

(50 & A-21)

SEAT No. _____

No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

T. Y. B.Sc. (VI Sem) Examination - 2018 [CBCS]

TUESDAY, 2nd April, 2018 10:00 AM - 1:00 PM

US06CMIC04(MICROBIOLOGY) MEDICAL MICROBIOLOGY

Maximum Marks: 70

Q.1. Each question below gives a multiple choice of answers. Choose the most appropriate one. [10]

- 1 The smallest cellular component in blood is
(a) Erythrocyte (b) Thrombocyte
(c) Leukocytes (d) none of these
- 2 During Blood coagulation thromboplastin is released by
(a) Clumped Platelets (b) RBC
(c) Leucocytes (d) Blood plasma
- 3 _____ acts as a powerful calcium chelating agent
(a) Sodium fluoride (b) Acid citrate dextrose
(c) EDTA (d) All of these
- 4 _____ refers to a precipitation reaction in an agar gel medium
(a) RIA (b) Western Blot
(c) Immunodiffusion (d) ELISA
- 5 RIA was first developed by
(a) Alberts Coons (b) Barson and Yalow
(c) Landsteiner (d) Kirby Bauer
- 6 Kidney function tests include _____
(a) Serum creatinine (b) Routine urine examination
(c) Urea clearance test (d) All of these
- 7 In post hepatic conditions very high levels of _____ is observed.
(a) SGPT (b) SGOT
(c) ALP (d) Urease
- 8 Most vaccine preparation contain :
(a) killed whole cells (b) Live attenuated cells or viruses
(c) Genetically engineered microbes (d) All of these
- 9 _____ is the choice of antibiotic for the treatment of typhoid.
(a) Chloramphenicol (b) Tetracycline
(c) AZT (d) Sulfa drugs
- 10 HIV belongs to _____ family of viruses.
(a) Rhabdoviridae (b) Retroviridae
(c) Orthomyxoviridae (d) Picornaviridae

Q.2 Short Questions (Attempt any TEN)

[20]

(P.T.O.)

- 1 Define Blood and what its components are.
 - 2 How does RBC generate energy and what are Heinz bodies?
 - 3 Enlist the stages of development of Red Blood Cells in sequence.
 - 4 What is western blotting explain in brief.
 - 5 What are the transport problems associated with stool specimens and anaerobic cultures?
 - 6 What is immunofluorescence and give an example of dye used in it.
 - 7 How serum bilirubin is used for the diagnosis of different form of jaundice.
 - 8 Give the definition of Bioterrorism as given by CDC and give examples of the organisms used for the same.
 - 9 Define Epidemiology and Morbidity.
 - 10 Enlist the different laboratory tests for the diagnosis of HIV infections.
 - 11 What is the difference between malaria caused by P. Vivax and P. falciparum
 - 12 State the factors that contribute for the occurrence of hospital infections.
- Q. 3 [A] What are anticoagulants and explain the role of EDTA and Sodium citrate [06]
 [B] What are leucocytes and explain Neutrophils and Eosinophils [04]
- OR**
- Q. 3 [A] Define Hemostasis and explain the process of blood coagulation [06]
 [B] Explain coomb's Test [04]
- Q. 4 [A] Write a note on ELISA [05]
 [B] Immunoelectrophoresis [05]
- OR**
- Q. 4 [A] Explain various methods of collection of specimen [05]
 [B] Write a note on Rapid Identification techniques [05]
- Q. 5 [A] Explain Triglycerides and cholesterol as Cardiac function test. [05]
 [B] Explain Total protein, Albumin and Globulin as Liver function test [05]
- OR**
- [A] Write a note on Vaccines [06]
- Q.5. [B] Write clinical significance of Creatinine and Bilirubin [04]
- Q. 6 Write detailed note on HIV with reference to its symptoms, pathogenesis, transmission, lab diagnosis and its treatment and prevention [10]
- OR**
- Q. 6 Write detailed note on Typhoid with reference to its symptoms, pathogenesis, transmission, lab diagnosis and its treatment and prevention [10]