

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATIONS-2023

B. Tech III-Semester (BI)

COURSE CODE (CREDITS): 18B11BI311 (3)

MAX. MARKS: 15

COURSE NAME: CELL AND MOLECULAR BIOLOGY

COURSE INSTRUCTOR: DR. JATA SHANKAR

MAX. TIME: 1 Hour

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*Note: All questions are compulsory. Marks are indicated against each question in square brackets.*

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Q1. What are the distinct models of lipid bilayers that have been proposed in scientific literature

[2 marks] CO I

Q2. What are the key differences in term molecular and cellular level that distinguish prokaryotic and eukaryotic cells, [2 marks] CO I

Q3. The Phospholipids bilayer is asymmetrical, how? [2 marks] CO I

Q4. Define carbohydrates and describe different types. What is the major role of carbohydrates

[2 marks] CO II

Q5. What are the various types of protein structures, and what are the factors that influence the relationship between structure and function [2 marks] CO I & II

Q6. Explain the following (5 marks) CO I & II

a. Peptide bond between glycine

b. Draw the structure of the two essential amino acids

c. Protein turnover

d. The major role of proteins

e. Draw the maltose indicating the glycosidic bond