JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST 1 EXAMINATION- Sept. 2018
B.Tech. VIIth Semester

COURSE CODE: **11B1WBT833**

MAX. MARKS: **15**

COURSE NAME: **INDUSTRIAL ENZYMES**

COURSE CREDITS: **04**

MAX. TIME: **1Hrs**

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

Q1 Define the following terms:

A) Prosthetic group

B) Turnover number

C) Apoenzyme

D) V_{max} (maximum velocity)

(2) CO -I

Q 2 What are the major factors affecting the rate of an enzymatic reaction? Describe the effects of substrate concentration on enzyme activity. **(3)   CO -I**

Q 3 Explain competitive and uncompetitive inhibition and their effect on enzyme kinetics. Give one example for each.   **(4) CO -II**

Q 4 What are the two basic assumptions for Michaelis –Menten equation? Explain diagrammatically. **(3) CO-II**

Q5 Describe the various strategies used by enzymes to catalyze the reaction? Give one example for each. **(3) CO-I**