



Note: Attempt all questions. Answer PART- A and PART - B in separate answer books. All part of a question should be answered together.

PART - A

PAPER CODE: 2211130004

(5 + 5 + 5 = 15)

Q.1 Long Answer Question

A 30 year old female presented with cervical lymphadenopathy, low grade fever, cough, loss of appetite and weight loss. On investigations, the mantoux test was positive and FNAC revealed tubercular lymphadenitis.

- Pathogenesis of primary and secondary tuberculosis.
- Describe the structure of granuloma, its different types and examples of granulomatous inflammation.
- Describe necrosis and differentiate it from apoptosis

Q.2 Short Notes Questions (within 500 words)

(5 x 3 = 15)

- Healing by Primary and Secondary intention.
- Role of Cytokines in Inflammation.
- Breaking bad news.

Q.3 Short Answer Questions (within 100 words)

(2 x 5 = 10)

Explain the following in brief why:

- Bends and Chokes occur in Decompression sickness.
- Carpal tunnel syndrome develop in a renal failure patient on hemodialysis.
- Peau d' orange occur in carcinoma breast.
- Blue black skin pigmentation in alkaptonuria.
- Edema, tachycardia, fever after bee sting.

Q.4 Multiple Choice Questions

(1 x 10 = 10)

- Liquefactive necrosis is seen in:

(a) Brain	(b) Breast	(c) Liver	(d) Pancreas
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- Haemophilia A is characterized by:

(a) Prolonged PTT	(b) Abnormal BT	(c) Low platelet count	(d) Prolonged PT
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- Virchow's Triad includes all except:

(a) Venous Thrombosis	(b) Vein Injury	(c) Venous Stasis	(d) Hypercoagulability Blood
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- Sickle cell disease is due to:

(a) Frame shift mutation	(b) Point mutation	(c) Nucleotide receptor blockage	(d) Non- sequence mutation
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- Knudson two hit hypothesis is seen with:

(a) Melanoma	(b) Retinoblastoma	(c) Lymphoma	(d) Osteosarcoma
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- Kaposi's sarcoma is associated with:

(a) HCV	(b) HSV	(c) HPV	(d) HHV
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- HLA is located on short arm of chromosome:

(a) 6	(b) 8	(c) 3	(d) 9
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- Hypersensitivity reaction in blood transfusion reaction is:

(a) Type III	(b) Cell Mediated	(c) Cytotoxic type	(d) Anaphylactic type
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- The term "Carcinoma in situ" is closely related to:

(a) Hypertrophy	(b) Hyperplasia	(c) Dysplasia	(d) Metaplasia
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Q.1 Long Answer Question

(5 + 5 + 5 = 15)

A 10 month old male infant presents with severe pallor. On examination he has prominent cheek bones & hepatosplenomegaly. The treating doctor is considering the possibility of β -Thalassemia Major.

- Enumerate various haematological and biochemical findings in β -Thalassemia Major.
- Describe its pathogenesis.
- Give differential diagnosis of Beta-Thalassemia Major and mention special tests for confirmation of its diagnosis.

Q.2 Short Notes Questions (within 500 words)

(5 x 3 = 15)

- Paraneoplastic Syndromes.
- Blood Transfusion Reactions.
- Chemical mediators of inflammation.

Q.3 Short Answer Questions (within 100 words)

(2 x 5 = 10)

- Differences between Necrosis and Apoptosis.
- Difference between Transudate and Exudate.
- Enumerate any four autosomal recessive disorder.
- Name any four tumor markers and tumor associated with it.
- Define Autoimmunity with examples.

Q.4 Multiple Choice Questions

(11 x 10 = 110)

- Reed Sternberg cells are found in:
 - CML
 - Sickle cell anaemia
 - ALL
 - Hodgkin's Lymphoma
- Auer rods are found in:
 - Megakaryoblast
 - Myeloblast
 - Lymphoblast
 - Erythroblast
- Wound contraction is mediated by:
 - Epithelial cells
 - Elastin
 - Collagen
 - Myofibroblasts
- Smudge cells in peripheral smear are commonly seen in:
 - AML
 - ALL
 - CLL
 - CML
- Reticulocytes are stained with:
 - Sudan Black
 - Methyl Violet
 - Carmine
 - Brilliant Cresyl Blue
- Libman-Sacks endocarditis is seen in:
 - Rheumatoid arthritis
 - SLE
 - Infective Endocarditis
 - Nonbacterial thrombotic endocarditis
- The Centre of a characteristic tubercular granuloma shows:
 - Langhans' Giant cells
 - Liquifactive Necrosis
 - Epithelioid cells
 - Caseous Necrosis
- Fat embolism is commonly seen in:
 - Drowning
 - Hanging
 - Head injuries
 - Long bone fractures
- Trisomy 13 is identified as:
 - Edward's syndrome
 - Down's syndrome
 - Patau's syndrome
 - Klinefelter's syndrome
- In amyloidosis, beta pleated sheet will be seen in:
 - Electron microscope
 - X-ray crystallography
 - Congo red stain
 - Phase contrast microscope