

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI**Course Schedule – June to November 2015**

Department : Botany
Name/s of the Faculty : Dr. H. Shakila
Course Title : GENERAL BOTANY - I
Course Code : 15BT/AC/GB14
Shift : I

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
June 18 – 24, 2015 (Day Order 1 to 6)	Unit:1Taxonomy: Bentham & Hooker's classification. Annonaceae	Lecture	College Botany by B.P. Pandey	Oral questioning after each class
June 25 – July 01, 2015 (Day Order 1 to 6)	Unit:1 Cucurbitaceae, Apocyanaceae, Lamiaceae,	Lecture & Practical demonstration	College Botany by B.P. Pandey	Oral questioning after each class
July 02 - 08, 2015 (Day Order 1 to 6)	Unit:1 Euphorbiaceae & Arecaceae	Lecture & Practical demonstration	College Botany by B.P. Pandey	Quiz
July 09 - 16, 2015 (Day Order 1 to 6)	Unit:2 Primary structure of dicot stem & root	Lecture OHP	Anatomy of seed plants by V.Singh & P.C.Pande	
July 17 - 24, 2015 (Day Order 1 to 6)	Unit:2 Secondary growth in typical dicot stem and root Leaf: Isobilateral & Dorsiventral	Lecture & Practical demonstration	Anatomy of seed plants by V.Singh & P.C.Pande	
July 27 - Aug. 03, 2015	Unit:3	Lecture	Text book of	Assignment

(Day Order 1 to 6)	Characteristic features of Algae		Algae by O.P. Sharma	
August 04 - 08, 2015	C.A. Test I			
August 10 - 17, 2015 (Day Order 1 to 6)	Unit:3 Type Study of Nostoc & Chara	Lecture	Text book of Algae by O.P. Sharma	
August 18 - 24, 2015 (Day Order 1 to 6)	Unit:3 Sargassum, Characteristic features of Fungi	Lecture	Text book of Fungi by O.P. Sharma	
August 25 – Sep 01, 2015 (Day Order 1 to 6)	Unit:4 Type study of Rhizopus, Aspergillus & Polyporus	Lecture & Practical Demonstration	Text book of Fungi by O.P. Sharma	
September 02 - 09, 2015 (Day Order 1 to 6)	Unit:4 Type study of Polyporus	Lecture	Text book of Fungi by O.P. Sharma	
September 10 - 18, 2015 (Day Order 1 to 6)	Unit:5 Causal organism, symptoms & control of Citrus Canker, Tikka Disease	Lecture	Plant Pathology by B.P. Pandey	
September 19 - 23, 2015 (Day Order 1 to 4)	Unit:5 Red rot of Sugarcane	Lecture & Practical Demonstration	Plant Pathology by B.P. Pandey	
September 25 - 30, 2015	C.A. Test II			
October 01 & 05, 2015 (Day Order 5 and 6)	Revision Practical			
October 06 - 12, 2015	Model Practical			

(Day Order 1 to 6)				
October 13 & 14, 2015 (Day Order 1 and 2)	Revision			

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule – June to November 2015

Department : Botany
Name/s of the Faculty : Dr. S.Sathya Bama
Course Title : Algae, Fungi and Lichens
Course Code : 11BT/MC/AF14
Shift : I

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
June 18 – 24, 2015 (Day Order 1 to 6)	Unit 1.1 Classification of Algae (Bold and Wynne,1978) Unit 1.2 Characteristics of Algal Divisions	Chalk &Board teaching method	Indroductio n to Algae by Bold and Wynne &Text book of Algae by O.P. Sharma	Oral Questioning
June 25 – July 01, 2015 (Day Order 1 to 6)	Unit 1.2 (continuation) Characteristics of Algal Divisions	Lecture	-do- The Algae by Chapman and Chapman; Botany for Degree students- Algae by Vashista sinha &Singh	-do-
July 02 - 08, 2015 (Day Order 1 to 6)	Unit 2 Detailed study of the thallus organization, reproduction and Life cycle of the following forms: Unit 2.1. Cyanochloranta- Nostoc Unit.2.2 Chlorophycophyta- Volvox	Lecture cum practicals	Text book of Algae by O.P. Sharma andAn Introduction to Algae by Morris	

