

Exam.Code:0006
Sub. Code: 17578

2056

B.A./B.Sc. (General) Sixth Semester
Industrial Microbiology (Elective) - I

IMB-602: Immunobiotechnology, Tissue Culture and Government Regulations

Time allowed: 3 Hours

Max. Marks: 33

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

x-x-x

I. Answer the following briefly:-

- a) What is antigen-antibody reaction?
- b) Define mycotoxins.
- c) What is biohazard?
- d) What are recombinant DNA products?
- e) What is hybridoma technology?

(5x1)

UNIT - I

- II. Explain the types of immunity. Describe the physiology of immune response in detail. (7)
- III. Discuss antigen-antibody reactions and structure, distribution, and functions of immunoglobulins. (7)

UNIT - II

- IV. Describe different types of vaccines and their methods of production. (7)
- V. Explain monoclonal antibodies and hybridoma technology with applications. (7)

UNIT - III

- VI. Discuss the process and products of animal cell culture. (7)
- VII. Explain plant cell culture and role of genetically engineered cells in biotechnology. (7)

UNIT - IV

- VIII. Explain the role of international organizations in biotechnology development. (7)
- IX. Discuss government regulations for recombinant DNA research and disposal of biohazardous materials. (7)

x-x-x

