

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. The anticoagulant of choice for performing coagulation studies is:			
(a) EDTA	(b) Heparin	(c) Trisodium citrate	(d) Double oxalate
2. All of the following findings are seen in DIC except:			
(a) Prolonged PT and APTT	(b) Thrombocytopenia	(c) Raised plasma fibrinogen levels	(d) Presence of fibrin degradation products
3. Malignant neoplasm of epithelial cell origin is known as:			
(a) Sarcoma	(b) Papilloma	(c) Carcinoma	(d) Adenoma
4. Good Prognosis of ALL:			
(a) Hyperdiploidy	(b) Hypodiploidy	(c) T-cell line	(d) Philadelphia Chromosome
5. Pigments involved in free radical injury:			
(a) Lipofuscin	(b) Melanin	(c) Bilirubin	(d) Hematin
6. In Hemodialysis associated amyloidosis, the biochemical type of amyloid is:			
(a) AL type	(b) AA type	(c) A-Beta 2M	(d) ATTR
7. What is the chromosomal translocation in AML M3:			
(a) T(18,21)	(b) T(15,17)	(c) T(8,21)	(d) T(9,11)
8. UV-radiation:			
(a) Prevent formation of pyrimidine dimers	(b) Stimulate formation of pyrimidine dimers	(c) Purine dimers	(d) None
9. Mallory bodies contain:			
(a) Vimentin	(b) Cytokeratins	(c) Keratins	(d) Collagens
10. Lead poisoning causes the following except:			
(a) Uroporphyrinuria	(b) Sideroblastic Anemia	(c) Basophilic Stippling	(d) Macrocytic Anemia

Q2. Long Answer Questions

- a. A 62-year-old woman presented with Anaemia, mild jaundice, Glossitis, Peripheral Neuropathy, anorexia and weight loss. Her laboratory findings are: Hb 8gm/dl, TRBC count 2.4 million/cumm, MCV120fl, MCH54pg, MCHC25g/dl.
- pernicious anemia
- I. What is the most likely diagnosis?
II. What are the possible causes?
III. Write morphological findings in peripheral smear and bone marrow.
IV. What other investigations required in this case?
- b. A 55-year-old male patient presents with progressive fatigue, weight loss and edema in legs. Laboratory tests reveal elevated levels of protein in urine, Congo red was used to diagnose it in abdominal fat aspirates. Deposits in spleen show sago spleen and lardaceous spleen. On physical examination he has hepatomegaly and macroglossia.
- I. Identify the clinical condition
II. What are its types and classification?
III. What is its pathogenesis
IV. Systemic features on different organs

Q3. Brief Answer Questions

6 x 05 = 30

- a. Paraneoplastic syndrome
b. Diagnostic criteria of Multiple myeloma.
c. Hemophilia
d. Role of compliments in inflammation.
e. Define hypersensitivity reaction. Write in detail about Type-I hypersensitivity reactions.
f. Blood Transfusion reactions.

Q4. Short Answer Questions

10 x 2 = 20

- a. Draw a labelled diagram of peripheral blood smear in iron deficiency anemia.
b. Leukemoid Reaction.
c. Vitamin C.
d. Tumor Markers.
e. Enumerate childhood round cell tumor.
f. Turner's syndrome.
g. Bence-jones proteins.
h. Virchow's triad
i. Embolism
j. Difference between intravascular and extravascular hemolysis.