

M.Sc. (Botany) Semester - 2 (CBCS) Examination
May/June-2021 (OLD COURSE)
BIOTECHNOLOGY AND IMMUNOLOGY(CORE)

Time: 1:30 Hours**Marks: 42****Instructions:**

1. Figure to the right indicate marks.
 2. There are five questions in the question paper.
 3. Answer any three of the following questions.
-

- Que-1 Answer The Following Questions. (Any Seven Out of Ten) (14)**
- A. Mention the media used for plant tissue culture.
 - B. What is in situ bioremediation?
 - C. Enlist the techniques of animal tissue culture.
 - D. Draw the molecular structure of pUC18 plasmid.
 - E. What is hypersensitivity explain in brief.
 - F. Define IgE in brief.
 - G. Define immobilization of enzyme.
 - H. Define protoplast culture.
 - I. What is blue white screening?
 - J. Explain the MCS molecular biology.
- Que-2 Answer The Following Questions. (Any Two Out of Three) (14)**
- A. Describe the bioremediation techniques and explain *in situ* bioremediation in detail.
 - B. Write a note on animal tissue culture.
 - C. Explain the principle and application of immobilized enzymes.
- Que-3 Answer The Following Questions. (Any Two Out of Three) (14)**
- A. Write a note on pBR322 plasmid.
 - B. Describe the principle of bacterial DNA isolation method.
 - C. Explain the role of genetic engineering in the field of biotechnology.
- Que-4 Answer The Following Questions. (Any Two Out of Three) (14)**
- A. Explain the principle of Monoclonal antibody and mention its application.
 - B. Write note on ELISA.
 - C. What is hypersensitivity? Explain type-II reaction.
- Que-5 Answer The Following Questions. (Any Two Out of Three) (14)**
- A. Describe basic principle and application of plant tissue culture.
 - B. Write a short note on a callus culture.
 - C. Discuss types of plant tissue culture.
