

No. of Printed Pages : 03

Roll No. ....

**D64**

**B.Tech. EXAMINATION, May 2019**

(Fourth Semester)

(B. Scheme) (Main & Re-appear)

(BT)

BT208B

INDUSTRIAL MICROBIOLOGY

*Time : 3 Hours]*

*[Maximum Marks : 75*

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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.

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**Note :** Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

(3-04/12)M-D64

**P.T.O.**

### **Unit I**

1. Discuss different types of Fermentation used in industrial Microbiology. **15**
2. What are the desirable characteristics of an ideal medium ? Give types of medium and common media used in Fermentation Industry. **15**

### **Unit II**

3. Discuss biosynthesis and production strategies of ethenol on commercial scale using Yeast *Saccharomyces cerevisiae*. **15**
4. Describe production technology of antibiotic Penicillin by microbial fermentation. **15**

### **Unit III**

5. What are Biopesticides ? Discuss their types and mode of action. **15**

6. What do you understand by the term Single Cell Proteins ? Discuss their advantages, limitations, raw materials used and microorganisms used in their production. **15**

### **Unit IV**

7. Write different methods of industrial waste management. **15**
8. Write the role of various endophytic symbionts in agricultural crops. **15**