

DEPARTMENT OF BIOCHEMISTRY
SUBJECT: IMMUNOLOGY

SUBJECT CODE: PBC910S

SECTION -A

1. What are haptens? Give examples.
2. Name the technique used to test similarity between antigens.
3. Name one fluorescence compound used in immunofluorescence.
4. List immunologically privileged sites.
5. Why adjuvants should be added to vaccines?
6. Differentiate : Paratope and epitope
7. What do you mean by APC?
8. Give two examples to immunosuppressive agents.
9. Why serum sickness occurs?
10. What is white graft?
11. What do you mean by null cell?
12. Write a note on Widal test?
13. What is Garve's disease.
14. What is hyperacute rejection?
15. Name one fluorescence compound used in immunofluorescences?
16. List immunologically privileged sites?
17. What are adjuvants?
18. Why adjuvants added to vaccines?
19. What are paratope?
20. What are epitope?
21. What is allograft ?
22. What is autograft?
23. What is antigen processing and presentation?
24. Why null cells called so?
25. Define hypersensitivity?
26. Give another name for Type I hypersensitivity.
27. Give an example for Type I hypersensitivity.
28. What are allergens?
29. What is atopy?
30. What is the normal range of serum IgE level?
31. What is the half-life period of serum IgE?

32. What are the principle mediators involved in the Type I hypersensitivity?
33. Write the another name for Type II hypersensitivity.
34. Give an examples for Type II hypersensitivity.
35. What is Rhogam?
36. Which type of antibodies involved in the Type II hypersensitivity.
37. Which antibody can cross the placenta.
38. Name the antibody which synthesized in the body.
39. What is immunoelectrophoresis?
40. What is Agglutination reaction?
41. What is Prozone effect?
42. What is precipitation?
43. Give the Principles of Precipitation reaction.
44. Write the uses of double immunodiffusion.
45. Give any two applications of Radial immunodiffusion.
46. Give another name for Type III and Type IV hypersensitivity?
47. Give an example for Type III hypersensitivity.
48. Give an example for Type IV hypersensitivity.

SECTION –B

1. Explain the essential factors for antigenicity?
2. Describe briefly about clonal selection theory ?
3. List out the application of monoclonal antibodies
4. What are the consequences of Type – I hypersensitivity rection ?
5. Write short note on immunological memory ?
6. Bring out the classification of autoimmune diseases.
7. Highlight SLE
8. Briefly explain type –II hypersensitivity
9. Explain in the primary lymphoid organs?
10. What is transplantation ?Explain different types of grafts?
11. Write a note on complement fixation test?
12. Write a note on B- cell and T- cell?

13. How is HLA typing performed ?
14. Differentiate active and passive immunity ?
15. What is FISH? Explain neatly with flowchart
16. Explain the properties of an antigen?
17. Briefly explain the structure and function of spleen?
18. Write short notes on cytosolic pathway of antigen processing and presentation?
19. Illustrate step involved in radio immunoassay?
20. Explain cytosolic pathway of antigen processing and presentation?
21. Write short notes on structure and function of spleen?
22. Differentiate innate and acquired immunity?
23. Explain the primary lymphoid organ?
24. How active and passive immunity differs in their action?
25. Briefly explain about null cells. Why they are called so?
26. Write a note on T-cell
27. Shortly explain clinical transplantation of skin?
28. What are null cells? Elaborate on the two types of null cell
29. Write a short notes on organ specific autoimmune diseases?
30. Write a note on primary lymphoid organs?
31. Write note on B- cell and T-cell?
32. What are the consequences of Type I Hypersensitivity reaction?
33. Briefly explain Type II hypersensitivity.
34. Write the Principles and applications of precipitation reactions.
35. Write the principles and applications of radial immunoelectrophoresis.
36. Give the technique of single and double immunodiffusion.
37. Explain Type III hypersensitivity reaction with suitable examples.
38. Write a short note on immunoelectrophoresis.
39. Write a note on different types of antigenic determinants.
40. Write a note on innate immunity.

SECTION – C

1. Describe the steps involved in monoclonal antibody production?

2. Explain type –II and type –III hypersensitivity reaction with one suitable example?
3. Write a detailed note on MHC molecules?
4. Write briefly about different types of agglutination reaction?
5. Explain the detail about immunological basis of graft rejection.
6. Write a detailed note on phagocytosis?
7. Differentiate innate and acquired immunity?
8. Bring out the classification of autoimmune diseases?
9. Outline the events of classical complement pathway?
10. Describe the structure and function of lymphoid organs?
11. Write the principle of immunoelectrophoresis. How is it performed?
12. How immunoglobulin genes are organized and rearranged?
13. Discuss the classification of autoimmune diseases with example?
14. Explain in detail about the immunoglobulin genes are organized and rearranged?
15. Elaborate the structure and function of lymphoid organs?
16. Write a detailed note on phagocytosis?
17. Describe in detail about structure and functions and function of different types of antibodies.
18. Write the principles of immunoelectrophoresis. How is it performed?
19. Briefly explain about Type III and Type IV hypersensitivity with one suitable examples.
20. Write the principles and applications of double immunodiffusion.
21. Give an account on the heavy and light chain rearrangement.
22. Write a note on different types of immunity.
23. Give an account on the humoral immunity.

24. Write in detail about converge pathway.

25. Give an account on complement fixation test