July 09 - 16, 2015 (Day Order 1 to 6)	Unit 2.2 Chlorophycophyta- Caulerpa and Cladophora	-do-	-do-	Oral questioning
July 17 - 24, 2015 (Day Order 1 to 6)	Unit 2.3 Charophyta-Chara Unit 2.4 Phaeophycophyta- Sargassum	-do-	-do-	Assignment on comparative study
July 27 - Aug. 03, 2015 (Day Order 1 to 6)	Unit 2.5 Rhodophycophyta- Polysiphonia REVISION	-do-	-do-	
August 04 - 08, 2015	C.A. Test I			
August 10 - 17, 2015 (Day Order 1 to 6)	Unit3.1 Classification of Fungi(Alexopoulos and Mims)	Chalk and Board teaching method	Text book of Fungi by Sharma O.P Introductory Mycology by Alexopoulos	Oral questioning
August 18 - 24, 2015 (Day Order 1 to 6)	Unit 3.2 Characteristics of Major fungal classes	Lecture	Text book of Fungi by Sharma O.P Biology of Fungi by Ingold	Quiz
August 25 – Sep 01, 2015 (Day Order 1 to 6)	Unit4: Detailed study of thallus organization, reproduction and life cycle of the following forms; Unit 4.1 Chytridiomycetes-	Lecture cum practicals	Text book of Fungi by Sharma O.P A TextBook of Fungi by Dube	Oral questioning

	Synchytrium Unit.4.2 Plasmodiophoromycetes- Plasmodiophora			
September 02 - 09, 2015 (Day Order 1 to 6)	Unit 4.3 Oomycetes-Albugo Unit. 4.4 Ascomycetes- Peziza	-do-	-do-	
September 10 - 18, 2015 (Day Order 1 to 6)	Unit.4.5 Basidiomycetes- Puccinia	-do-	-do-	Oral questioning
September 19 - 23, 2015 (Day Order 1 to 4)	Unit.4.6 Deuteromycetes – Cercospora REVISION	-do-	Testbook of Fungi by O.P. Sharma	
September 25 - 30, 2015	C.A. Test II			
October 01 & 05, 2015 (Day Order 5 and 6)	Unit 5.1 Lichens Types and structure	-do-	Lichens- A Praliminary Text by Misra and Agarwal	
October 06 - 12, 2015 (Day Order 1 to 6)	Unit:5.1 Lichens-Reproduction and importance REVISION	-do-	-d0- Fungi and Allied Organism by P.D. Sharma	
October 13 & 14, 2015 (Day Order 1 and 2)	REVISION			

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule – June to November 2015

Department : Botany
Name/s of the Faculty : Dr. Geradette Davey & Dr. H. Shakila
Course Title : PRINCIPLES OF BIOTECHNOLOGY
Course Code : 15BT/MC/PB 14
Shift : I

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
June 18 – 24, 2015 (Day Order 1 to 6)	Unit:1.1 Introduction & Scope of Biotechnology	Lecture	Biotechnology – An Introduction by S.J. Ignacimuthu	Oral questioning after each class
June 25 – July 01, 2015 (Day Order 1 to 6)	Unit:1.1Mass Cultivation of SCP(Spirulina) Unit 2.1 Mushrooms: Morphology- Pleurotus.	Lecture	Biology of Fungi by Ingold, C.T. Industrial Microbiology by Presscott & Dunn A Text book of Biotechnology by H.D. Kumar	Oral questioning after each class
July 02 - 08, 2015 (Day Order 1 to 6)	Unit:1.2 Neutraceutical & Pharmaceutical Applications. Unit2.1 Mushrooms: Morphology - Agaricus & Volvariella	Lecture cum OHP	A Text book of Biotechnology by H.D. Kumar Industrial Microbiology by Presscott & Dunn	Assignment
July 09 - 16, 2015 (Day Order 1 to 6)	Unit:1.3 Algal Biofertilizers. Uni 2.2 Identification of edible & poisonous	Lecture cum OHP	A Text book of Biotechnology by H.D. Kumar Industrial Microbiology by	

	mushrooms		Presscott & Dunn	
July 17 - 24, 2015 (Day Order 1 to 6)	Unit:2.3 Mushrooms: Cultivation of Pleurotus & Agaricus Unit 5.1-Media	Lecture & Practical demonstration	Industrial Microbiology by Presscott & Dunn A Text book of Biotechnology by H.D. Kumar	Quiz
July 27 - Aug. 03, 2015 (Day Order 1 to 6)	Unit:2.3 Harvesting and Uses of Mushrooms. Unit 5.1 Equipmentsl	Lecture	Industrial Microbiology by Presscott & Dunn A Text book of Biotechnology by H.D. Kumar	
August 04 - 08, 2015	C.A. Test I			
August 10 - 17, 2015 (Day Order 1 to 6)	Unit:3.1 Principles of cheese making Unit :4.1 Bread production	Lecture	A Text book of Biotechnology by H.D. Kumar	Quiz
August 18 - 24, 2015 (Day Order 1 to 6)	Unit:3.2 Types of cheese Unit:4.2 Role of yeast in Bread making	Lecture	Industrial Microbiology by A.H. Patel.	
August 25 – Sep 01, 2015 (Day Order 1 to 6)	Unit:3.3Yoghurt manufacture Unit 4.3 Rate of fermentation	Lecture & Practical Demonstration	Industrial Microbiology by A.H. Patel.	Assignment
September 02 - 09, 2015 (Day Order 1 to 6)	Unit:5.2 Antibiotics Production.	Lecture	Industrial Microbiology by A.H. Patel.	
September 10 - 18, 2015 (Day Order 1 to 6)	Unit:5.3 Citric acid production	Lecture	Industrial Microbiology by A.H. Patel.	Quiz
September 19 - 23, 2015	Unit:5.4 Strain		Industrial	

