

1 Hour

Total Marks: 25

N.B:

1. Attempt **all** questions.
2. **All questions** carry **equal** marks.
3. Draw **neat labelled diagrams** wherever necessary.
4. Use of **log tables** and **non-programmable calculators** is **allowed**.

Q.1 Answer the following (Any 1)

08

- a. What are adjuvants? Discuss their types & roles.
- b. Describe Mixed Lymphocyte Reaction and its applications.

Q. 2 Answer the following (Any 1)

07

- a. Discuss peptide vaccines.
- b. Elaborate the technique of RIA in immunological assay.

Q. 3 Do as directed (MCQ/ True or false/ Match the columns etc.)

10

1. Give any one example of subunit vaccines. , 1
2. State true or false : DNA vaccines raise both humoral and cell mediated immunity. 1
3. Give an advantage of Passive immunisation. 1
4. Name any one plant used for preparation of plant based vaccines. 1
5. How chimeric antibodies are created? 1
6. Which among the following is NOT a system in which Neutralisation of animal viruses can be demonstrated? 1
a) animals b) eggs c) synthetic media
7. Western Blotting Technique is also known as _____ immunoblot. 1
8. State any one disadvantage of Flow cytometry. 1
9. State True or False: The Ouchterlony method of antigen antibody reaction involves double diffusion in two dimensions. 1
10. What is a complement fixation test? 1