



**Avinashilingam Institute for Home Science and Higher Education for Women**  
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)  
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B  
Coimbatore - 641 043, Tamil Nadu, India

**Bachelor's Degree Examination – July 2020**  
**VI Semester**

**Class : III UG**  
**Major : Zoology**

**Time : 2 Hours**  
**Max. Marks: 50**

**15BZOC23 Immunology**

**Part – A**

**10 X 1 = 10**

**Choose the Correct Answer**

1.  $\beta$  Interferons are synthesized by
  - a. leucocytes
  - b. activated t cells
  - c. fibroblasts
  - d. lymphocytes
2. Filter for lymphatic system is
  - a. thymus
  - b. bone marrow
  - c. bursa of fabricius
  - d. lymph node
3. The microbial toxin which can over stimulate the immune system
  - a. superantigens
  - b. adjuvant
  - c. soluble antigens
  - d. synthetic antigens
4. Strength of interaction between multivalent antibody and antigen is
  - a. avidity
  - b. equivalence zone
  - c. ab valance
  - d. binding reaction
5. Which cells are responsible for delayed-type hypersensitivity?
  - a. CD8<sup>+</sup>
  - b. CD4<sup>+</sup>
  - c. CTL
  - d. CD28
6. Motile phagocytic cells which may damage parasite membrane
  - a. basophils
  - b. mast cells
  - c. eosinophils
  - d. neutrophils
7. Protein which regulate the classical pathway of complement system
  - a. C1 inhibitor
  - b. factor H
  - c. C4b- binding protein
  - d. both a and c
8. In humans MHC is located on ----- chromosome.
  - a. 6
  - b. 17
  - c. 9
  - d. 20
9. Type I hypersensitivity is caused by
  - a. IgG
  - b. IgE
  - c. IgM
  - d. Both a and c
10. Tissue transferred between genetically identical individual is known as
  - a. allograft
  - b. autograft
  - c. isograft
  - d. xenograft

**Part B**

**3 x 6 = 18**

Answer any **Three** questions

**Each answer should not exceed 400 words or two pages**

11. Write short note on types of immunity.
12. Mention different kinds of leukocytes.
13. Define the structure of immunoglobulin with neat diagram.
14. Explain the cross -reactivity.
15. Give an account on lymphocytes and its types.
16. Describe about the antigen presenting cells.
17. Discuss the complement regulatory proteins and its functions.
18. Differentiate class I and class II MHC molecules.
19. Classify the type of transplants.
20. List out the Type II hypersensitivity diseases.

**Part C**

**2 x 11 = 22**

Answer any **Two** questions

**Each answer should not exceed 800 words or four pages**

21. Give a detailed note on innate and adaptive immunity.
22. List the secondary lymphoid organ and summarize their functions in the immune response.
23. Write a brief note on classes and subclasses of immunoglobulins.
24. Elaborate the applications of antigen-antibody interaction.
25. Write an essay on B-cell activation and proliferation.
26. Discuss about the primary and secondary humoral immune responses.
27. Describe in detail on complement deficiencies.
28. Explain about HLA typing.
29. Explain the types of hypersensitivity.
30. Summarize organ transplantation, graft rejection and prevention of graft rejection.

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