(Day Order 1 to 4)	selection and demonstration on citric acid production		Microbiology by A.H. Patel.	
September 25 - 30, 2015	C.A. Test II			
October 01 & 05, 2015 (Day Order 5 and 6)	Revision			
October 06 - 12, 2015 (Day Order 1 to 6)	Revision			
October 13 & 14, 2015 (Day Order 1 and 2)	Revision			

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule – June to November 2015

Department : Botany
Name/s of the Faculty : Dr Dr.Sathya Bama & Dr. Priscilla Jebakumari
Course Title : Herbal Therapy
Course Code : 11BT/GE/HT32
Shift : I

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
June 18 – 24, 2015 (Day Order 1 to 6)	Unit 1. Introduction: Ayurveda, Siddha and Unani	Lecture	Fundamentals of Ayurvedic Medicine by Vaidya Bhagwan Dash	
June 25 – July 01, 2015 (Day Order 1 to 6)	Unit 1.2 Basic Principles of Ayurveda: Panchamahabhutas, Tridosha concept and Malas	Lecture	-do- Ayurveda the Gentle Health System by Hans Ayurveda and panchakarma, the science of Healing and rejuvenation by Sunil	Oral Questioning
July 02 - 08, 2015 (Day Order 1 to 6)	Unit 1.3 Preparation of Ayurvedic medicine: Svarasa(Juice), Churna(powder),Kalka(paste),Kashaya	Lecture cum practical demonstration	Ayurveda the Gentle Health System by Hans	Students are trained to prepare herbal

	and Bhasma		The Book of Ayurveda, A guide to personal wellbeing by Judith H. Morrison	medicine
July 09 - 16, 2015 (Day Order 1 to 6)	Unit.1.3 Preparation of Siddha Medicine: Lavanam, Pashanam,Loham, Rasam and Gandhaham	Lecture using visual aids	A Hand Book of Common Remedies based on siddha systemof Indian medicine by Jaibala and Balakrishnan	Quiz
July 17 - 24, 2015 (Day Order 1 to 6)	Unit 2.1 Herbal Remedies for some common ailments: Diarrhoea, ulcer, cold Asthma,Fever, Hypertention,	Lecture	Eating and Healing: traditional food as Medicine, by Pieronia and Price	
July 27 - Aug. 03, 2015 (Day Order 1 to 6)	Unit 2.1: Jaundice, Chickenpox, DiabetesMenstrual disorder, Bites and Stings	Lecture	- Do – Herbal remedies by Saha	Oral questioning
August 04 - 08, 2015	C.A. Test I			

August 10 - 17, 2015 (Day Order 1 to 6)	Unit 2.2 General health tonics and Salads Unit 3.1 Herbal care for facial skin: herbal pack for dry, oily and normal skin	Lecture cum demonstration	Herbal remedies by Saha A Hand Book of Common Remedies based on siddha systemof Indian medicine by Jaibala and Balakrishnan	Oral Questioning
August 18 - 24, 2015 (Day Order 1 to 6)	Unit 3.2 Herbal remedies for Pimples, acnes, Black heads, corns warts and boils	-do -	-do – Handbook on Medicinal plants, by Duke	Assignment
August 25 – Sep 01, 2015 (Day Order 1 to 6)	Unit 3.3 Herbal Remedy for dandruff, premature graying and loss of hair	Lecture cum demostration	-do-	
September 02 - 09, 2015 (Day Order 1 to 6)	Unit2.3 Preparation of Ayurvedic Medicines	Practical preparation		
September 10 - 18, 2015 (Day Order 1	Unit 3.4 Hair washes and herbal hair tonics	lecture	Herbal remedies by Saha	

to 6)				
September 19 - 23, 2015 (Day Order 1 to 4)	Unit 3.5 Demonstration of facial and hair care REVISION	Practical demostration		
September 25 - 30, 2015	C.A. Test II			
October 01 & 05, 2015 (Day Order 5 and 6)	REVISION			
October 06 - 12, 2015 (Day Order 1 to 6)	TEST			
October 13 & 14, 2015 (Day Order 1 and 2)				

