

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST 1 EXAMINATION- Sept. 2019

M.Sc. Biotechnology (1st Semester)

COURSE CODE: 18MS1BT113

MAX. MARKS: 15

COURSE NAME: Biochemistry and intermediary metabolism

COURSE CREDITS: 02

MAX. TIME: 1Hrs

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

- Q1. What do you understand by anaplerotic reactions? (1 mark) (COI)
- Q2. What is the significance of thiamine pyrophosphate (TPP) and biotin? (2 marks) (COI)
- Q3. Explain the following in brief. (6 marks) (COI)
- a) Differentiate between primary metabolism and secondary metabolism
 - b) Hexokinase and glucokinase enzymes requirements
- Q4. Why last step of Glycolysis can't be reverse back to synthesize glucose by Gluconeogenesis process? Define the process which is utilized to bypass the above mentioned reaction and synthesis of glucose. (3 marks) (COI)
- Q5. Explain, how 'synthase' are different from 'synthetase' enzyme? Justify your answer with the suitable example. (3 marks) (COI)