

B.Sc. Semester - 6 (CBCS) Examination**March/April -2020****CLINICAL AND DIAGNOSTIC MICROBIOLOGY (CORE)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
 2. Figures to the right indicate marks.
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Q 1 A ANSWER THE FOLLOWING (ANY ONE)**07**

1. Explain contribution of Karl Landsteiner and write a detailed note on Human blood grouping systems.
2. Write names of various blood coagulation factors and discuss process of haemostasis in detail.

Q 1 B ATTEMPT ANY ONE**04**

1. Discuss principles of blood transfusion and precautions associated with that.
2. Write a note on leucopoiesis.

Q1 C ANSWER IN ONE OR TWO LINES (ANY THREE)**03**

1. Give names of any five non ABO non Rh blood groups.
2. What are anticoagulants?
3. What is cross matching?
4. What is FFP and PCV?
5. What is Bombay blood group?

Q 2 A ANSWER THE FOLLOWING (ANY ONE)**07**

1. Discuss principle and applications of various marks in vitro agglutination tests.
2. Describe major special serological tests.

Q 2 B ATTEMPT ANY ONE**04**

1. Give an overview of intracutaneous diagnostic tests.
2. Describe precipitation tests in gel.

Q2 C ANSWER IN ONE OR TWO LINES (ANY THREE)**03**

1. What is titre ?
2. Write principle of Ouchterlony's test.
3. What is heterophile antibody ?
4. What is lattice hypothesis ?
5. Give names of Fluorescent dyes used in diagnosis.

Q 3 A ANSWER THE FOLLOWING (ANY ONE)**07**

1. Describe microscopic, molecular and rapid diagnostic methods for the identification of microorganisms from clinical specimens.
2. Explain various types of ELISA along with applications.

Q 3 B ATTEMPT ANY ONE**04**

1. Describe RIA and Western blot test in brief.
2. What are major methods of specimen collection?

Q 3 C ANSWER IN ONE OR TWO LINES (ANY THREE)**03**

1. Define : Intubation and Swab
2. What is bacteriophage typing?
3. What is a dipstick test?
4. Name the diseases that can be diagnosed using PCR.
5. What is immunotherapy?

Q 4 A ANSWER THE FOLLOWING (ANY ONE)**07**

1. What are epidemiological markers? Write a note on tools of Epidemiology.
2. Describe pathogenicity, diagnosis and control of diseases caused by Gm Negative bacteria.

Q 4 B ATTEMPT ANY ONE**04**

1. Explain opportunistic fungal pathogens.
2. Describe cutaneous mycoses.

Q 4 C ANSWER IN ONE OR TWO LINES (ANY THREE)**03**

1. What is Morbidity rate ?
2. What is Widal and VDRL test ?
3. Name the diseases caused by anaerobic bacterial pathogens.
4. What is the pathogenicity of Malassezia furfur ?
5. What is convalescent carrier ?

Q 5 A ANSWER THE FOLLOWING (ANY ONE)**07**

1. Explain pathogenicity, diagnosis and control of Malaria.
2. What are vaccines ? Write a detailed note on conventional and modern vaccines.

Q 5 B ATTEMPT ANY ONE**04**

1. Explain HBV and HIV along with their spread and symptoms.
2. Discuss Amoebiasis in detail.

Q 5 C ANSWER IN ONE OR TWO LINES (ANY THREE)**03**

1. What is H1N1? (write full name)
2. What is DNA vaccine?
3. Kala Azar and African Sleeping sickness are caused by _____ and _____ respectively.
4. Write full forms of : HSV, HBsAg and ART
5. What is CoVid 19 ?
