



**PB-003-1016013**

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

**B. Sc. (Sem. VI) (CBCS) (W.E.F. 2016) Examination**

**March / April - 2020**

**MB - 603 : Clinical Diagnostic Microbiology**

**Faculty Code : 003**

**Subject Code : 1016013**

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

[Total Marks : 70

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

- 1 (a) Objective type questions : 4
- (1) Which are the progenitor of Hematopoietic stem cell ?
- (2) Enlist tests which are required before blood transfusion ?
- (3) What is full form of FFP ?
- (4) Who invented Rh system, when ?
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Enlist different blood groups of human blood.
- (2) Enlist various blood components and their usage.
- (c) Answer in details : (any 1 out of 2) 3
- (1) Discuss significance of Blood banking.
- (2) Discuss Hemostasis.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Hematopoiesis.
- (2) Blood Compatibility Test.

- 2** (a) Objective type questions : **4**
- (1) Define Heterophile antibody.
  - (2) What is Serology ?
  - (3) Give example of fluorescent dye used in diagnostic techniques.
  - (4) Typhoid is determined by \_\_\_\_\_.
- (b) Answer in brief : (any 1 out of 2) **2**
- (1) Explain Fluorescent antibody technique.
  - (2) Describe Precipitation test.
- (c) Answer in details : (any 1 out of 2) **3**
- (1) Explain : Neufeld Quellung Reaction.
  - (2) Explain : CFT.
- (d) Write a note on : (any 1 out of 2) **5**
- (1) Intracutaneous Diagnostic tests.
  - (2) Agglutination
- 
- 3** (a) Objective type questions : **4**
- (1) \_\_\_\_\_ isotope is used in RIA.
  - (2) Write full form of ELISA and RIA.
  - (3) Enlist the microscopes which can be use for specimen identification.
  - (4) Which are the advanced methods to identify specimen ?
- (b) Answer in brief : (any 1 out of 2) **2**
- (1) Enlist various clinical specimen and how they are collected ?
  - (2) Explain Immuno histochemistry.
- (c) Answer in details : (any 1 out of 2) **3**
- (1) Write advantages and disadvantages of RIA.
  - (2) Explain: -Western Blotting.
- (d) Write a note on : (any 1 out of 2) **5**
- (1) ELISA.
  - (2) Immunofluorescence.

- 4 (a) Objective type questions : 4
- (1) \_\_\_\_\_ is the causative agent of Syphilis.
  - (2) Give example of Opportunistic fungi.
  - (3) Systemic mycoses are caused by \_\_\_\_\_ and \_\_\_\_\_.
  - (4) Give the name of causative agent of meningitis.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Explain Shigellosis.
  - (2) Explain Superficial Mycoses.
- (c) Answer in details : (any 1 out of 2) 3
- (1) Explain Cutaneous mycoses.
  - (2) Explain 'Food Poisoning'.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Epidemiological markers.
  - (2) Mycobacterium- as a pathogen.
- 5 (a) Objective type questions : 4
- (1) Write full form of MMR.
  - (2) Which disease is caused by *Leishmania donovani* ?
  - (3) \_\_\_\_\_ is the vaccine is for Tuberculosis.
  - (4) Write the types of Hepatitis virus.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Describe diagnostic test for *Giardia lamblia*.
  - (2) Write down the symptoms of Trypanosomiasis.
- (c) Answer in details : (any 1 out of 2) 3
- (1) Describe disease caused by *Entamoeba histolytica*.
  - (2) Explain symptoms and diagnostic treatment of Chikungunya.
- (d) Write a note on : (any 1 out of 2) 5
- (1) Malaria.
  - (2) Modern approaches for Vaccines.