



ACADEMIC ORGANISER (2016-2017)**Biotechnology**
Semester I Paper I

Month and Number Of Teaching Days	Syllabus Proposed to be Covered Month Wise	Remarks
June (10) 2+3	UNIT-I: Cell Structure and function upto Viruses (2 classes) UNIT-III: Mendel's Laws and mechanism of Inheritance- upto Law of independent assortment (3 classes)	
July (25) 11+13	UNIT-I: Cell Structure and function-upto Eukaryotic cell structure. (11 classes) UNIT-III: Mendel's Laws and mechanism of Inheritance- upto Phenocopies (13 classes)	
August (22) 11	UNIT-I: Cell Structure and function-upto Eukaryotic cell structure plasma membrane (3 classes) UNIT-II:Chromosome organization and cell division- up to Mitosis and its significance (8 classes)	
September (20) 8+11	UNIT-II:Chromosome organization and cell division- up to Mechanism of apoptosis (8 classes) UNIT IV: Linkage, Recombination and Sex determination up to colour blindness (11 classes)	
October (5) 1	UNIT-II:Chromosome organization and cell division- up to Necrosis (1 class)	


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ACADEMIC ORGANISER (2016-2017)**Biotechnology****Semester II Paper II**

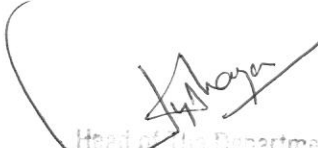
Month and Number Of Teaching Days	Syllabus Proposed to Be Covered Month Wise	Remarks
November (17) 11	UNIT-I: Structure, Function of nucleic acids upto RNA as genetic material TMV virus (11 classes)	
December (19) 17	UNIT-I: Structure, Function of nucleic acids upto Structures and types of RNA (4 classes) UNIT-II: DNA replication upto DNA replication in Eukaryotes (13classes)	
January (19) 14	UNIT-II: DNA replication upto Theta mechanism of DNA replication (2classes) UNIT-III: Concepts of Biostatistics upto Concept of test of hypothesis (12 classes)	
February (15) 15+3	UNIT-III: Concepts of Biostatistics upto Statistics application in biology (3 classes) UNIT-IV: Concepts of Bioinformatics upto Multiple sequence alignment (15 classes)	
March (6) 2	UNIT-IV: Concepts of Bioinformatics upto sequence alignment. (2 classes)	


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Biotechnology
Semester III Paper III

Month and Number of Teaching Days	Syllabus Proposed to Be Covered Month Wise	Remarks
June (19) 9+7	UNIT-I: Carbohydrates and proteins upto Peptidoglycan (9 classes) UNIT-III: Intermediary metabolism of Carbohydrates and Lipids upto chemiosmotic theory of ATP synthesis (7 classes)	
July (22) 7+8	UNIT-I: Carbohydrates and proteins Ramachandran plot (7 classes) UNIT-III: Intermediary metabolism of Carbohydrates and Lipids upto phenylketonuria (8 classes)	
August (19) 8+9	UNIT II: Lipids, Enzymes, Vitamins and Minerals upto Enzyme inhibition (8 classes) UNIT-IV: Intermediary metabolism of proteins and photosynthesis upto Photosynthesis (9 classes)	
September (18) 7+6	UNIT II: Lipids, Enzymes, Vitamins and Minerals upto minerals sources and functions (7 classes) UNIT-IV: Intermediary metabolism of Carbohydrates and Lipids upto carbon assimilation (6classes)	


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ACADEMIC ORGANISER (2016-2017)
Biotechnology
Semester IV Paper IV

Month and Number of Teaching Days	Syllabus Proposed to Be Covered Month Wise	Remarks
November (17) 11	UNIT-I: Identification of microorganisms and sterilization methods upto Microalgae -reproductive bodies(11 classes)	
December (19) 17	UNIT-I: Identification of microorganisms and sterilization methods upto pure culture characteristics (4 classes) UNIT-II: Bacterial reproduction and disease causing microorganisms upto Typhoid (13 classes)	
January (19) 14	UNIT-II: UNIT-II: Bacterial reproduction and disease causing microorganisms upto HIV (2 classes) UNIT-III: Photometry and microscopy upto fluorescent microscopy(12 classes)	
February (15) 15	UNIT-III: Photometry and microscopy upto Phase contrast microscopy (3 classes) UNIT-IV: Biophysical techniques upto dialysis (12 classes)	
March (6) 3	UNIT-IV: Biophysical techniques upto autoradiography (3classes)	


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ACADEMIC ORGANISER (2016-2017)
Biotechnology Paper III (Annual)

Month and Number Of Teaching Days	Syllabus Proposed to Be Covered Month Wise	Remarks
June (19) 12	UNIT-I: Genes and Genome organization upto Satellite DNA (12 classes)	
July (22) 11	UNIT-I: Genes and Genome organization upto ribosomal genes (11 classes)	
August (22) 11	UNIT –II: Gene Expression & Gene Regulation- upto wobble hypothesis (11classes)	
September (6) 4	UNIT –II: Gene Expression & Gene Regulation- upto eukaryotic translation (4 classes)	
October (8) 3	UNIT –II: Gene Expression & Gene Regulation- upto regulation of gene expression in prokaryotes (3classes)	
November (24) 16	UNIT –II: Gene Expression & Gene Regulation- upto Lac operon (2 classes) UNIT-III: Recombinant DNA Technology upto Identification of cloned genes (14 classes)	
December (19) 13	UNIT-III: Recombinant DNA Technology upto DNA Fingerprinting (4 classes) UNIT-IV: Basics of Immunology upto antigen antibody reactions (9 classes)	
January (13) 9	UNIT-IV: Basics of Immunology upto autoimmune diseases (9 classes)	


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ACADEMIC ORGANISER (2016-2017)
Biotechnology Paper IV (Annual)

Month and Number of Teaching Days	Syllabus Proposed to Be Covered Month Wise	Remarks
June (19) 12	UNIT-I:Animal Biotechnology– up to preservation of cell cultures.(12 classes)	
July (22) 11	UNIT-I:Animal Biotechnology - up to gene therapy (10 classes) UNIT-II: Plant Biotechnology- up to culture media (2 classes)	
August (22) 11	UNIT-II: Plant Biotechnology-gene transfer by Agrobacterium (11 classes)	
September (13) 6	UNIT-II: Plant Biotechnology -up to transgenic plants (6 classes)	
October (8) 2	UNIT-III: Industrial Biotechnology- up to secondary metabolites. (2 classes)	
November (24) 14	UNIT-III: Industrial Biotechnology- up to fermentative production of microbial enzymes. (14 classes)	
December (19) 13	UNIT-III:Industrial Biotechnology up to patenting issues (4 classes) UNIT-IV:Environmental Biotechnology- up to microbial degradation of pesticides and toxic chemicals (9 classes)	
January (16) 12	UNIT-IV:Environmental Biotechnology upto Bioremediation (12 classes)	


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