

Model question paper  
MSc sem 4  
end sem  
Immunology

Short question

1. How does immune system discriminate between self and non self molecules?
2. Write down properties and trafficking of lymphocyte.
3. What are antigens ?
4. Draw a structure of immunoglobulin and label it.
5. What is hybridoma technology?
6. What is the difference between humoral and cell-mediated immune response?
7. Briefly discuss about NK-DC interaction.
8. Write down types of antibodies and their individual role in immune response.
9. What is auto immunity?
10. What is ELISA-PCR?
11. What are the autoimmune components of diabetes mellitus?
12. Brief about western blotting.
13. How does a vaccine works in the immune system?
14. Briefly discuss about types of vaccine.
15. What is graft rejection?
16. What is the role of TNF and IFN in immune system?
17. Write short notes on HIV.
18. Write short notes on autoimmunity.
19. Discuss about natural killer cells.
20. Write short notes on DNA vaccines.

Long questions

1. Describe three fundamental concept of immune system. Specificity, self and non self discrimination and memory.
2. Define structure and properties of immunoglobulin classes.
3. Describe genetic organisation of MHC I and MHC II .
4. Describe cell signalling through MAP kinases.
5. Describe ELISA and RIA.
6. Write down production and delivery system of vaccines.
7. Discuss primary and secondary immune response.
8. What are immunogenicity? Explain their characteristics.
9. What are different immunodiagnosics and immunotherapy in virology?
10. Explain types of grafts and graft rejection.