

MSc ZO-06:IMMUNOLOGY

Part-A

1. What is the role of skin in presenting the infection?
2. What is acquired (adaptive) immunity?
3. What are epitopes?
4. What is apoptosis?
5. Write down the role of bone marrow.
6. What are tonsils?
7. What is Payer's patches?
8. Where are Hassal's corpuscles seated?
9. What is haematopoiesis?
10. What are immunoglobins?
11. Define antitoxins.
12. Write down the basic unit of immunoglobulin.
13. Name the two isotypic forms of light chain of immunoglobulin molecules.
14. What is major histocompatibility complex?
15. What are Haplotypes?
16. DLA is the substituent name of MHC in which animal?
17. What is immunologic memory?
18. What is class switching?
19. Name kinds of T lymphocytes.
20. Name the site where T lymphocytes are produced.
21. Describe antigen presenting cells.
22. Name the components involved in compliment.
23. What is immune complex disease?
24. What is a tumour?
25. What is radio immune assay (RIA)?
26. Briefly write about immunofluoresence.

Part-B

1. What is immune system?
2. Explain functions of immune system.
3. What is a Vaccine?
4. Differentiate between innate and acquired immune system.
5. Note down the general mechanism of internal innate immunity.
6. What are Kuffer cells? How they save body from pathogens?
7. Explain antigen antibody interaction.
8. Explain the role of cytokines in inter cellular communication.
9. Note down the constituents of lymphoid system.
10. List the surface markers of thymus cells.
11. What is the function of thymus?

12. List the components of secondary lymphoid organs.
13. Explain the structure of a lymph node.
14. Briefly write down the structure of spleen.
15. List the associated lymphoid tissues in intestine.
16. What is clonal selection theory?
17. Briefly write about lymphocyte traffic.
18. What are natural killer cells in lymph?
19. Name the accessory killer cell in the lymph.
20. Specify the function of lymphoid lineage.
21. Write down the markers of B lymphocytes.
22. List the markers of T cells.
23. Write down the number of amino acids in light chain and heavy chain of immunoglobulin.
24. What are isotopes? Give examples.
25. The genetic markers allotypes and idiotypes are located in immunoglobulin. What are the constituents of them?
26. Name the types of immunoglobins found in man.
27. Briefly write about kappa light chain.
28. What are function of MHC?
29. List the classes of MHC genes.
30. What is antigen processing pathway?
31. What are phases of immune response?
32. List the sequences in antibody protection.
33. Give a diagrammatic representation of cell mediated immunity.
34. Write down the stages in CTL mediated killing of target cells.
35. Write down the mechanism of natural killing cells killing.
36. Role of cytokines in CMI, briefly write.
37. The activity of serum that would enhance the ability of antibodies to lyse bacteria is termed as complement. Who coined this term?
38. Write briefly the components of complement pathway.
39. What are regulatory proteins of the alternative pathway of complement activation?
40. How the membrane attack complex (MAC) formed?
41. Write down phases of type I hypersensitivity reaction.
42. Inflammation describe various aspects.
43. Name some autoimmune diseases.
44. Briefly describe good pasteur's syndrome.
45. Briefly describe insulin dependent diabetes mellitus.
46. List the T cell deficiency diseases.
47. List the Bcell deficiency diseases.
48. What are the causes of secondary immuno deficiency?
49. Name some of the infections which occupies a host circumventing the host defences.
50. Name types of hepatitis viruses.
51. Name the types of salmonella that causes typhoid.
52. Write down about typhoid vaccine.

53. Briefly write down the immunity against vibrio cholera.
54. How many antigens are usually produced by a nematode parasite in host?
55. What are attenuated viruses? How they are useful in viral diseases presentation?
56. List some of the plant based vaccines.
57. Name the different types of grafts with suitable examples.
58. What are the factors for the causes of tumour?
59. Name some of the virally induced tumour antigens.
60. List the stages of tumour cell lysis.
61. Explain the immunotherapy of tumours.
62. Write stages of hybridoma technology.

Part-C

1. Explain the contribution of Louis Pasteur in immunology.
2. What is innate immunity? Describe its components.
3. What is adaptive immunity? Describe its components.
4. Note down the major inhibitors against pathogens.
5. Write down the process of phagocytosis.
6. Explain the process inflammation.
7. Explain the role of T cell.
8. Explain the role of macrophages.
9. Write down the role of langerhans cells in the skin.
10. Write down principal components of immune system.
11. Explain the antibody antigen activity in lymph nodes.
12. Give a diagrammatic categorization of cells involved in immune response.
13. Write down the functions of various types of T cells in immune system.
14. Describe macrophages and phagocytosis.
15. Name the cells commonly referred as phagocytes.
16. Explain the process of antigen processing and presentation.
17. Give fragmentation of immunoglobulin molecule by various enzymes.
18. Describe functions of immunoglobins.
19. Name the antibody found in secretion such as saliva, milk and tears.
20. Describe the general structure of various classes of MHC molecules.
21. Write down disease susceptibility of MHC alleles.
22. How the exogenous pathogens are endocytosed?
23. List the factors that affect primary antibody response development.
24. List the phases of secondary immune response.
25. List the phases of regulation of immune response.
26. What is the role of T helper cells in regulatory immune response.
27. Write down various regulatory components of immune response.
28. List the functions of cell mediated immunity (CMI).
29. Describe CMI against infectious diseases.
30. What are types of hypersensitivity reactions?

31. Write down the components of immune complexes that contributes to pathogenesis.
32. Describe systemic autoimmune disease of rheumatoid arthritis .
33. Briefly write about mechanism of humoral cell mediated response to some viruses.
34. Write down the principle opportunistic infectious agents in AIDS.
35. How the diagnosis to HIV is made?
36. Write down precautions against hepatitis viruses.
37. Write down about treatment of leprosy.
38. What do you understand by immunity response to various protozoan parasites.
39. Explain the vaccine used against schistosoma.
40. Write down the classification of vaccines.
41. What are types of grafts used in transplantation immunity?
42. Describe immune mechanism of graft rejection.
43. How immunodiagnosis is made by ELISA?
44. Detail the technique of immunoelectrophoresis.
45. Write down about process of agglutination in diagnosis of various infection.
46. How the monoclonal antibodies are produced in mouse?
47. What are significance of monoclonal antibodies in therapy?