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PAP-003-1015009 Seat No. _____

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?

(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
