



**MAL-003-001631**

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

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

**March / April - 2018**

**Microbiology : MB-601**

*(Immunology & Clinical Microbiology)*

*(New Course)*

**Faculty Code : 003**

**Subject Code : 001631**

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

[Total Marks : 70

**Instructions :**

- (1) All questions are compulsory.
- (2) Draw figures wherever required.
- (3) The right side figure indicates the marks of the question.

1 Answer following questions in short : **1×20=20**

- (1) Define : Hapten.
- (2) Give four signs of inflammation.
- (3) What is phagocytic barrier ?
- (4) What is Humoral immunity ?
- (5) What is APC ?
- (6) What is main function of IgA ?
- (7) Write the types of heavy chain in the structure of immunoglobulins.
- (8) Which are the types of B-cell ?
- (9) What is Grave's disease ?
- (10) What is MHC ?

- (11) What is Arthus reaction ?
- (12) What is SLE ?
- (13) Write causative agent of Tuberculosis.
- (14) Give full form of: VDRL, B T – C T, ELISA.
- (15) Write any four normal flora of skin.
- (16) Write full form of MMR and BCG.
- (17) Give two example of flourescent dye.
- (18) Name any two enzymes which are used in ELISA.
- (19) Which isotope is generally used in RIA ?
- (20) Which are the types of Blood transfusion ?

**2** (a) Write in short : (any **three**) **2×3=6**

- (1) What is Epitope ?
- (2) Which are the types of light chain in the structure of IgA ?
- (3) What is immunological tolerance ?
- (4) What is GVH ?
- (5) What is Haemagglutination ?
- (6) What is Western blot technique ?

(b) Write in brief : (any **three**) **3×3=9**

- (1) Explain Immune response.
- (2) Describe IgA.
- (3) Which are combined immunodeficiencies ?
- (4) Explain role of 'Pharmacologically active mediator in Hypersensitivity'.
- (5) Immunoelectrophoresis.
- (6) Discuss : Malaria

(c) Write short notes on : (any **two**) **5×2=10**

- (1) Passive Immunity
- (2) Structure and function of IgG
- (3) Principles of Transplantation
- (4) Normal flora of Healthy Human body
- (5) Precipitation Reaction.

**3** (a) Write in short : (any **three**) **2×3=6**

- (1) What are Adjuvants ?
- (2) What is Lattice Hypothesis ?
- (3) What is sensitizing and shocking dose ?
- (4) Write types of infection.
- (5) What is RIA ? State its advantage.
- (6) Write causative agent of Tetanus and Syphilis.

(b) Write in brief : (any **three**) **3×3=9**

- (1) Explain the role of T&B cells in immunity.
- (2) What is Antibody affinity and avidity ?
- (3) Explain Autoimmune hemolytic anaemia.
- (4) Explain Epidemiological markers.
- (5) Agglutination reaction.
- (6) Discuss : Mycobacteria

(c) Write short notes on : (any **two**) **5×2=10**

- (1) Lymphocytes
- (2) Monoclonal antibody
- (3) Anaphylaxis
- (4) Vaccines
- (5) Blood compatibility test.