

**D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1**

**DEPARTMENT OF ZOOLOGY**

**IMMUNOLOGY (15CZO6B)**

**SECTION-A            (UNIT-I)**

1. Lysozyme.
2. SALT(skin associated lymphoid tissues).
3. Innate immunity.
4. Sources of lysozyme.
5. Defensins.
6. Non- specific immunity.
7. HMI&CMI&AMI.
8. Physical factors of innate immunity.
9. Phagocytosis.
10. Chemotaxis.
11. Inflammation.
12. Specific immunity.
13. Passive immunity.
14. Active immunity.
15. Immunological memory.

**UNIT-II**

1. Hassel's corpuscles.
2. Thymectomy.
3. DiGeorge syndrome.
4. Bursa of fabricius.
5. Lymphnodes.
6. Lymph.
7. Trabeculum.
8. Marginal zone.
9. MALT.
10. BALT.

11. CALT.
12. Tonsils.
13. Peyer's patches.
14. NALT.
15. 'M'- cells.
16. Waldeyer's ring.
17. Appendix.
18. Thymocytes.
19. Germinal center.

### **UNIT-III**

1. Myeloid cells.
2. Lymphoid cells.
3. Pluripotency.
4. Megakaryocyte.
5. Macrophages.
6. NK cells.
7. Accessory cells.
8. Monocytes.
9. Dendritic cells.
10. Kupffer cells.
11. Osteoclast.
12. Langerhan's cells.
13. Antigen presenting cells.
14. Cluster of differentiation.
15. PMN.
16. Extravasation.
17. Effector and regulator T-cells.
18. Helper cells.
19. CD-Markers.
20. Class switch.
21. Plasma cells.
22. Mast cells.
23. Histiocytes.

24. Thymopoitein.

25. Memory cells.

#### **UNIT-IV**

1. Immunoglobulin.
2. Papain and Pepsin.
3. Fab dimer.
4. Fragments of FC.
5. H-chain and L-chain.
6. Domains.
7. Sources of IgA.
8. J-chain.
9. Pentameric Ig.
10. Opsonization.
11. X-linked A gamma globulemia.
12. Hypervariable region.
13. Hinged region.
14. Monoclonal.
15. Polyclonal.
16. PEG.
17. HGPRT.
18. HAT Medium.
19. Hybridoma cell.
20. Hybridoma technology.
21. Two applications of Hybridoma technology.
22. Advantages of Hybridoma technology.
23. Affinity & Avidity of Antigen & Antibody reactions.
24. Serological reaction.
25. What is Precipitation reaction.
26. Cross reactivity.
27. Zone Phenomenon.

28. Antibody Specificity.
29. RIA.
30. ELISA.

## **UNIT-V**

1. Immunization.
2. Vaccination.
3. BCG.
4. DTP.
5. Tetanus.
6. Transplantation.
7. Hypersensitivity.
8. Anaphylaxis.
9. Prophylaxis.
10. Immediate type of Allergy.
11. Suppressor cells.
12. Cytotoxic reaction.
13. Hay fever allergic rhinitis.
14. RAST.
15. Penicillin.
16. Massive inflammation.
17. Good Pasteur's syndrome.
18. MAC lysis.
19. Serum sickness.
20. Arthur's reaction.
21. Rheumatic Arthritis.
22. Glomerular necrosis.
23. Patch test.
24. Grave's disease.
25. Killed Vaccines.
26. Live Vaccines.
27. MMR Vaccine.
28. Good Vaccine.

29. Adjuvants.
30. EPI .
31. RHOGAM.
32. Louis Pasteur.
33. Edward Jenner.
34. Toxoids.
35. Syngenic.
36. Allogenic.
37. HLA.
38. MHC.
39. H-Gene.
40. H-Antigen.
41. Acquired rejection.
42. Chronic rejection.
43. Graft rejection.
44. RAST.
45. RFLT.
46. GVHD.

### **SECTION-B (UNIT-1)**

1. Explain the mechanism of phagocytosis.
2. Explain about the HMI&CMI with reference parasite infection.
3. What are the differences between innate & active immunity?
4. What are the physiological barriers of innate immunity?

### **UNIT-II**

1. Structure of Thymus.
2. Structure of Bone marrow.
3. Write a note on Bursa of fabricius.
4. Structure of Lymphnode.
5. Structure of Spleen.
6. Write a short note on MALT.

### **UNIT-III**

1. Write a short note on the origin of immunocompetent cell.
2. Write a short note structure and functions of Macrophages.
3. What are the different types of the dendritic cells?

### **UNIT- IV**

1. Structure of Immunoglobulin.
2. Physiochemical and biological properties of Immunoglobulin.
3. Give an account on Immunodeficiency diseases.
4. Explain about the Biosynthesis of antibody (or) Monoclonal and Polyclonal antibodies.
5. Explain about the Antigen and Antibody reactions.
6. Explain about the process of Hybridoma Technology.
7. Explain about the Hybridoma Techniques.
8. What are the general features of Antigen and Antibody reactions?
9. What are the stages of Antigen and Antibody reactions?

### **UNIT-V**

1. Characteristics features of Good Vaccines.
2. Advantages and Disadvantages of Killed Vaccines.
3. Write short note on Live Vaccines.
4. Immunization schedule of Children.
5. Immunization schedule of Adult.

### **SECTION-C (UNIT-I)**

1. Explain the different types of immunity.

### **UNIT-II**

1. What are the Primary Lymphoid Organs and explain their structure and functions?
2. What are the Secondary Lymphoid Organs and explain their Structure and functions?

### **UNIT-III**

1. Explain the various types of immune cells and their role in immune response.

### **UNIT-IV**

1. Write in detail about the structure, types and functions of Immunoglobulin. Causes, Prevention, treatment and Symptoms of AIDS.

### **UNIT-V**

1. Give an account on Different types of Vaccination and their properties.
2. Write in detail on the mechanism and different types of Hypersensitivity.
3. Write an account on Transplantation Immunology.