

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATIONS-2022

B.Tech-VI Semester (BT)

COURSE CODE (CREDITS): 20B1WBT631(3)

MAX. MARKS: 35

COURSE NAME: Manufacturing Process and Industrial Products

COURSE INSTRUCTORS: Dr. Udayabanu

MAX. TIME: 2 Hours

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

1. Endophytes are viewed as an outstanding source of bioactive natural products. What are endophytes and how would you isolate endophytes? Can fungal endophytes be exploited for antibiotics? Explain. [5 Marks]
2. Discuss the ecological implications and potential practical benefits of the "mycofumigation" [2 Marks]
3. Beer is an alcoholic beverage produced by fermentation of sugar rich extracts. How Hops affects the bitterness, flavour or aroma? Which yeast is commonly used for top fermentation and bottom fermentation processes? Explain. [5 Marks]
4. Based on the characteristics wines occupy different types. Differentiate red wine, white wine and rose wine. Why SO₂ is used in the processing of wine? What is Lees and Dry wine? [5 Marks]
5. Malolactic fermentation is used in which process? How Oxidative ageing and reductive ageing are used for ageing in alcoholic beverages? [3 Marks]
6. Immobilization of an enzyme requires several criteria. What are the ideal attributes required for an enzyme carrier? Name some insoluble adsorbents and how you can attach enzymes to these adsorbents? [5 Marks]
7. Penicillin acylase is produced by various microorganisms. Name some microbial sources, the strategies involved in the purification of penicillin acylase and briefly explain p-dimethyl amino benzaldehyde method used for the assay of penicillin acylase. [5 Marks]
8. The therapeutic application of the following enzymes are: [5 Marks]
 - a. Urokinase
 - b. Streptokinase
 - c. Sarcosidase
 - d. Phenylase
 - e. Hyaluronidase