(b) Characteristic translocation in Burkitt lymphoma is \_\_\_\_\_.

(c) Haemoglobinopathies are diagnosed by \_\_\_\_\_

(d) Haemoglobinuria is a feature of \_\_\_\_\_.

(e) A disorder of platelet function defect is \_\_\_\_\_.

2021

**PATHOLOGY** 

Paper - I

Full Marks: 100

Time: 3 hours

Answer all questions

The figures in the right-hand margin indicate marks

## SECTION - A

1. Define necrosis. Enumerate the types of necrosis with examples. Mention difference between necrosis and apoptosis. 2+5+3

Or

Name various auto-immune diseases. Discuss the pathogenesis of SLE. Mention the morphologic patterns of lupus nephritis. 2 + 5 + 3

2. Write short notes on any five:

 $4 \times 5$ 

- (i) Metaplasia
- (ii) Chemotaxis
- (iii) Fate of thrombus
- (iv) Chemical carcinogens
- (v) Glycogen storage diseases
- (vi) Amyloidosis.
- 3. A 6 years old male child presented with irregular fever for one month. On examination he had multiple cervical lymphadenopathy and petechae all over the body. Mention the possible diagnosis. Plan the investigations needed for confirmation of diagnosis.
  4 + 6
- 4. Select the most appropriate answer:
  - (a) All are endogenous pigments except:
    - (i) Melanin
    - (ii) Bilirubin
    - (iii) Lipofuschin
    - (iv) Tattooing

- (b) All the following are acute phase reactants except:
  - (i) C-reactive protein
  - (ii) Hepcidin
  - (iii) Serum amyloid A
  - (iv) TNF-a
- (c) Which of the following is an autosomal recessive disorder?
  - (i) Marfan syndrome
  - (ii) Neurofibromatosis
  - (iii) Cystic fibrosis
  - (iv) Polycystic kidney disease
- (d) All the following are oncogenic viruses except:
  - (i) HTLV-1
  - (ii) Herpes simplex virus
  - (iii) Epstein-Barr virus
  - (iv) Hepatitis C virus

 $2 \times 5$ 

- (e) All are tumour suppressor genes except:
  - (i) Rb gene
  - (ii) APC gene
  - (iii) p 53 gene
  - (iv) myc gene

## SECTION - B

5. Classify haemolytic anaemia. Describe lab investigations to reach at the diagnosis. 5 + 5

Or

Enumerate the causes of macrocytic anaemia. Describe peripheral blood and bone marrow picture of megaloblastic anaemia. Mention the lab diagnosis. 2 + 5 + 3

Write short notes on any five:

 $4 \times 5$ 

- (i) Microcytic anaemia
- (ii) Sickle cell anaemia

- (Continued)

- (iii) Blood group antigens
- (iv) Disseminated intravascular coagulation
- (v) Leukemoid reaction
- (vi) Hodgkin's lymphoma.
- Answer the following:

 $2 \times 5$ 

- (a) Difference between leukemia and Leukemoid reaction
- (b) Difference between myeloblast and Lymphoblast
- (c) Mention the RBC indices in iron deficiency anaemia
- (d) Mention causes of pancytopenia
- (e) Lab investigations in multiple myeloma.
- Fill in the blanks:

 $2 \times 5$ 

(a) Haemophilia A is due to deficiency of \_\_\_\_\_