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule – June to November 2015

Department : Botany
Name/s of the Faculty : Dr.Priscilla Jebakumari & Dr.S. Sathya Bama
Course Title : Phytotherapy and Ethnobotany
Course Code : 11BT/MC/PE33
Shift :I

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
June 18 – 24, 2015 (Day Order 1 to 6)	1.1.Basic principles of Aurveda and Siddha: Panchamahabhutas,Tidhoshha Concept 2.Vernacular name, Binomial, Family, Active principle, Morphology of the useful part and the Medicinal uses of 2.1. Roots –Asparagus racemosa; Rouwolfia sepentina	Chalk and Board Teaching method	Fundamental of aurvedic Medicine by Dash: Medicinal plants of India and Pakistan by Dastur; Handbook of Medicinal herbs by Duke	Oral Questioning
June 25 – July 01, 2015 (Day Order 1 to 6)	1.1.Basic principles of Ayurveda and Siddha: Malas,Agni, prakruti 2.2.Underground stem: Zingiber officinalis, Curcuma longa and Allium cepa	-do -	-do- Taxonomy of Medicinal plants and their uses by Shankaranarayanan	
July 02 - 08, 2015 (Day Order 1 to 6)	1.2. Drug preparation: Ashwam, Arishtam, 2.3. Leaves: Ocimum sp., Tylophora	Board and Chalk method Lecture cum practical study on	-do -	Scrapbook on Herbal products and Herbaria

	asthmatica, Catharanthus roseus and Aloe vera	Morphological characters		
July 09 - 16, 2015 (Day Order 1 to 6)	1.2. Drug preparation: Thaila Churnam, Leghyam, Bhasmam 2.3. Flowers: Hibiscus rosa-sinensis & Datura stramonium 2.4. Fruits: Piper longum, Terminalia belerica	-do-	-do- Understanding medicinal plants, their chemistry and therapeutic action by Hanson	-do-
July 17 - 24, 2015 (Day Order 1 to 6)	1.2. Drug preparation: Infusion Decoction 2.4. T. chebula, Emblica officinalis 2.5. Seeds: Strychnos nuxvomica and Trigonella foenum- graceum	-do-	-do-	-do-
July 27 - Aug. 03, 2015 (Day Order 1 to 6)	1.2. Drug preparation: Poulitice – Salves, Compresses, Mouthwash 2.6. Bark: Cinnamomum zeyalicum REVISION	-do-	-do-	-do-
August 04 - 08, 2015	C.A. Test I			
August 10 - 17, 2015 (Day Order 1 to 6)	1.3. Adultration, Detection 2.7. Whole plant: Azadirachta indica, Eclipta alba, Acalypha indica and Phyllanthus amarus	Lecture cum PPT	Quality STDs of Indian Medicinal Plants by ICMR Medicinal plants- Field and Laboratory Manual by Froog	Oral questioning
August 18 - 24, 2015	1.3. Standardization of drugs	Lecture	Quality STDs of Indian Medicinal	Quiz

(Day Order 1 to 6)	3.1. Ethnobotany; Definition and Scope 3.2. Methodologies of Ethnobotanical research, Fieldwork, Literature, Herbaria and Musea.	Guest lecture	Plants by ICMR	
August 25 – Sep 01, 2015 (Day Order 1 to 6)	1.4. Preparation of Ayurveda/ Siddha Medicines for common ailments. 3.3. Ethnobotany and healthcare 3.4. Ethnobotanical studies of Toda and Irula Tribes	Lecture cum practical preparation of various medicines and microscopic analysis Field Trip to IT WWS	Medicinal Plants for health and wealth by S N Das Ayurvedic treatment for common diseases by V B Dash	Oral questioning Report submission
September 02 - 09, 2015 (Day Order 1 to 6)	1.5. Microscopic and qualitative analysis of herbal drug 3.5. Tribal food and medicine 4.1. Traditional way of conserving plant diversity	Lecture cum practical preparation of medicines and microscopic analysis Lecture through PPT	-do- Medicinal plants- Field and Laboratory Manual by Froog Pharmacognosy – A. Roseline	Oral questioning
September 10 - 18, 2015 (Day Order 1 to 6)	REVISION 4.2. Ex situ conservation (including gene banks and seedbanks) 4.3. In situ conservation	Lecture through PPT	Medicinal plants for Health and Wealth by Das S.N	Oral questioning
September 19 -	4.4. Biodiversity: Uses	Lecture	-do-	

