

Maulana Azad National Institute of Technology

Department of Biological Science & Engineering

Mini Test (Sept 2024)

Subject: Biology for Engineers

Subject Code: BSE-111

Time: One Hour

Max Marks: 50 (On a Scale of 10)

Q. No	Question	Marks					
1 ✓	Draw a neat and well-labelled diagram of human eye and present a schematic comparison of it with a camera to illustrate the similarities and differences in their functioning.	10					
2 ✓	Narrate the biochemical events involved in the Glycolysis pathway through a flow chart. Mention the stoichiometry (energy production) and enzymes involved in the aerobic respiration.	10					
3	(a) Write the reaction steps involved in Krebs cycle in aerobic metabolism, clearly mentioning the energetics of the pathway. (b) Elucidate the salient features of <i>electron transport system (malate-aspartate shuttle)</i> with the help of a schematic diagram.	10					
4	Draw a table in the below format to illustrate the physiological functioning of the human digestive system: <table><tr><td>Name of the Organ</td><td>Diagram of the Organ</td><td>Structural Illustrations</td><td>Functioning</td><td>Biochemic reaction involved</td></tr></table>	Name of the Organ	Diagram of the Organ	Structural Illustrations	Functioning	Biochemic reaction involved	10
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5 ✓	Mention four diseases each pertaining to the: 1. Human Digestive System 2. Human Respiratory System	10					