Total page: 1

PG CBCS

M.Sc. Semester-I Examination 2020

MLT

PAPER: MLT 102

(HAEMATOLOGY AND SEROLOGY)

Full Marks: 40 **Time: 2 Hours**

Answer any <u>four</u> questions of the following: 10X4=40

1. Describe the morphological classification of classification of anemia. What is megaloblastic anaemia? How do you calculate MCV, MCHC? 6+2+2
2. What is erythropoiesis? Mention the different factors controlling erythropoiesis. What do you mean by lekocytosis? 2+6+2
3. Describe the structure of hemoglobin. What is hemoglobin H disease? State the principle of VDRL test. 6+ 1+3
4. Write down the principle of competitive ELISA. Why indirect ELISA is preferred over direct ELISA? State the two applications of ELISA in the field of Medical Laboratory Technology (MLT). 4+3+3
5. Write down the biosynthesis of hemoglobin. What do you mean by leukopenia? State the principle of latex agglutination test for the detection of RA. 5+2+3
6. Write down the molecular basis of sickle cell anemia. What is flocculation reaction? Describe the clinical significance of osmotic fragility test of erythropoiesis. 6+2+2
7. How to determine antibody titer? State the importance of positive and negative control in different serological assay. What is TORCH panel test and mention it's clinical significance 3+3+2+2
8. State the difference between direct and indirect ELISA. What is spherocytosis? State the different causes of leukomoid reaction. What is hemboglobin Barts? 3+2+3+2
9. Briefly describe the different classification of leukemia. Write down the clinical significance of Coomb test. Write down the different symptoms of multiple myeloma. 6+2+2
10. Describe the test procedure of Mantoux test. What is Philadelphia chromosome? Write down the different signs and symptoms of myelodysplastic syndrome. 6+2+2

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