



DCK-003-2016013

Seat No. _____

Third Year B. Sc. (Sem. VI) (CBCS)

(W.E.F. 2019) Examination

July - 2022

Microbiology : Paper - 603

(Clinical & Diagnostic Microbiology)

Faculty Code : 003

Subject Code : 2016013

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

[Total Marks : 70

- Instructions :**
- (1) All questions are compulsory.
 - (2) Right side figures indicate marks of the question.
 - (3) Draw the figure wherever necessary.
 - (4) Write answers of all the questions in main answer sheet.

- 1 (a) Answer the following : 4
- (1) Define Hemostasis.
 - (2) What do you mean by Progenitor Cells?
 - (3) What is FFP?
 - (4) Who discovered Rh blood group system?
- (b) Answer in brief : (any **one**) 2
- (1) Explain significance of blood banking.
 - (2) What is the difference between serum & plasma?
- (c) Answer in detail : (any **one**) 3
- (1) ABO Blood Group System.
 - (2) Enlist components of blood and write protocol for the separation of packed red cells.
- (d) Write a note on : (any **one**) 5
- (1) Hematopoiesis
 - (2) Blood Coagulation

- 2** (a) Answer the following : **4**
- (1) Define precipitation.
 - (2) What do you mean by Intracutaneous Diagnostic Tests?
 - (3) Name two fluorescent dye used in fluorescent antibody technique.
 - (4) Define heterophile antibody.
- (b) Answer in Brief : (any **one**) **2**
- (1) Explain Antifibrinolysin.
 - (2) Explain Neufeld Quellung reaction.
- (c) Answer in detail : (any **one**) **3**
- (1) Discuss Complement fixation test
 - (2) Discuss Radial Immunodiffusion.
- (d) Write a note on : (any **one**) **5**
- (1) Agglutination Reaction
 - (2) Fluorescent Antibody Technique
- 3** (a) Answer the following : **4**
- (1) What is a clinical specimen?
 - (2) What is Immunohistochemistry?
 - (3) Which methods are used to identify microbes from clinical specimen?
 - (4) What is Primer in PCR?
- (b) Answer in brief : (any **one**) **2**
- (1) Write applications of Western Blot.
 - (2) What do you mean by Immunoelectrophoresis?
- (c) Answer in detail : (any **one**) **3**
- (1) Discuss RIA
 - (2) Discuss Immunofluorescence

- (d) Write a note on : (any **one**) **5**
- (1) ELISA
 - (2) Methods of Specimen Collection
- 4 (a) Answer the following : **4**
- (1) Define Epidemiology.
 - (2) Write causative agent of syphilis.
 - (3) Give two examples of Opportunistic fungi.
 - (4) What do you mean by Systemic Mycoses?
- (b) Answer in brief : (any **one**) **2**
- (1) Write symptoms of syphilis.
 - (2) Write causative agent and diagnosis of typhoid.
- (c) Answer in detail : (any **one**) **3**
- (1) Explain Cutaneous Mycoses with example.
 - (2) Enlist diseases Caused by Streptococci and discuss any one.
- (d) Write a note on : (any **one**) **5**
- (1) Mycobacteria
 - (2) Epidemiological Markers
- 5 (a) Answer the following : **4**
- (1) Give two examples of air borne viral diseases.
 - (2) What is HSV?
 - (3) What do you mean by trophozoite?
 - (4) Which is the causative agent of Malaria?
- (b) Answer in brief : (any **one**) **2**
- (1) Define Viral Zoonosis and give two examples of it.
 - (2) Write symptoms of Swine Flu.

(c) Answer in detail : (any **one**) **3**

(1) Explain life cycle of *Entamoeba histolytica* and clinical manifestation of infection in humans.

(2) Discuss in detail about causes, symptoms, treatments and control of AIDS.

(d) Write a note on : (any **one**) **5**

(1) Malaria

(2) Influenza
