



PAR-003-001519

Seat No. _____

B. Sc. (Sem. V) (CBCS) Examination

October / November - 2018

BT - 503 : Immunology

(Old Course)

Faculty Code : 003

Subject Code : 001519

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) Section-I covers compulsory one mark questions of 20 marks.
(2) Figures in the right indicate marks.

SECTION – I

- 1 One mark objective questions : **20**
- (1) Which immunoglobulin present in mother milk?
 - (2) Vaccination is an example of passive immunization - True or False.
 - (3) _____ Macrophage present in the lung.
 - (4) Cell lysis in complement pathway is initiated by _____.
 - (5) Type IV hypersensitivity is also called as _____.
 - (6) Transfer of tissue individuals own tissue to another part of the body is called _____.
 - (7) Give the full form of HCG.
 - (8) The thymus is the site of T-cell development and maturation. True/ False.
 - (9) MHC genes are present on chromosome _____ in human and chromosome _____ in mice.
 - (10) Which immunoglobulin gives the degranulation of mast cell ?

- (11) Which cytokine induces an antiviral state in most nucleated cells ?
- (12) Who gave the term phagocyte ?
- (13) Give the full form of SCID.
- (14) _____ cell destroy the targeted cells by ADCC.
- (15) A molecule that reacts with specific antibody but is not immunogenic by itself is called _____.
- (16) The pH of lysosome is _____.
- (17) The Grave's disease is associated with _____ hormone.
- (18) The interaction between antibody and particulate antigen results in visible clumping is called _____.
- (19) Enlist the barriers of innate immunity.
- (20) Who gave the ABQ blood grouping ?

SECTION – II

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| 2 | <p>(a) Write any three out of six :</p> <ol style="list-style-type: none"> (1) What is immunogenicity and antigenicity ? (2) Draw the diagram of neutrophil and eosinophil. (3) What is opsonization ? (4) What is adjuvant? Give its function. (5) Define: Extravasation and vasodilation. (6) What is co-stimulatory signal ? | 6 |
| | <p>(b) Write any three out of six :</p> <ol style="list-style-type: none"> (1) Write a short note on structure and function of macrophages. (2) Explain: Factors that affect immunogenicity. (3) Give the difference between class - I and Class - II MHC molecules. (4) Explain: Mechanism of CTL for cell killing. (5) Write in detail about Type - II hypersensitivity. (6) Describe the process of phagocytosis. | 9 |

- (c) Write any **two** out of five : **10**
- (1) Discuss in detail about protozoan disease.
 - (2) Explain: cytosolic pathway for antigen presentation.
 - (3) Write a note on Hematopoiesis.
 - (4) What is immunoglobulin ? Describe its classification.
 - (5) Describe in detail about DNA vaccine.
- 3** (a) Write any **three** out of six : **6**
- (1) What is adaptive and innate immunity?
 - (2) What is cross reactivity?
 - (3) What is immunosuppressive drugs ? Give its examples.
 - (4) Give the functions, of complement.
 - (5) What is the function of T - cell receptor ?
 - (6) Define: vaccine. Enlist its types.
- (b) Write any **three** out of six : **9**
- (1) Write a note on hybridoma technology.
 - (2) Describe in detail about lymph node.
 - (3) Explain: Insulin dependent diabetes mellitus.
 - (4) Write about B- cell differentiation.
 - (5) Give the difference between chemokines and cytokines.
 - (6) Explain structure and function of immunoglobulin.
- (c) Write any **two** out of five : **10**
- (1) Describe in brief about primary lymphoid organ.
 - (2) What is immunodeficiency disease? Discuss in detail about AIDS.
 - (3) Write a detail note on alternative pathway for complement activation.
 - (4) Explain: Mechanism of T- cell activation.
 - (5) Write a note on ELISA.
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