



JC-003-1016013

Seat No. _____

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

August – 2019

MB-603 : Microbiology

(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) Marks for all the questions are indicated on the right.
(3) Support your answer with suitable diagram wherever applicable.

- 1 (A) Objective type question : 4
(1) Who discovered ABO blood group system?
(2) Define Hematopoiesis
(3) What is Cross Matching?
(4) State two importance of blood transfusion
- (B) Answer in brief : (Any **One** out of Two) 2
(1) Enlist various types of blood cells with their functions
(2) What is Rh system? What is its importance?
- (C) Answer in brief : (Any **One** out of Two) 3
(1) Explain the process and significance of Hemostasis
(2) Explain in brief the principle, significance and procedure of blood transfusion

- (D) Write note on : (Any **One** out of Two) **5**
- (1) Hematopoiesis
 - (2) Separation and storage of blood components
- 2** (A) Objective type question : **4**
- (1) Define Immunogen
 - (2) Define Antibody
 - (3) What is Precipitation Reaction?
 - (4) Define Agglutination Reaction
- (B) Answer in brief : (Any **One** out of Two) **2**
- (1) What are Virus neutralizing antibodies?
 - (2) Explain in brief - Neufeld quellung reaction
- (C) Answer in brief : (Any **One** out of Two) **3**
- (1) Explain fluorescent antibody technique in brief
 - (2) Explain in brief - Complement fixation test
- (D) Write note on : (Any **One** out of Two) **5**
- (1) Intracutaneous diagnostic tests
 - (2) Agglutination tests
- 3** (A) Objective type question : **4**
- (1) Define - Clinical specimen
 - (2) What is ELISA?
 - (3) Enlist various types of blotting technique
 - (4) Name any two fluorescent dyes

- (B) Answer in brief : (Any **One** out of Two) **2**
- (1) Enlist various methods of specimen collection
 - (2) What is Radioimmunoassay?
- (C) Answer in brief : (Any **One** out of Two) **3**
- (1) Describe Immunoelectrophoresis
 - (2) Discuss ELISA
- (D) Write note on : (Any **One** out of Two) **5**
- (1) Methods for identification of microbes from clinical specimen
 - (2) Immunotherapy
- 4 (A) Objective type question : **4**
- (1) Define Epidemiology
 - (2) Define Mortality rate
 - (3) What is Mycosis?
 - (4) Define Opportunistic pathogens
- (B) Answer in brief : (Any **One** out of Two) **2**
- (1) Name any one disease caused by Treponema and discuss its treatment
 - (2) Discuss in brief the prevention of Superficial Mycosis
- (C) Answer in brief : (Any **One** out of Two) **3**
- (1) Write a brief note on Opportunistic fungi
 - (2) Discuss pathogenicity, diagnosis and treatment of Clostridial infections

- (D) Write note on : (Any **One** out of Two) 5
- (1) Systemic Mycosis
 - (2) Mycobacterial diseases
- 5 (A) Objective type question : 4
- (1) Define Vaccine
 - (2) Name any two viral diseases of humans
 - (3) Name any two protozoan diseases of humans
 - (4) What is Triple Vaccine?
- (B) Answer in brief : (Any **One** out of Two) 2
- (1) Briefly discuss pathogenicity of *Entamoeba histolytica*
 - (2) Discuss Ebola virus in brief
- (C) Answer in brief : (Any **One** out of Two) 3
- (1) Write pathogenicity and prevention of Hepatitis
 - (2) Briefly discuss - Swine flu
- (D) Write note on : (Any **One** out of Two) 5
- (1) Vaccines
 - (2) HIV
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