

PG CBCS
M.Sc. Semester-I Examination, 2021
MEDICAL LABORATORY TECHNOLOGY (MLT)
PAPER: MLT 196 (PRACTICAL)
(CLINICAL BIOCHEMISTRY, SEROLOGY & IMMUNOLOGY)

Full Marks: 50**Time: 4 Hours****Answer any TWO questions of the following:****2X25=50**

1. i) Describe the principle and procedure of total proteins determination in serum by Biuret method. Mention the normal value of proteins in serum. 3+8+1
 ii) Describe the principle, procedure and interpretation of the result of creatinine determination in serum by Jaffe's Kinetic method. 3+8+2
2. i) What is Beer-Lambert's law? Mention the working principle of colorimeter. Write the applications of colorimeter. Mention two photometric instruments. 2+3+3+2
 ii) Write the types of laboratory water bath. Mention some features of water bath. .
 Mention the precautions you have to take during usage of water bath. 4+3+3
 iii) Discuss the calibration process of graduated pipette and volumetric flask. 2+3
3. i) Discuss the principle, procedure and interpretation of the result of determination of cholesterol in serum by CHOD/PAP method. Mention the normal value of cholesterol in serum. 3+7+2+1
 ii) Describe the principle, procedure and interpretation of result of triglyceride determination in serum by GPO/PAP method 3+7+2
4. i) Describe the principle, procedure and interpretation of the result of determination of SGPT in serum by modified IFCC method. 4+7+2
 ii) Discuss the principle, procedure and interpretation of result of determination of total and direct bilirubin in serum by Jendrassik and Grof method. 3+7+2
5. i) Describe the principle, procedure and interpretation of result of WIDAL test. 3+7+3
 ii) Describe the principle and procedure of AIDS test. Mention the precautions you have to take during the performance of AIDS test. 3+7+2
6. i) What is ultracentrifugation ? Mention the principle of centrifugation. Mention the types and applications of different kinds of centrifugation techniques. 2+3+7
 ii) What is anticoagulant? Give two examples of anticoagulant. Mention the medical uses of anticoagulant. 2+2+4
 iii) Mention three advantages of using micropipette. Mention the precautions you have to take during usage of micropipette. 3+2
