

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2005-06 & thereafter)
SUBJECT CODE: ZL/MO/IM34

B.Sc. DEGREE EXAMINATION NOVEMBER 2008
BRANCH VI.A. –ADVANCED ZOOLOGY AND BIOTECHNOLOGY
THIRD SEMESTER

COURSE : MAJOR OPTIONAL
PAPER : IMMUNOLOGY
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS

(10 x 3 = 30)

1. FILL IN THE BLANKS

- a) _____ is a pentameric Immunoglobulin.
- b) The growth of tissue cells in a laboratory medium is called as _____.
- c) _____ Patches are secondary lymphoid tissue.

2. CHOOSE THE CORRECT ANSWER

- a) The natural killer cells is a type of _____ cell.
1. Null cell 2. Stem cell 3. Mast cell
- b) Blood group system in man has been discovered by _____.
1. Landsteiner 2. Louis Pasteur 3. Alexander Flemming
- c) Rupture or lysis of RBC is called as _____.
1. Haemolysis 2. Haemolysin 3. Haemagglutinin

3. TRUE OR FALSE

- a) Interferon is a glycoprotein.
- b) Oncogenes are the genes causing Haemophilia.
- c) Allergen is a substance producing allergy or hypersensitivity.
- d) Thymectomy is a surgical removal of Thyroid gland.
- e) Kupffer cells are phagocytes found in the liver which engulf the antigen entering through the gut.
- f) Tuberculin is a Protein fraction.

4. MATCH THE FOLLOWING

- | | | |
|----------------------|---|-----------------------------|
| a) Malaria | - | Tumour of the Thymus |
| b) Elephantiasis | - | Lesion in the Thyroid |
| c) Thymoma | - | <i>Wuchereria bancrofti</i> |
| d) Hashimoto disease | - | Allergy |
| e) Eczema | - | Plasmodium |
| f) Hay fever | - | skin eruption |

5. DEFINE:

- a) Complement fixation
- b) Anaphylaxis
- c) Null cells

6. **DISTINGUISH BETWEEN**
 - a) Antigens and Antibody.
 - b) Blast cell and Mast cell.
 - c) Chemotaxis and Diapedesis
7. **EXPAND THE FOLLOWING ABBREVIATIONS**
 - a) NK b) HLA c) HIV
8. Name the different types of Immune cells.
9. Draw and label the parts of human lymph node.
10. **GIVE THE FUNCTION OF**
 - a) Macrophage b) Complement system c) Immunoglobulins

SECTION – B

ANSWER ANY FIVE QUESTIONS

(6 x 5 = 30)

11. Write Briefly about Biological functions of complement system.
12. Give an account of the vaccines used in the prevention of various human diseases and its schedule in children.
13. Explain signal transduction mediated by cytokine receptor.
14. Draw and explain the structure of Immunoglobulin.
15. Give a brief account of Antibody Dependent Cell Mediated Cytotoxicity.
16. Write down the differences between primary and secondary Immune Responses.
17. Describe bacterial evasion of host defense mechanism.

SECTION – C

ANSWER ANY TWO QUESTIONS

(2 x 20 = 40)

18. Give an account on the anatomical barrier of innate immunity.
19. What is Hypersensitivity? Classify and explain any one with an example.
20. Define acquired immunity. Describe the Cell Mediated Immune Response.
21. Write an essay on cells of Immune Response.
