RUHS

Second Year MBBS Examination

II MBBS PATHOLOGY PAPER I

Time: 3 hours

Max Marks: 100

Date: 04-12-2024

Instructions: INSTRUCTIONS: Attempt all questions in both sections: (Use separate answer book for each section)

Section 1

1. Fill in the blanks: 4x1.5=06 (6)

a. Complementary leukocyte molecule for E-selectin is
b. Most common inherited form of aplastic anemia is
c. Prostaglandin which has role in vasoconstriction, bronchoconstriction and platelets aggregation is
d. Shelf life of packed red cells in SAGM is

2. Answer the followings (Multiple Choice Questions): 4x1=04 (4)

a. Neurofibromatosis is: a) Autosomal recessive

b) Autosomal dominant c) X-linked recessive d) All

b. CD 95 is a marker of: a) Cellular adaptation b) Intrinsic pathway of apoptosis c) Reversible cell injury d) Extrinsic pathway of apoptosis

c. ABO is the most important blood group system because: a) It has four different blood group A, B, AB, O b) ABO antigens are present in most body tissues & fluids c) It was first blood group system to be discovered d) ABO antibodies are invariably present in plasma in absence of corresponding antigen

d. The peripheral blood smear in megaloblastic anemia shows the following features except: a) Hyper segmented neutrophils b) Increased reticulocyte count c) Macroovalocytes d) Cabot ring

3. A 60 year old male present to emergency department with complaints of cough, fever and shortness of breath. He was also experiencing night sweats, fatigue, (15) weight loss for the last few weeks and haemoptysis since 3 days. On examination he was febrile, respiratory rate 24/min, BP 150/84 mmHg. Chest X-ray shows triangular consolidation of Lt upper lobe and small cavity lesion.3*5= 15

a. Give your diagnosis.
b. Write briefly about relevant lab investigation.
c. Differential diagnosis for this condition.

4. Write short notes on (Any five): 5*2 = 10 (10)

a. Write briefly on Karyotype analysis.
b. Describe role of cytokinins in inflammation.
c. Discuss mechanism of angiogenesis.
d. Down's syndrome.
e. Etiopathogenesis of obesity.
f. Cellular events in acute inflammation.

5. Explain briefly (Any three): 3*5=15 (15)

a. Differences between arterial and venous thrombosis.
b. Differences between metaplasia and dysplasia.
c. Discuss grading and staging of tumour.
d. Differences between proto-oncogenes and tumour suppressor genes.

Section 2

6. A 65 year old male was brought to emergency room with acute respiratory distress. On examination he had hypotension and tachycardia fever of 103 deg C He was (20) admitted to ICU next day had haematuria and petechial rash on skin with deranged coagulation profile and positive D-dimer test. 3*5= 15

a. What is your diagnosis?
b. Explain pathogenesis of this condition.
c. Discuss laboratory findings.

7. Write short notes on (Any three): 3*5=15 (10)

a. Morphological variants of Reed Sternberg Cell.
b. Haematological findings of CMLC
c. Etiopathogenesis of sickle cell anemia.
d. Describe procedure of component separation in blood banking.

8. Explain briefly (Any four): 4*5 = 20 (20)

a. Differences between acute and chronic idiopathic thrombocytopenic purpura.
b. Difference between Intravascular & Extravascular haemolysis.
c. Difference between ALL and AML

d. Comparison between platelet disorders and coagulation disorders
e. Difference between Hodgkin's and Non-Hodgkin's lymphoma.

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