JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-2 EXAMINATION- OCT 2018

B. Tech (Biotech), VII Semester Dr. Crarlapati Ku MAX. MARKS: 25

COURSE NAME: Traditional Bioprocesses & their upscaling

COURSE CODE: 15M11BT431

COURSE CREDITS: 03 MAX. TIME: 1.5 h

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

- 1. Write about the strategies used to tackle the "Apoptosis" and "Ammonia and Lactic acid accumulation" problems associated with the antibody production? (5 M) (CO II)
- 2. What are the main features of "Slow Process", "Quick process" and "Fringe Process" related to the acetic acid production? Mention the steps involved in "Vitamin C" synthesis by Reichstein process? (5 M) (CO I)
- 3. What are the main problems associated with the fermentations used for aminoacids production and explain the solutions to overcome those problems? Name any four antibiotics along with their producing microorganisms? (5 M) (CO III)
- 4. Discuss in detail about the protein therapeutics of "Human Growth Hormone" and "Alginate (5 M) (CO II). Lyase"?
- 5. What are the benefits and general applications of "Sugar Alcohols"? Write in detail about the "Xylitol" production processes? (5 M) (CO III)