23, 2015 (Day Order 1 to 4)	and conservation			
September 25 - 30, 2015	C.A. Test II			
October 01 & 05, 2015 (Day Order 5 and 6)	5.1. Role of Dhatu in physical beauty and daily routine to enhance beauty 5.2. Essential oils and Salads	Lecture cum demo	Ayurveda and beauty by Melanie Sachs	Oral questioning
October 06 - 12, 2015 (Day Order 1 to 6)	5.3. Facial and hair care using herbal products REVISION	-do-	-do-	
October 13 & 14, 2015 (Day Order 1 and 2)	REVISION			

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule – June to November 2015

Department : BOTANY
Name of the Faculty : DR. MS. ORDETTA MENDOZA
Course Title : TAXONOMY OF ANGIOSPERMS AND ECONOMIC BOTANY
Course Code : 11BT/MC/TE34
Shift : AIDED

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
June 18 – 24, 2015 (Day Order 1 to 6)	Unit 1. Importance of Taxonomy. Classification – Artificial, Natural and Phylogenetic system of classification	PPT presentation and Chalk and Board.	Text: Singh, V., and D.K.Jain, (1989), Taxonomy of Angiosperms , Rastogi Pub. Meerut, India., Ref.: Lawrence, George, H.M., Taxonomy of Vascular Plants , Oxford IBH pub. Co., New Delhi.	
June 25 – July 01, 2015 (Day Order 1 to 6)	Detailed study of Bentham and Hooker's classification – Merits and demerits. Taxonomic Keys – use of dichotomous keys	-do-	-do-	
July 02 - 08, 2015 (Day Order 1 to 6)	Unit 2: Plant nomenclature: Binomial and Polynomials. ICBN, Typification, Effective and Valid Publications.	-do-	-do-	

July 09 - 16, 2015 (Day Order 1 to 6)	Author Citation, Choice of names and rejection of names. Unit 3: Herbarium Techniques, collection, pressing, drying poisoning, mounting and preservation of plant specimens.	-do-	-do-	Botanical Gardens in India, Kew Gardens. Herbaria in India - Assignments To be submitted on August 21, 2015
July 17 - 24, 2015 (Day Order 1 to 6)	Unit 4: Detailed study of the diagnostic characteristics and economic importance of the following families: Dicotyledones - Annonoaceae, Nymphaeaceae, Rutaceae	PPT presentation and Chalk and Board.	Ref.: Lawrence, George, H.M., Taxonomy of Vascular Plants , Oxford IBH publishing Co., New Delhi. Rendle, A.B, Classification of Flowering plants , Vol. I & II, C. Univ. Press, London. Text Bk.: Singh, V., and D.K.Jain, (1989), Taxonomy of Angiosperms , Rastogi Pub., India.	
July 27 - Aug. 03, 2015 (Day Order 1 to 6)	Fabaceae and its sub-families	-do-	-do-	
August 04 - 08, 2015	C.A. Test I			
August 10 - 17, 2015 (Day Order 1 to 6)	Cucurbitaceae Gamopetalae - Rubiaceae, Apocynaceae	PPT presentation and Chalk and Board.	-do-	
August 18 - 24, 2015 (Day Order 1 to 6)	Asclepiadaceae, Convolvulaceae, Solanaceae	-do-	-do-	
August 25 -Sep 01, 2015 (Day Order 1 to 6)	Acanthaceae, Lamiaceae.	-do-	-do-	
September 02 - 09, 2015	Monochlamydeae - Amaranthaceae,			

(Day Order 1 to 6)	- Euphorbiaceae	-do-	-do-	
September 10 - 18, 2015 (Day Order 1 to 6)	Orchidaceae and Arecaceae,	PPT presentation and Chalk and Board.		
September 19 - 23, 2015 (Day Order 1 to 4)	Poaceae	PPT presentation	- do -	
September 25 - 30, 2015	C.A. Test II			
October 01 & 05, 2015 (Day Order 5 and 6)	Unit 5: Economic Botany Fibre and Fibre yielding plants	Lecture	Text Bk.: Singh, V., and D.K.Jain, (1989), Taxonomy of Angiosperms , Rastogi Publications, India.	
October 06 - 12, 2015 (Day Order 1 to 6)	-Tannins and Dyes - Gums, Resins - Spices and Condiments - Fumitories and Masticatories	Lecture	-do-	QUIZ
October 13 & 14, 2015 (Day Order 1 and 2)	Revision			

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule – June to November 2015

Department : Botany
Name/s of the Faculty : Dr. Nirmala Kanagaraj
Course Title : Cell Biology
Course Code : 11BT/MC/CB54
Shift : I

