JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST-1 EXAMINATION- September -2017

B. Tech (1st Semester) Bioinformatics

COURSE CODE: 13B11BI112

MAX. MARKS: 15

COURSE NAME: Cell and Molecular Biology

COURSE CREDITS: 04

MAX. TIME: 1 HR

Note: All questions are compulsory. Carrying of mobile phone during examination will be treated as case of unfair means. Marks are indicated below each question

- 1. What is carbohydrate? Discuss types of carbohydrate with examples and their function in a cell? (3)
- 2. What is protein? What are different protein structures and their function in a cell? Write on Insulin with respect to its composition? (3)
- 3. Draw the steps involved in glycolysis process with name of the enzyme at each step? (3)
- 4. What are the major differences between a prokaryotic and eukaryotic cell, discuss with example? (2)
- 5. Write on the different cell component in percentage present in a typical cell? (2)
- 6. Two amino acids are bonded by peptide bond; draw the peptide bond between two Glycine amino acids? (1)
- 7. Draw the glycosidic bond between glucose molecules in maltose disaccharide? (1)
- 8. Different types Bacteria are classified on the basis of shape, what are they and give example for each?