

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- May 2018

B.Tech VIII Semester

COURSE CODE: L-14B1WBT741

MAX. MARKS: 35

COURSE NAME: Bio-resources and Industrial Product

COURSE CREDITS: 3

MAX. TIME: 2 Hr

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

- Q.1a** What is a prodrug? Which components of the morphine molecule are involved in binding to the opioid receptor binding site (4+3)
- Q.1b** Compare the SAR activity of Morphine and Heroin CO-4&2
- Q.2 a** Draw the structure of lactose and explain what causes a sandy texture in ice cream? (3+3)
- Q.2b** Write a note on lactose glass and caking CO-5&2
- Q.3a** What are gums? Write down the pharmaceutical application of Gums. (3+3)
- Q.3b** Explain in detail "different methods used for structure elucidation of terpenoid" CO-4&2
- Q.4a** What are different crystalline form of lactose explain different form with respect to temperature. (3+2)
- Q.4b** What are Eicosapentaenoic acid and Docosahexaenoic acid? Write down the possible health benefits of Eicosapentaenoic and Docosahexaenoic acid. CO-5&2
- Q.5** What are renewable resources? Why is energy from biomass renewable? (1+2) (1+2)
- Q.6** Answer the following question. CO-1
1. Food preservation by lowering pH (2x4)
 2. The primary sources of microorganisms in food CO-3
 3. Side effect of probiotics
 4. Healthy Microbiome