

Instructions:

- All questions are compulsory
- Draw diagrams wherever necessary
- Answers of Questions and Sub-questions must be written strictly according to serial order of question paper.
- MCQ has to be answered in theory answer book
- Please write MCQ answer neatly and in serial order with black or blue pen in brackets; for example: - 1. (a) 2. (c)
- MCQ has to be answered only once, any kind of repetition or cutting or erasing or whitener will be considered as malpractice, such answers will not be counted in marks and action will be taken according to UFM rules of university.
- Subjective answer should be answered in up to 30 words per marks. For example, if a question having 2 marks should answered in up to 60 marks.

Q1. Total MCQs: 10

10 x 1 = 10

1. Systemic sign of acute inflammation EXCEPT			
(a) leukocytosis	(b) fever	(c) rubor	(d) loss of appetite

2. Serum transferrin			
(a) anti-oxidant	(b) iron storage form	(c) both correct	(d) both wrong

3. Fracture of bone causes			
(a) air embolism	(b) fat embolism	(c) clot embolism	(d) none

4. Example of type 3 hypersensitivity reaction EXCEPT			
(a) auto-immune hemolytic reaction	(b) serum sickness	(c) poly-arteritis nodosa	(d) SLE

5. Proto-oncogene			
(a) P53 gene	(b) RB gene	(c) RAS gene	(d) APC gene

6. Heart failure cells are seen in			
(a) chronic venous congestion of liver	(b) chronic venous congestion of lung	(c) acute venous congestion of lung	(d) acute venous congestion of liver

7. FIGLU test is done for			
(a) G6PD	(b) folic acid deficiency	(c) thalassemia	(d) iron deficiency

8. Disseminated intravascular coagulation is seen in			
(a) acute promyelocytic leukemia	(b) acute lymphoblastic leukemia	(c) auto-immune hemolytic anemia	(d) multiple myeloma

9. Abnormality of what is seen in hereditary spherocytosis			
(a) alpha globin chain	(b) beta globin chain	(c) spectrin	(d) phosphatidyl inositol

10. Reticulocytosis is seen in EXCEPT			
(a) aplastic anemia	(b) thalassemia	(c) sickle cell anemia	(d) hereditary spherocytosis

Q2. Long Answer Questions**2 x 20 = 40**

- a. Chemical mediator of acute inflammation
- b. Define apoptosis. Describe in detail about pathogenesis, types of apoptosis, morphological changes, difference between apoptosis and necrosis

Q3. Brief Answer Questions**6 x 05 = 30**

- a. Mechanism of P53 gene
- b. Etiopathogenesis of tuberculosis
- c. Type 1 hypersensitivity
- d. Chemical carcinogenesis
- e. Lab diagnosis of megaloblastic anemia
- f. Multiple myeloma

Q4. Short Answer Questions**10 x 2 = 20**

- a. Types of pigments
- b. Types of amyloidosis
- c. Metastatic calcification
- d. Types of necrosis with examples
- e. Difference between benign and malignant tumors
- f. Fate of thrombus
- g. Special stains for amyloidosis
- h. Peripheral smear findings in CML
- i. Mention 4 crises seen in sickle cell anemia
- j. Mention 4 blood components and one use of each