

**ACADEMIC PLAN FOR THE DEPARTMENT OF MICROBIOLOGY**

**SESSION:2017-18 (ACADEMIC YEAR)**

Year	PAPER	UNIT	TEACHER		No. of class hours allotted per week (as per class routine)		Total no. of class hours required in the session (Approx.)		Duration (in month)	Remark (if any)
			Theory	Practical/Tutorial	Theory	Practical/Tutorial	Theory	Practical/Tutorial		
<b>PART-I 1<sup>st</sup> Year (UG)</b>	<b>Paper I Group A (Theory): Biomolecules</b>	Unit I: 1. Stereochemistry	Dr. Sampa Debnath	-----	4	-----	80	-----	8	
		Unit I: 2. Carbohydrates								
		Unit I: 3. Amino acids								
		Unit II: 2. Nucleic Acids								
		Unit II: 3. Lipids								
	Unit II: 1. Protein	Dr. Arun Roy	-----	1	-----					
	<b>Paper I Group B (Theory): Biophysical Chemistry and Biometry</b>	Unit I: 1. Physicochemical properties of water	Dr. Arpita Das	-----	2	-----	70	-----		
		Unit I: 2. Thermodynamics								
		Unit I: 4. Radioactivity								
		Unit II:1. Spectroscopy								
		Unit I: 3. Microscopy	Mr. Pinaki Hazra	-----	1	-----				
	Unit II: 2. Biometry	Miss Ananya Banerjee	-----	1	-----					
	Mr. Chiranjit Ghorui	-----	1	-----						
	<b>Paper II Group A (Theory): General Microbiology</b>	Unit I: 1. Development of microbiology	Miss Sahana Ghosh	-----	2	-----	75	-----		
		Unit I: 2. position of microbes								
		Unit I: 3. Staining								
		Unit I: 4. Morphology and subcellular structures								
		Unit I: 5. Bacterial cell wall biosynthesis and structure								
Unit II: 3. Microbial growth										
Unit II: 4. Control of growth of microbes	Dr. Saswati Gayen	-----	2	-----						
Unit II: 1. Eukaryotic microbes										
Unit II: 2. Microbial nutrition	-----	2	-----							
<b>Paper II Group B (Practical)</b>	Unit I: 1. Operation of Light-Microscope; oil-immersion objective	Dr. Saswati Gayen	-----	-----	-----	60	-----			
	Unit I: 2. Preparation of culture media, Cultivation of Microorganisms, Pure-culture, Staining techniques									
	Unit I: 3. Micrometry									
	Unit II: 1. Qualitative tests of carbohydrates	Dr. Sampa Debnath						-----	2	-----
	Unit II: 2. Separation of amino acids									
	Unit II: 3. Estimation of amino acid									
Unit II: 4. Biometry	Dr. Prasenjit Das	-----	1	-----						