



PAP-003-1015009

Seat No. 59574

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

October / November - 2018

MB - 501 : Immunology & Medical Microbiology

Faculty Code : 003

Subject Code : 1015009

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

[Total Marks : 70

- 1 (a) Answer specifically : 4
- (1) Species, Racial and Individual immunity are types of _____ immunity.
 - (2) Enlist various types of Secondary lymphoid organs
 - (3) Define : Herd Immunity
 - (4) What is the function of Neutrophile in immune reaction ?
- (b) Answer in brief : (any one) 2
- (1) Define acquired immunity and state its various types
 - (2) Draw a well labelled diagram of a Macrophage and state its role in immunity.
- (c) Answer in detail : (any one) 3
- (1) Discuss structure and function of various WBCs involved in generation of immune response
 - (2) Discuss various characteristics of immune system
- (d) Write a Note on : (any one) 5
- (1) Secondary Organs of immune system
 - (2) Types of immunity
- 2 (a) Answer specifically : 4
- (1) Every nucleated Eukaryotic cell is capable to produce MHC _____ molecule.
 - (2) Enlist various Antigen Presenting cells
 - (3) Define : Opsonisation
 - (4) What is the function of Plasma cells in immune response?

PAP-003-1015009]

1

[Contd....

- (b) Answer in brief : (any one) 2
- (1) Define immune response and explain its types
 - (2) Draw a well labelled diagram of a Phagocytosis process and state its role in immunity
- (c) Answer in detail : (any one) 3
- (1) Discuss the mechanism of generation of Humoral immune response
 - ~~(2)~~ Discuss Antigen processing and presentation
- (d) Write a Note on : (any one) 5
- ~~(1)~~ Structure and properties of MHC molecules
 - (2) Cytokines
- 3 (a) Answer specifically : 4
- (1) The chemical nature of antibody was deduced by _____
 - (2) Enlist various classes of immunoglobulin
 - (3) Define : Haptens
 - (4) What is the function of Adjuvant immune response ?
- (b) Answer in brief : (any one) 2
- (1) Define Immunogenicity and contrast it with Antigenicity
 - ~~(2)~~ Draw a well labelled diagram of an Immunoglobulin molecule
- (c) Answer in detail : (any one) 3
- (1) Discuss the factors affecting immunogenicity of a molecule.
 - ~~(2)~~ Discuss Immunoglobulin classes

(d) Write a Note on : (any one) 5

~~(1)~~ Monoclonal antibody

(2) Antibody diversity

4 (a) Answer specifically : 4

(1) Deficiency or total absence of T lymphocytes or of Thymus is called _____

(2) Enlist various types of Autoimmunity

(3) Define : Immunodeficiency

(4) What is the function of Mast cell in Hypersensitivity?

(b) Answer in brief : (any one) 2

(1) Define Hypersensitivity

~~(2)~~ Explain : Primary immunodeficiency

(c) Answer in detail : (any one) 3

~~(1)~~ Discuss Type - II Hypersensitivity

(2) Discuss mechanisms of Graft rejection

(d) Write a Note on : (any one) 5

~~(1)~~ Autoimmune diseases

(2) Immunotherapy of Tumors

5 (a) Answer specifically : 4

(1) The ability of an organism to cause disease is called _____

(2) Enlist various types of microbial virulence factors

(3) Define : Normal flora

(4) What is Infection?

(b) Answer in brief : (any one)

2

(1) What is Gnotobiotic Life?

~~(2)~~ Explain : Importance of Normal flora

(c) Answer in detail : (any one)

3

(1) Discuss microbial virulence factors

~~(2)~~ Discuss Process of infection

(d) Write a Note on : (any one)

5

~~(1)~~ Normal flora of a healthy human host

(2) Natural Resistance