

# National Board of Examinations

**Question Paper Name :** DNB Pathology Paper4  
**Subject Name :** DNB Pathology Paper4  
**Duration :** 182  
**Total Marks :** 100  
**Display Marks:** No

**Maximum Instruction Time :** 0  
**Is Section Default? :** No

**Question Number : 1 Question Id : 32718745354 Consider As Subjective : Yes**

**Please write your answers in the answer booklet within the allotted pages as follows:-**

Question Number	Answer to be attempted within	Question Number	Answer to be attempted within
Q. 1	Page 1-5	Q. 6	Page 26-30
Q. 2	Page 6-10	Q. 7	Page 31-35
Q. 3	Page 11-15	Q. 8	Page 36-40
Q. 4	Page 16-20	Q. 9	Page 41-45
Q. 5	Page 21-25	Q. 10	Page 46-50

1. Outline the WHO classification of T-cell lymphoid neoplasms. Elaborate on the diagnostic approach to anaplastic large cell lymphoma. [10]

**Question Number : 2 Question Id : 32718745355 Consider As Subjective : Yes**

Discuss the etiopathogenesis, laboratory findings, and histopathology of hemolytic anemias with particular reference to hereditary spherocytosis. [10]

**Question Number : 3 Question Id : 32718745356 Consider As Subjective : Yes**

Describe in detail polycythemia vera including molecular pathogenesis and diagnostic criteria. [10]

**Question Number : 4 Question Id : 32718745357 Consider As Subjective : Yes**

- a) Pure red cell aplasia. [5]
- b) Myelophthistic anemia. [5]

**Question Number : 5 Question Id : 32718745358 Consider As Subjective : Yes**

Explain the pathogenesis and classification of myelodysplastic syndromes. Describe typical morphological features on bone marrow aspirate and biopsy. [10]

**Question Number : 6 Question Id : 32718745359 Consider As Subjective : Yes**

- a) Platelet function disorders. [5]
- b) Thromboelastography. [5]

**Question Number : 7 Question Id : 32718745360 Consider As Subjective : Yes**

Explain the laboratory diagnosis of hemophilia and Von Willebrand disease. Contrast their clinical and laboratory profiles. [10]

**Question Number : 8 Question Id : 32718745361 Consider As Subjective : Yes**

Outline the diagnostic criteria, morphological and immunophenotypic features of erythroleukemia. [10]

**Question Number : 9 Question Id : 32718745362 Consider As Subjective : Yes**

- a) Principles of hemoglobin electrophoresis. [5]
- b) Large granular lymphocytic leukemia. [5]

**Question Number : 10 Question Id : 32718745363 Consider As Subjective : Yes**

- a) Discuss recent advances and role of artificial intelligence in blood banking. [5]
- b) Apheresis: principle and application. [5]