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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

T-2 EXAMINATION- October 2019

B. Tech 7th Sem

COURSE CODE: 10B13BT832

MAX. MARKS: 25

COURSE NAME: Industrial Enzymes

COURSE CREDITS: 3

MAX. TIME: 1.5 Hr

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

Q1 Define the following terms. (1×2= 2 marks) CO III

- (a) Saccharification (b) Lyophilization

Q 2 Discuss the various techniques of cell disruption used for purification of enzymes (2 marks) CO III

Q 3 What are the various chromatographic techniques used for the separation of a mixture of proteins (3 marks) CO II

Q 4 What are the various strategies used by enzymes to carry out catalysis? Give the example of enzyme for each type of catalysis CO III (4 marks)

Q 5 Discuss the various steps involved in the production of extracellular enzymes from microbial cells? Explain the process as flow chart diagram CO III (4 marks)

Q6 Discuss the industrial use and microbial sources of following enzymes. (2×5= 10 marks) CO IV

- (a) α -Amylase
(b) Protease
(c) Laccase
(d) Chymosin
(e) Transglutaminase