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
June 18 – 24, 2015 (Day Order 1 to 6)	Unit-1 Introduction to cell biology, Cell theory, Relationship of cytology with other sciences Cell Wall- Primary and Secondary Cell membrane- Introduction and chemical composition	Lecture	Cytology By P.S.Verma Molecular Biology By S.L. Wolfe Cell and molecular biology By Philip Scheeler	Oral questioning after each class
June 25 – July 01, 2015 (Day Order 1 to 6)	Unit-1 Molecular organization of the cell membrane, Models, Biogenesis and cell membrane surface	Lecture OHP	Cytology By P.S.Verma	Oral questioning after each class
July 02 - 08, 2015 (Day Order 1 to 6)	Unit-2 Endoplasmic Reticulum- Morphology ,chemistry,origin and functions	Lecture OHP	Cytology By P.S.Verma Molecular Biology By S.L. Wolfe	Oral questioning after each class
July 09 - 16, 2015 (Day Order 1 to 6)	Unit-2 Golgi Apparatus Mitochondria- Ultrastructure	Lecture OHP	Cytology By P.S.Verma Molecular	Preserntation of Functions by each group

			Biology By S.L. Wolfe	
July 17 - 24, 2015 (Day Order 1 to 6)	Unit-2 Mitochondria Contd Chloroplast- Ultrastructure	Lecture OHP	Cytology By P.S.Verma Molecular Biology By S.L. Wolfe	Oral questioning after each class
July 27 - Aug. 03, 2015 (Day Order 1 to 6)	Unit-2 Chloroplast- DNA, Biogenesis		Cytology By P.S.Verma Molecular Biology By S.L. Wolfe	Oral questioning after each class
August 04 - 08, 2015	C.A. Test I			
August 10 - 17, 2015 (Day Order 1 to 6)	Unit-2 Microtubules- Occurrence, Structure, functions etc.,	Lecture OHP	Cytology By P.S.Verma Molecular Biology By S.L. Wolfe	Oral questioning after each class
August 18 - 24, 2015 (Day Order 1 to 6)	Unit-3 Nucleus-Nuclear membrane, Nucleolus, Chromosomes	Lecture PPT	Cytology By P.S.Verma Molecular Biology By S.L. Wolfe	Oral questioning after each class
August 25 – Sep 01, 2015 (Day Order 1 to 6)	Unit-3 Chromosomes contd.	Lecture PPT	Cytology By P.S.Verma Molecular Biology By S.L. Wolfe	Oral questioning after each class
September 02 - 09, 2015 (Day Order 1 to 6)	Unit-3 DNA Structure	Lecture PPT	Cell and molecular biology By S.L. Wolfe	Oral questioning after each class
September 10 - 18, 2015 (Day Order 1 to 6)	Unit-4 Replication	Lecture OHP		Oral questioning after each class
September 19 - 23, 2015 (Day Order 1 to 4)	Unit-5 Cell cycle- Mitosis			Oral questioning after each class

September 25 - 30, 2015	C.A. Test II			
October 01 & 05, 2015 (Day Order 5 and 6)	Unit-5 Meiosis- Introduction	Lecture	Molecular Biology By Wolfe	Assignment
October 06 - 12, 2015 (Day Order 1 to 6)	Unit-5 Meiosis- Mechanism Developmental biology of plants	Lecture	Molecular Biology By Wolfe	Oral questioning after each class
October 13 & 14, 2015 (Day Order 1 and 2)	Revision			

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI**Course Schedule – June to November 2015**

Department : Botany
Name/s of the Faculty : Dr. Geradette Davey
Course Title : Ecology and Environmental Biotechnology
Course Code : 11BT/MC/EE54
Shift : 1

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
June 18 – 24, 2015 (Day Order 1 to 6)	1.1 Ecosystem,- Structure & Function	Power Point Presentation	Ecology & Environment -P. D. Sharma	Quiz
June 25 – July 01, 2015 (Day Order 1 to 6)	1.2 Ecological Pyramids & Energy Flow	Power Point Presentation	Ecology - Peter Stiling	Quiz
July 02 - 08, 2015 (Day Order 1 to 6)	2.1 Qualitative Analysis of Plant Communities	Lecture	Ecology - R. S. Sharma P. S. Chandel	Quiz
July 09 - 16, 2015 (Day Order 1 to 6)	2.2 Quantitative Analysis of Plant Communities	Lecture	Essentials of Ecology C. Townsend, J. Harper and M. Begon.	Quiz
July 17 - 24, 2015 (Day Order 1 to 6)	2.3 Sampling of Population	Field Study	College Botany Practical Vol.1 S. C. Santra, T. P. Chatterjee, A. P. Das	Problems
July 27 - Aug. 03, 2015 (Day Order 1 to 6)	Revision			

