All India Institute of Medical Sciences, Kalyani
Second Professional MBBS Examination, February 2024

Time: 3 Hrs. **Pathology (Paper–I)** **Marks: 100**

(General Pathology, Hematopathology, Childhood diseases)

- Answer all questions.
- Answer the questions in the same serial order strictly.
- Illustrate your answers with well labelled diagram wherever necessary.
- Answer each section in a separate answer book.

SECTION – A
(50 MARKS)

Long answer question: **[1+2+3+4=10]**

1. A 28-yr-old female patient presented with easy fatigability and a red coloured butterfly shaped rash in the face, which flared up on sun exposure. She had a past bad obstetric history. Her preliminary evaluation demonstrated ANA positivity.
    a. What is the most probable diagnosis?
    b. What are the criteria for its diagnosis?
    c. What are the pathological changes you see in the heart in this disease?
    d. Describe its pathogenesis.

Write Short notes on: **[8×5=40]**

2. Define paraneoplastic syndrome and give suitable examples.
3. Discuss the pathogenesis of septic shock.
4. Enumerate the differences between necrosis and apoptosis.
5. Draw labelled diagrams depicting multistep evolution of colorectal carcinogenesis and briefly mention the roles of involved genes.
6. Enumerate pediatric small round cell tumors. Write a brief note on Neuroblastoma.
7. Diagnosis of amyloidosis
8. Klinefelter Syndrome
9. Pathogenesis of primary tuberculosis. Draw the microscopic findings in tubercular lymphadenitis.

SECTION – B
(50 MARKS)

Long answer question: **[2+4+4=10]**

1. 8 years old girl presented with malaise and fatigue. On examination yellowish sclera with hepatosplenomegaly noted. Family history revealed similar complaints in her sibling also. Her hemoglobin level is 7.8g/dl. X-ray skull showed 'crewcut" appearance.
    a. What is your diagnosis?
    b. Write in detail about the pathogenesis and morphological features of the disease.
    c. Enlist the various laboratory investigations required to confirm the diagnosis.

Write Short notes on: **[8×5=40]**

2. WHO classification of acute myeloid leukemia
3. Rh incompatibility
4. Enumerate the causes of pancytopenia. Write the bone marrow findings of aplastic anemia.
5. Enumerate causes of megaloblastic anemia. Briefly describe the pathogenesis megaloblastic anemia.
6. Disseminated intravascular coagulation
7. Lab diagnosis of multiple myeloma
8. Blood components and their uses and storage conditions
9. Chronic myeloid leukemia- Peripheral smear and Bone marrow findings.
