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|--|--|--|-----|-------|
| Name. _____  |  | Printed Pages:01                             |     |       |
| Student Admn. No.: _____   |  |  |     |       |
| <b>School of Biological and Life Sciences</b><br><b>Summer Term Examination – July - August 2024</b><br><b>[Programme: MSc Microbiology/ M.Sc. Med. Biotech.] [Semester: I] [Batch: 1]</b> |  |  |     |       |
| <b>Course Title: Biochemistry</b><br><b>Course Code: P1PT103T/ MBAMTT1005/Q1PO114B</b>   |  | <b>Max Marks: 100</b><br><b>Time: 3 Hrs.</b> |     |       |
| <b>Instructions:</b>   | 1. All questions are compulsory.<br>2. Assume missing data suitably, if any.                     |  |     |       |
|  |  | K<br>Level                                   | COs | Marks |
| <b>SECTION-A (15 Marks)</b>  |  | <b>5 Marks each</b>                          |     |       |
| <b>1.</b>  | Define Buffer. Discuss the importance of biological buffer in human body.                        | K1   |     | 5     |
| <b>2.</b>  | Critically outline the characteristic features and function of bacteriorhodopsin.                | K2   |     | 5     |
| <b>3.</b>  | Discuss about membrane lipid.  | K1   |     | 5     |
| <b>SECTION-B (40 Marks)</b>  |  | <b>10 Marks each</b>                         |     |       |
| <b>4.</b>  | Briefly elucidate the different level of protein organization.                                   | K2   |     | 10    |
| <b>5.</b>  | Give a brief account about structure and properties of purines and pyrimidine.                   | K3   |     | 10    |
| <b>6.</b>  | Classify and characterize different types of enzyme.   | K4   |     | 10    |
| <b>7.</b>  | Briefly discuss about the major sources, deficiency disease and symptoms of fat soluble vitamin. | K3   |     | 10    |
| <b>SECTION-C (45 Marks)</b>  |  | <b>15 Marks each</b>                         |     |       |
| <b>8.</b>  | Discuss different steps of glycolysis.   | K4   |     | 15    |
| <b>9.</b>  | Explain various steps of TCA cycle.  | K3   |     | 15    |
| <b>10</b>  | Classify and characterize different types of carbohydrates.                                      | K4   |     | 15    |