August 04 - 08, 2015	C.A. Test I			
August 10 - 17, 2015 (Day Order 1 to 6)	3.1 Biomagnification	Lecture	Elements of Biotechnology - P.K. Gupta	Quiz
August 18 - 24, 2015 (Day Order 1 to 6)	3.2 Biotransformation - DDT	Lecture	Fundamentals of Ecology M. C. Dash & S. P. Dash	Quiz
August 25 – Sep 01, 2015 (Day Order 1 to 6)	3.3 Testing Methods of Toxicity	Lecture	Fundamentals of Ecology M. C. Dash & S. P. Dash	Quiz
September 02 - 09, 2015 (Day Order 1 to 6)	4.1 Biodegradation of Xenobiotics	Guest Lecture	Biotechnology – S S .Purohit and S. K. Mathur	Quiz
September 10 - 18, 2015 (Day Order 1 to 6)	4.2 Bioremediation 4.3 Biosensors	Lecture	Biotechnology – S. S . Purohit and S.K. Mathur	Quiz
September 19 - 23, 2015 (Day Order 1 to 4)	4.4 Bioleaching	Power Point Presentation	Biotechnology-M. D. Trevan, S. Boffey, K. H. Goulding, P. Stanbury	Quiz
September 25 - 30, 2015	C.A. Test II			
October 01 & 05, 2015 (Day Order 5 and 6)	5.1 Stages of EIA	Lecture	Environmental Science R. C. Das and D. K. Behera	Quiz
October 06 - 12, 2015 (Day Order 1 to 6)	Environmental Quality Assessment & Monitoring	Power Point Presentation	Environmental Biology & Toxicology P. D. Sharma	Quiz
October 13 & 14, 2015				

(Day Order 1 and 2)	Revision of entire syllabus			
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STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule – June to November 2015

Department : Botany
Name/s of the Faculty : Dr.Priscilla Jebakumari
Course Title : Microbiology
Course Code : 11BT/MC/MB54
Shift :I

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
June 18 – 24, 2015 (Day Order 1 to 6)	Unit1.1 Germ theory of disease, Vaccination, Koch's Postulates, Whittaker's Five Kingdom Theory	Lecture	Microbiology by Prescott, Harley and Klein; Microbiology by Stuart and Hogg	Oral questioning
June 25 – July 01, 2015 (Day Order 1 to 6)	Unit 2.1 Classification of Bacteria(Bergey's Manual) Unit2.2 Morphology of Bacteria	Lecture Study of bacterial Morphology through Practical Isolation and Characterization of bacteria	-do – General Microbiology by Ajith kumar	
July 02 - 08, 2015 (Day Order 1 to 6)	Unit 2.2 Growth and Control and endospore formation	Lecture, Study of bacterial Morphology through Practical Isolation and Characterization of bacteria	- do-	Evaluation of Practical Observation book
July 09 - 16, 2015 (Day Order 1 to 6)	Unit:2.3 Conjugation, Transformation Transduction	Lecture using PPT	Microbiology by Prescott, Harley and Klein; Microbiology by Stuart and Hogg	Quiz

July 17 - 24, 2015 (Day Order 1 to 6)	Transduction	Lecture using PPT	Microbiology by Prescott, Harley and Klein; Microbiology by stuart and Hogg	Quiz
July 27 - Aug. 03, 2015 (Day Order 1 to 6)	Unit 3.3 Structure: Virion size, helical capsid, icosahedral capsid and viral envelope REVISION	Lecture	-do- Basic Microbiology by Volk,A. Wesley	
August 04 - 08, 2015	C.A. Test I			
August 10 - 17, 2015 (Day Order 1 to 6)	Unit3.4 Replication: Bacteriophages(Lytic and Lysogenic cycles), plant virus(TMV) and animal virus(Herpes simplex virus and retrovirus)	Lecture Cum Seminar	Microbiology by Pelczar et al Environmental. Microbiology by Maier, Pepper and Gerba Microbiology by Presscot	
August 18 - 24, 2015 (Day Order 1 to 6)	Unit 3.5 Prions, viroids and virusoids Unit 4.1 Rhizosphere Unit 4.2 Distribution, Taxonomy and Function of bacteria	Lecture	Microbiology by Presscot; Vermicology - The Biology of Earthworms by Ismail Microbial Ecology by Atlas	
August 25 – Sep 01, 2015 (Day Order 1 to 6)	Unit 4.2 Actinomycetes, Fungi, Algae and Protozoa Unit 4.3. Biogeochemical Cycle: Nitrogen, Sulphur, Phosphorous and Carbon	Lecture and Group study	Microbial Ecology by Atlas;Principles	Diagrammatic representation of cycles

