

Seat No. : _____

MD-109

March-2018

B.Sc., Sem.-V

CC-303 : Microbiology (Principles of Immunology)

Time : 3 Hours]

[Max. Marks : 70

- Instructions :** (1) All questions carry equal marks.
(2) Appropriate labelled diagrams will be appreciated.

1. Answer any **two** of the following questions : 14
- (A) Describe in brief the innate immunity.
 - (B) Describe the MHC class I and II in brief.
 - (C) Describe the antibody mediated immune response in brief.
 - (D) Enlist the components of lymphatic system and describe the role of lymphatic system in brief.
2. Answer any **two** of the following questions : 14
- (A) Describe the characteristics of immunoglobulins.
 - (B) Explain the term precipitation and describe the applications of the test in diagnosis.
 - (C) Describe the significance of skin tests with examples.
 - (D) Describe the mechanism(s) of occurrence of a large number of antibodies.
3. Answer any **two** of the following questions : 14
- (A) Enlist the types of hypersensitivity and describe delayed type of hypersensitivity.
 - (B) Enlist the types of dysfunctions of immune responses and describe immunodeficiencies in brief.
 - (C) Enlist the types of grafts and describe the rejection of the transplants in brief.
 - (D) Explain the term autoimmune disorders and describe the autoimmune disorders.

4. Answer any **two** of the following questions : 14

- (A) Explain the need for- prophylaxis and describe the types of vaccines.
- (B) Enlist the constituents of blood and describe in brief the function(s) granulocytes.
- (C) Describe the role of Blood banks and explain the significance of Blood groups.
- (D) Describe the hazards of vaccination.

5. Answer the following questions in **one** or **two** statements : 14

- (1) Explain the term immune tolerance.
 - (2) Give example of a heterophile antigen found on human RBC.
 - (3) Give an example of a primary lymphoid organ.
 - (4) Name any radioactive compound used in RIA.
 - (5) Name the skin test used to diagnose tuberculosis.
 - (6) Name two enzymes used in ELISA technique.
 - (7) Give example of a immunosuppressive drug.
 - (8) What is Myasthenia gravis ?
 - (9) Name two peptides involved in non-specific immunity.
 - (10) What is the role of platelets ?
 - (11) What is a Cytokine ?
 - (12) Name the genes of HLA-I class.
 - (13) Explain term : “Cross matching” of the blood.
 - (14) Write full form of DPT vaccine.
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