

Exam.Code:1032
Sub. Code: 7865

1129
M. E. (Bio-Technology)
First Semester
ME-BIO-103: Microbial Bio-Technology

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Answer the following:-

- a) Write the microorganisms used for production of Inulinase. (1)
- b) Write the applications propionic acid. (2)
- c) What are extremophiles? Give an example. (1)
- d) Write the applications of Itaconic acid? (2)
- e) Define biofertilizers. Give examples. (2)
- f) Write the applications of chitinase. (1)
- g) What is full form of GMP? (1)

UNIT - I

- II. a) Discuss the production process of peroxidase in detail.
b) What are its applications? (7,3)
- III. a) Describe in detail the process technology for production of an antibody.
b) How will you make it specific for one type of antigen? (6,4)
- IV. a) Define the term "Next generation antibiotics".
b) Give examples of next generation antibiotics.
c) Elaborate on the production of next generation antibiotic you have studied. (2,2,6)

UNIT - II

- V. a) Describe in detail about bioleaching giving illustrations.
b) What are the advantages and disadvantages of this process as compared to the conventional process? (7,3)
- VI. Describe the process technology for waste stabilization. (10)
- VII. a) Write the role of thermostable enzymes in biotechnology giving examples.
b) What are halophilic organisms? What are the advantages of such organisms? (7,3)

x-x-x