STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2011 – 2012 & thereafter)

SUBJECT CODE: 11ZL/MC/IM54

B.Sc. DEGREE EXAMINATION - NOVEMBER 2016
BRANCH VI A – ADVANCED ZOOLOGY & BIOTECHNOLOGY
FIFTH SEMESTER

COURSE : MAJOR CORE
PAPER : IMMUNOLOGY
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION – A

ANSWER ALL QUESTIONS **(10 x 3 = 30)**

1. Fill in the blanks
a) Cytokines made by monocytes are known as _____.
b) Antibacterial substance present in tears is _____.
c) The key component of complement is _____.

2. Choose the correct answer
a) Secretory antibody
a) IgA b) IgM c) IgD
b) Antiviral substances produced in cells during viral infection
a) Interleukin b) interferon c) CRP
c) Example for heat killed organism as vaccine
a) Oral polio vaccine b) TT c) Cholera vaccine

3. True or false
a) Innate immunity is non-specific.
b) Chemokines enable the migration of leucocytes from blood to tisssues.
c) IgG can be transported across the placenta.
d) Only cell mediated immunity gives protection against parasitic infections.
e) Opsonin prevents phagocytosis.
f) There is no alternate pathway for complement activation.

4. Match the following

a) Edward Jenner	-	i) BCG
b) Elie Metchnikoff	-	ii) polio
c) Arne Tiselius	-	iii) small pox
d) Louis Pasteur	-	iv) phagocytosis
e) Albert Sabin	-	v) rabies
f) Calmette	-	vi) gammaglobulin

5. Define
a) epitope b) Immuno suppression c) anti-venom

6. Distinguish between
a) Antigen and hapten
b) Syngraft and xenograft
c) Prophylaxis and anaphylaxis

7. Expand the following abbreviations
a) MHC b) TNF c) DPT

8. Mention any three important cytokine groups.

9. Illustrate the C.S. of spleen.

10. Give the function of
a) dendritic cells b) Macrophages c) Complement

SECTION – B

ANSWER ANY FIVE QUESTIONS (5 x 6 = 30)
(Draw diagrams where necessary)

11. Compare and contrast the active and passive acquired immunities.
12. Describe the general structure of antibody.
13. Explain the mechanism of graft rejection.
14. Give a brief account of Interleukins.
15. What are subunit vaccines? Explain with an example.
16. Distinguish between cellular and humoral immunity. Illustrate humoral immunity.
17. Describe thymus as a primary lymphoid organ.

SECTION – C

ANSWER ANY TWO QUESTIONS (2 x 20 = 40)
(Draw diagrams where necessary)

18. Write an essay on the immunologically important cells of lymphoid lineage.
19. Describe the methods for studying the Ag-Ab interactions.
20. Explain the types of hyper sensitivity reactions.
21. Describe the immune reactions against bacterial and viral infections.

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