

M.Sc. (Micro) Semester - 2 (CBCS) Examination
MARCH/APRIL - 2024 (Syllabus Year: 2018)
Biotechnology & Immunology (CORE)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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| Q. 1 | Answer the following: (Any Seven) | (14) |
| | <ol style="list-style-type: none">1. Explain the function of LacZ?2. What is a cos site?3. Define <i>in situ</i> bioremediation.4. Role of sodium alginate in immobilization of cell.5. Explain the function of immobilization.6. What is embryo culture?7. Give the two examples of plant tissue culture media8. Explain the function of IgE.9. Explain the Agglutination.10. Explain the function of T cell. | |
| Q. 2 | Answer the following: (Any Two) | (14) |
| | <ol style="list-style-type: none">1. Explain the principle and methods of bioremediation.2. Discuss the immobilized enzymes.3. Discuss the principles and techniques of animal tissue culture. | |
| Q. 3 | Answer the following: (Compulsory) | (14) |
| | <ol style="list-style-type: none">1. Describe the Basics of genetic engineering.2. Explain Blue white screening.3. Write a short note on pUC18. | |
| OR | | |
| Q. 3 | Answer the following: (Compulsory) | |
| | <ol style="list-style-type: none">1. Write note on types of restriction enzymes.2. Explain Gene targeting. | |
| Q. 4 (A) | Answer the following: (Any Two) | (10) |
| | <ol style="list-style-type: none">1. Explain IgG in detail.2. Describe the Monoclonal Antibodies. | |
| Q. 4 (B) | Answer the following: (Any One) | (04) |
| | <ol style="list-style-type: none">1. Write a note on Precipitation,2. Explain any one Antigen-Antibody interaction. | |
| Q. 5 | Answer the following: (Any Two) | (14) |
| | <ol style="list-style-type: none">1. Explain the basic steps of plant tissue culture.2. Discuss principles and techniques of plant tissue culture.3. Write a note on plant culture media.4. Discuss types of plant tissue cultures. | |
