

Course Code/Name : BM3521-Biosciences for medical engineering

Regulation : 2021

UPC – Student Planner

Slot	Unit No	Name of the Unit	Questions	CO Mapping	Grade	
					A	B
1	IV	Fluid & Hemodynamic derangements	1. Bleeding disorder (8) 2. WBC Disorder.(16) 3. Hemorrhage.(8) 4. Shock and infarction (16) 5. Embolism & Chronic venous congestion (16)	213.4	1 2 3 - 4 5	- - - - - 5
2	V	Microbiology and immunopathology	1. Electron microscope.(16) 2. RIA.(8) 3. ELISA.(8) 4. Monoclonal Antibodies.(8) 5. Structure of bacteria and virus and common diseases (10) 6. Light microscope.(16)	213.5	1 2 3 4 5 - 6	- - - - - - 6
3	III	Cell degeneration, repair, neoplasia	1. Tumors with spread and types(16) 2. inflammation and Repair including fracture healing.(16) 3. Necrosis.(8) 4. Apoptosis.(8) 5. pathological calcification.(8) 6. Intracellular accumulation.(8) 7. Autopsy, biopsy.(8+8) 8. types of cell injury.(12)	213.3	1 2 3 4 5 6 7 - 8	- - - - - - - - 8
4	II	Carbohydrates, lipids, proteins	1. Classification of carbohydrates, (16) 2. Classification of lipids.(12) 3. Classification of proteins.(12) 4. Watson & crick model.(16) 5. Nucleosides, nucleotides.(8+8) 6. Properties of amino acids(8). 7. Properties of carbohydrates.(10) 8. Properties of protein.(8)	213.2	1 2 3 4 5 6 7 8	- - - - - - - 8
5	I	Fundamentals to biochemistry	1. Water as biological solvent.(8) 2. Physiological buffer systems (16) 3. Properties of water (8) 4. Biological membranes (16) 5. Handerson-Hasselbalch equation (16) 6. Clinical applications of electrolytes and radioisotopes (12)	213.1	1 2 3 4 5	- - - - 5
6	Part-A Questions					