological, chemical, biological and physical aspects of the marine environment and their significance to marine life	3,	Ev
CO-3	compare the marine ecosystems, types and threats to coral reefs, mangroves and salt marshes	1	An
CO- 4	relate ecological relationships that exist among marine organisms within a variety of habitats	4	An
CO-5	know the types and causes of marine pollution and their abatement	6	Un
CO-6	assess different sampling methods used in the marine biology and then using standard techniques for analysing samples in the laboratory	4,5	Ev
CO-7	analyse various types of marine resources and assess the various environmental concerns related to the use and abuse of marine resources.	2	An, Cr
CO-8	design and implement effective solutions to problems in marine environment	7,8	Ap

SEMESTER IV**Core XIII****Marine Biotechnology****Course Code: 21PZOC41****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	recall different zones of the sea	1	Re
CO-2	differentiate the physical and chemical properties of seawater and its impact on ocean life	3	Un
CO-3	classify the flora and fauna of estuaries, mangroves and salt marshes and their adaptations	2	Ap
CO-4	analyse the role of microbes in recycling of nutrients and the impact of pollution on marine life	3	An
CO-5	appraise the complexity and diversity of resources in the marine environment	5	An
CO-6	develop skills in a range of theoretical and practical applications on bioactive substances	6	Cr

SEMESTER IV			
Core Elective		A . Ornamental Fish Culture	
Course Code: 21PZOE41	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	1	Un
CO-2	apply the knowledge and skills in aquarium management	2	Ap
CO-3	evaluate the types and culture of live feed organisms and formulate the artificial feed	4	Ev
CO-4	demonstrate the mastery related with taxonomy, biology and transport of ornamental fish	3	Ap
CO-5	analyse the different breeding techniques employed for varieties of ornamental fish	6	An
CO-6	develop entrepreneurial skills and make aware of National and International export process and income generation	8	Cr



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