			of Microbiology by Parry & Thelma et al.	
September 02 - 09, 2015 (Day Order 1 to 6)	Unit 4.4 Arbuscular Mycorrhiza – Application Unit 4.5 Nematophagus fungus	Lecture	Microbiology by Powar	
September 10 - 18, 2015 (Day Order 1 to 6)	Unit 4.6 Bacterial and Viral insecticide Unit 5.1 Microbiology of domestic water and Sewage	Lecture	Microbial Ecology by Atas; General Microbiology by Powar II	Group Projects
September 19 - 23, 2015 (Day Order 1 to 4)	Unit 5.2 Purification of drinking water Unit 5.3 Sewage treatment and disposal	Lecture cum field visit	-do-	Group Projects
September 25 - 30, 2015	C.A. Test II			
October 01 & 05, 2015 (Day Order 5 and 6)	Unit 5.4 Distribution and sources of air borne organisms	Lecture cum practical exposure	Environmental Microbiology by Maier, pepper & Gerba	Group Projects
October 06 - 12, 2015 (Day Order 1 to 6)	Unit 5.5 Enumeration of microorganisms in air – sampling techniques REVISION	- Do-	-do-	Group Projects
October 13 & 14, 2015 (Day Order 1 and 2)	REVISION			

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule – June to November 2015

Department : Botany
Name/s of the Faculty : Dr. H. Shakila
Course Title : FRUIT PRESERVATION AND NUTRITION
Course Code : 11BT/ME/FN 53
Shift : I

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
June 18 – 24, 2015 (Day Order 1 to 6)	Unit:1 Principles and methods of preservation: High, Low Temp, Drying	Lecture	Food Microbiology: Frazier, W.C.	Oral questioning after each class
June 25 – July 01, 2015 (Day Order 1 to 6)	Unit:1 Canning & Bottling, Radiation, Chemical Preservation	Lecture	Food Microbiology: Frazier, W.C.	Oral questioning after each class
July 02 - 08, 2015 (Day Order 1 to 6)	Unit:2 Nutrition & Health: Basic 5 food groups	Lecture cum OHP	Nutrition & Food Processing: Muller, H.G.	
July 09 - 16, 2015 (Day Order 1 to 6)	Unit:2 Nutrition in fruits and vegetables	Lecture cum OHP	Nutrition & Food Processing: Muller, H.G.	Quiz
July 17 - 24, 2015 (Day Order 1 to 6)	Unit:5 Preparation of Preserves : Jam, Jelly, Marmalade,	Lecture & Practical demonstration	Hand book of food science and Experimental foods: Swaminathan, M	

	Tutti-fruity			
July 27 - Aug. 03, 2015 (Day Order 1 to 6)	Unit:5 Ginger preserve and candied peel, Jelly preparation,	Practical demonstration	Hand book of food science and Experimental foods: Swaminathan, M	
August 04 - 08, 2015	C.A. Test I			
August 10 - 17, 2015 (Day Order 1 to 6)	Unit:3 Canning: Canning of fruits and vegetables	Lecture	Processing and Preservation of fruits and vegetables-Home scale	
August 18 - 24, 2015 (Day Order 1 to 6)	Unit:3 Preparation of lime syrup, Grape crush,	Lecture & Practical Demonstration	Hand book of food science and Experimental foods: Swaminathan, M	
August 25 – Sep 01, 2015 (Day Order 1 to 6)	Unit:3 Mango squash and Pineapple syrup, Preparation of mixed vegetable pickle	Lecture & Practical Demonstration	Hand book of food science and Experimental foods: Swaminathan, M	Assignment
September 02 - 09, 2015 (Day Order 1 to 6)	Unit:4 Fermented Beverages: Principles of fermentation	Lecture	Food Microbiology: Frazier, W.C.	
September 10 - 18, 2015 (Day Order 1 to 6)	Unit:4 Preparation of	Lecture cum Demonstration	Food Microbiology:	

	Grape wine, Cider		Frazier, W.C.	
September 19 - 23, 2015 (Day Order 1 to 4)	Unit:4 Vinegar, Preparation of Fermented products - Wine	Practical	Hand book of food science and Experimental foods: Swaminathan, M	
September 25 - 30, 2015	C.A. Test II			
October 01 & 05, 2015 (Day Order 5 and 6)	Revision			
October 06 - 12, 2015 (Day Order 1 to 6)	Revision			
October 13 & 14, 2015 (Day Order 1 and 2)	Revision			