

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 2007
BRANCH VLA. –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) The first line of defence is _____ immunity.
- b) Two types of lymphocytes are T cells and _____.
- c) Bursa of fabricius is present in _____.

2. CHOOSE THE CORRECT ANSWER

- a) The most important phagocyte is
1. Neutrophil 2. Platelet 3. Stem cell
- b) The largest lymphoid organ is
1. Lymph node 2. Spleen 3. none
- c) The replacement of a diseased organ is by
1. Translocation 2. Transplantation 3. Transcription

3. TRUE OR FALSE

- a) In immune system, skin is the anatomical barrier.
- b) Acquired immunity is also known as non-specific immunity.
- c) Humoral immunity involves the Synthesis of macrophages.
- d) Each immunoglobulin molecule is made up of four polypeptide chains.
- e) Thymus is located near the lower part of the heart.
- f) SCID occurs due to genetic defect.

4. MATCH THE FOLLOWING

- a) Autoimmune disease - allergen
- b) Anaphylaxis - immunoglobulin
- c) antibody - immunogen
- d) Bursa - inflammation
- e) histamine - lymphoid organ
- f) antigen - self cells

5. DEFINE:

- a) MHC b) Autograft c) Hotspot

6. **DISTINGUISH BETWEEN**
a) Paratope and epitope.
b) Fab Region and Fc region.
c) Antigen and antibody.
7. **EXPAND THE FOLLOWING ABBREVIATIONS**
a) CTL b) APC c) MALT
8. Name different classes of Immunoglobulins.
9. Illustrate C.S of lymph node.
10. **GIVE THE FUNCTION OF**
a) macrophage b) antigen c) antigenic determinants

SECTION – B

ANSWER ANY FIVE QUESTIONS

(6 x 5 = 30)

11. Describe the basic structure of an immunoglobulin.
12. Summarise characteristic of immune responses.
13. Describe the histology of any two Secondary lymphoid organs.
14. List the properties of cytokines.
15. Explain types of T cells and their importance.
16. Summarise the features of complement system.
17. Describe the role of antivenin and antitetanus serum.

SECTION – C

ANSWER ANY TWO QUESTIONS

(2 x 20 = 40)

18. Classify various types of Immunity citing suitable examples.
19. Give a detailed account of types of vaccines used in humans.
20. Write an essay on types of Immunoglobulins and their characters.
21. Explain the immune reactions in infections caused by viruses and bacteria.
