



**HB-003-001519**

Seat No. \_\_\_\_\_

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

**May / June - 2017**

**BT - 503 : Immunology**

**Faculty Code : 003**

**Subject Code : 001519**

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

[Total Marks : 70

- Instructions :** (1) Question 1 covers 20 objective questions of 20 marks.  
(2) Figures in the right indicate marks.  
(3) Give answers of objective questions in main answer sheet.

**SECTION - I**

- 1 Objective Questions : 20**
- (1) Which is secretory Antibody?
  - (2) Give the full form of ADCC.
  - (3) Life span of RBC is \_\_\_\_\_ days.
  - (4) T-cell mature in \_\_\_\_\_.
  - (5) Which cell produce antibody?
  - (6) Who discovered the first vaccine?
  - (7) B-cell production occure in \_\_\_\_\_.
  - (8) In Tansplantation, if tissue is transferred between genetically identical individual than it is known as \_\_\_\_\_.
  - (9) Which medium is used for selection of monoclonal antibody?
  - (10) \_\_\_\_\_ Hypersensitivity is Ig-E mediated.
  - (11) Rubor means \_\_\_\_\_.
  - (12) The ability of antigen to stimulate Ig production is called \_\_\_\_\_.

- (13) Oily Substance secreted by sebaceous gland is \_\_\_\_\_.
- (14) Give the full form of RIA.
- (15) The cytokines responsible for Antiviral state is known as \_\_\_\_\_.
- (16) The process of formation and differentiation of blood cells is known as \_\_\_\_\_.
- (17) Which factors are cytotoxic to tumor cells but not to normal cells?
- (18) The causative agent of Malaria is \_\_\_\_\_.
- (19) Chronic Inflammation in joints occur in which Autoimmune disease?
- (20) Mast cell degranulation is done by \_\_\_\_\_.

## SECTION – II

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|----------|---|-----------|
| <b>2</b> | <p>(A) Write any <b>three</b> out of six :</p> <ol style="list-style-type: none"> <li>(1) Define : Immunity</li> <li>(2) What are Adjuvants?</li> <li>(3) Give examples of primary and secondary lymphoid organs.</li> <li>(4) Define : Hypersensitivity.</li> <li>(5) What is Graft rejection?</li> <li>(6) Give the Importance of MHC-1 molecules.</li> </ol> | <b>6</b>  |
|          | <p>(B) Write any <b>three</b> out of six :</p> <ol style="list-style-type: none"> <li>(1) Explain : Types of Granulocytes.</li> <li>(2) Explain : Ig-E.</li> <li>(3) Write a note on Recombinant Vaccine.</li> <li>(4) Explain : AIDS</li> <li>(5) Which are the factors effect on immunogenicity?</li> <li>(6) Function of cytokines.</li> </ol>               | <b>9</b>  |
|          | <p>(C) Write any <b>two</b> out of five :</p> <ol style="list-style-type: none"> <li>(1) Explain : Hematopoiesis.</li> <li>(2) Write a brief note on ELISA.</li> <li>(3) Explain classical pathway of complement system.</li> <li>(4) Explain : Erythroblastosis fetalis.</li> <li>(5) Explain : T-cell maturation.</li> </ol>                                  | <b>10</b> |

### SECTION – III

- 3** (A) Write any **three** out of six : **6**
- (1) What is Haptens?
  - (2) Define : Agglutination.
  - (3) What is phagocytosis?
  - (4) What is autoimmune disease?
  - (5) What is adaptive immunity?
  - (6) Define : Precipitation.
- (B) Write any **three** out of six : **9**
- (1) What is Antigen processing and Presentation?
  - (2) Explain : Inflammation.
  - (3) Explain properties of cytokines.
  - (4) Short note on B-cell.
  - (5) Describe : Thymus
  - (6) Explain : T-cell Receptor.
- (C) Write any **two** out of five : **10**
- (1) Explain : Innate immunity.
  - (2) Write a note on Transplantation.
  - (3) Explain production of monoclonal antibody by Hybridoma technology.
  - (4) Explain Types of immunoglobulins.
  - (5) Discuss : Malaria.
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