

No. of Printed Pages : 03

Roll No.

464

B. Tech. EXAMINATION, May 2018

(Fourth Semester)

(Old Scheme) (Re-appear Only)

(BT)

BT208

INDUSTRIAL MICROBIOLOGY
AND ENZ. TECH.

Time : 3 Hours]

[Maximum Marks : 100

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt any *Five* questions. All questions carry equal marks.

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P.T.O.

1. (a) How positive and negative mutants can be selected by rDNA technique ? **10**
 (b) Explain affinity chromatography and its application in detail. **10**
2. Discuss different techniques for preservation of microbes with advantages and disadvantages. **20**
3. Write short notes on the following :
 (a) Lyophilization
 (b) SSF
 (c) Purification of citric acid
 (d) Quoran. **5×4=20**
4. Write in detail about source, fermentation, recovery and purification of penicillin with suitable graph. **20**
5. (a) Discuss industrial production of beer and wine in detail. **10**
 (b) How amylase enzyme produced industrially ? Discuss its application in industry. **10**

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6. Discuss the mechanism of action of enzymatic reaction and explain the significance of K_m . **20**
7. (a) How enzyme stability can be obtained by using protein engineering approach. **10**
 (b) Elaborate mechanism of action of ribonuclease in detail. **10**
8. Explain the following :
 (a) Primers
 (b) Immobilized enzyme
 (c) Point mutation
 (d) HPLC. **4×5=20**

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