PG CBCS

M.Sc. Semester-I Examination, 2021 MEDICAL LABORATORY TECHNOLOGY (MLT)

PAPER: MLT 195 (PRACTICAL)

(PHYSIOLOGY AND HAEMATOLOGY LAB)

Full Marks: 50 Time: 4 Hours

Answer any <u>TWO</u> questions of the following:

2X25=50

- 1. i) Write the requirements and process of blood collection for the haematology assessment of a patient. (10)
 - ii) Make a note on the processing steps of the blood plasma and serum separation from collected blood sample. (5)
 - iii) Write the process of blood film preparation and Leishman staining on it. Write the precautions need to be taken by analyst during blood film preparation and staining.

(2+6)+2

- 2. i) Write the principle, apparatus and materials required, procedure, merits and demerits of haemoglobin estimation by Drabkin's method. (3+5+9+3)
 - ii) How will you interpret the results obtained after haemoglobin estimation? (5)
- 3. i) Write the principle, apparatus required, patient preparation, procedure and interpretation of blood pressure measurement. (3+3+3+10+2)
 - ii) Write the procedure of pulse rate measurement. (4)
- 4. i) Make a list of the requirements, discuss the procedure and state the method of calculation of the total count of WBC using Neubauer chamber. (3+7+3)
 - ii) Describe the procedure, calculation and limitations of the differential count of WBC.

(6+3+3)

- 5. i) Describe the principle, apparatus and materials required, procedure, and interpretation for the detection of the sickle cell anaemia. (3+3+9+4)
 - ii) Describe the requirements and procedure of bleeding time determination. (2+4)
- 6. i) Describe the principle, apparatus and materials required, procedure, and interpretation for the determination of Packed cell volume.
 - ii) How will you determine the Osmotic fragility of RBC?

3+(4+2)+6+5=5