Question Bank Biology For Engineers

Questions	Unit No.
Explain Cell membrane with suitable diagram.	1
Explain Macromolecules(Shape and Information) in detail.	1
Explain lipids in detail.	1
Explain Protein & Nucleic Acid in detail.	1
Explain Central Dogma in detail with suitable diagram.	1
Explain carbohydrate in detail.	1
Explain digestion Physiology of digestion n detail.	2
Explain regulation of food intake and digestive secretions in detail.	2
Explain Coordination - Structure of Brain and Neurons in detail.	2
Explain Physiology of nerve impulse conduction, excitability of membranes, electrical and chemical transmission between cells.	2
Explain cardiovascular System - Physiology of blood – compositions & structure, coagulation;	2
Explain about Heart beat, initiation, conduction and regulation.	2
Explain Physiology of Circulation.	2
Explain Respiration & Physiology of respiration.	2
Explain exchange and transport of gases and its regulation.	2
Explain Physiology of Excretion, Fluid and electrolytes balance,	2
Explain Acid Base balance & roles of kidney in body water regulation	2
Explain the Resting potential, action potentials, synaptic potentials in detail.	3
Explain the Exhitatory Post Synaptic Potentials (EPSP).	3
Explain the Inhibitory Post synaptic Potentials (IPSP).	3
Explain the interaction of signals and Bioelectric signals ECG generation and propagation.	3
Explain EMG, EEG its generation and propagation in detail.	3
Illustrate Recording Electrodes & Electrocardiograph.	3
Illustrate Electroencephalograph, Electromyograph Patient Monitoring Systems.	3
Illustrate Electromyograph Patient Monitoring Systems.	4
Illustrate Foetal Monitoring Instruments & Oximeters.	4
Explain Blood Flowmeters, Pulmonary Function Analysers.	4
Explain Blood Gas Analysers, Blood Cell Counters.	4

Explain about audiometers and Hearing Aids.	4
Explain X-ray Computed Tomography in detail.	5
Explain Nuclear Medical Imaging Systems in detail.	5
Explain Magnetic Resonance Imaging System.	5
Explain Ultrasonic Imaging Systems in detail.	5
Explain Tissue engineering as therapeutics & electromagnetic therapy.	6
Explain bio ceramics, microrobots and nanobots.	6
Explain about Biomaterials & Radiotherapy in detail.	6
Explain Ultrasound Enhanced Nano medicine & targeted drug delivery in detail.	6
Explain Automated Drug Delivery Systems.	6
Explain about Artificial skin, limb, advancement in prosthetics.	6
Explain advancement in prosthetics, Biocompatibility of artificial organs,	6