

**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT**  
**TEST-2 EXAMINATION OCTOBER 2018**  
**B.Tech 1<sup>st</sup> Semester**

*Dr. Abhinav*

**COURSE CODE: 18B11BT111**

**MAX. MARKS: 25**

**COURSE NAME: Fundamental Biology**

**COURSE CREDITS: 03**

**MAX. TIME: 1HR 30 MIN**

*Note: All questions are compulsory. Carrying mobile phone during examinations will be treated as a case of unfair means.*

1. How do you explain the presence of an aldehydic group in glucose molecule? [2] [CO-2]
2. Who gave five kingdom classifications? Name the five kingdoms of living organism? [3]  
[CO-1]
3. What are glycosidic linkages? In which type of bio-molecules are they present? [3]  
[CO-2]
4. Classify lipid with suitable example [5] [CO-2]
5. Write the name of amino acid having [2] [CO-2]
  - (a) Net negative charge at physiologic pH
  - (b) Net positive charge at physiologic pH
6. Draw the structure of following amino acids [4] [CO2]
  - (a) Proline (b) Cysteine (C) Aspartic acid (d) Glycine
7. Write down the difference between eukaryotic and prokaryotic cells [2] [CO-1]
8. Who proposed the cell theory and what does it state? [2] [CO-3]
9. Write down the possible difference between gram positive and gram negative bacteria [2]  
[CO-3]