

PATHOLOGY

PAPER- I

Time : 3 hours  
Max. Marks : 100

PAT/J/12/32/I

Attempt all questions in order.  
Each question carries 10 marks.

Write short notes on:

1. Enumerate the extragonadal germ cell tumors with respect to location. 3+7  
Discuss the pathogenesis and prognosis of CNS germ cell tumors.
2. Pathogenesis of colorectal carcinoma. 10
3. a) Familial breast cancer. 5+5  
b) Diffuse large B – Cell lymphoma.
4. a) Describe the pathogenesis of malignant melanoma of skin. 5+5  
b) Discuss its prognostic factors.
5. Epithelial – Mesenchymal Transitions. 10
6. Laboratory diagnosis and pathogenesis of myocardial infarction. 10
7. a) Classify the vesicobullous lesions of skin. 4+6  
b) Discuss the role of immunofluorescence in diagnosis of these disorders.
8. Non alcoholic steatohepatitis. 10
9. Giant cell rich tumors of bone. 10
10. Discuss the neuroendocrine tumors of pancreas. 10

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PAPER- II

Time: 3 hours  
Max. Marks : 100

PAT/J/12/32/II

Attempt all questions in order.  
Each question carries 10 marks.

Write short notes on:

1. a) Acquired hemophilia 5+5  
b) Fanconi's anemia
2. Lab diagnosis and differential diagnosis of microangiopathic hemolytic anemias. 6+4
3. a) Soluble Transferrin receptors 5+5  
b) Ferritin
4. Discuss the classification, pathogenesis and prognostic factors of myeloproliferative neoplasm. 3+4+3
5. a) Protein C deficiency. 5+5  
b) Minimal residual disease.
6. a) Heparin induced Thrombocytopenia. 5+5  
b) Hairy cell leukemia.
7. Hemophagocytic syndromes. 10
8. a) Non hematological blood transfusion reactions. 5+5  
b) Bombay blood group and its significance in blood transfusion.
9. Role of flow cytometry in diagnosis of acute leukemias. 10
10. Role of bone marrow biopsy in the diagnosis and staging of lymphomas. 10

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FINAL EXAM  
JUNE 2012

NATIONAL BOARD OF EXAMINATIONS

PATHOLOGY

PAPER- III

Time : 3 hours  
Max. Marks : 100

PAT/J/12/32/III

Attempt all questions in order.  
Each question carries 10 marks.

Write short notes on:

1. Urine cytology in Renal Transplantation. 10
2. Bronchoalveolar lavage in diagnosis of lesions of the lung. 10
3. Lab accreditation in India. 10
4. a) RT-PCR 5+5  
b) Tissue microarray
5. Describe in detail laboratory investigations in a patient suffering from jaundice. 10
6. a) What are the indications of frozen section examination and intraoperative cytology? 5+5  
b) Discuss their advantages and disadvantages.
7. a) Describe in brief the newer techniques used in cervical cancer detection. 5+5  
b) What are the advantages and disadvantages of liquid based cytology?
8. Discuss the role of cytology in the differential diagnosis of malignant salivary gland tumors. 10
9. Define Telepathology. Discuss the guidelines, components, advantages and disadvantages of telepathology. 10
10. Discuss the role of cytology in differential diagnosis of a solitary thyroid nodule. 10

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*POSSESSION/USE OF CELL PHONES OR ANY SUCH ELECTRONIC GADGETS IS NOT PERMITTED INSIDE THE EXAMINATION HALL*

PATHOLOGY

PAPER- IV

Time : 3 hours  
Max. Marks : 100

PAT/J/12/32/IV

Attempt all questions in order.  
Each question carries 10 marks.

Write short notes on:

1. Discuss the significance of glycated hemoglobin and albumin creatinine ratio as prognostic marker in diabetes mellitus. 10
2. Role of cytokines in acute inflammation. 10
3. a) Fat embolism 5+5  
b) Differential diagnosis of non-caseating necrotizing granulomatous disorders.
4. Define apoptosis. Mention the conditions in which it occurs and discuss its mechanisms. 1+3+6
5. Hereditary cancer syndromes. 10
6. a) Describe pathophysiology of tobacco in carcinogenesis of different organs. 5+5  
b) Enumerate non-carcinogenic diseases associated with tobacco.
7. What is angiogenesis? Describe the mechanisms of angiogenesis. 2+5+3  
Discuss the role of growth factors in angiogenesis.
8. a) Opportunistic infections in AIDS. 5+5  
b) Turner's syndrome
9. Define tumor marker. Discuss the origin and clinical importance of various tumor markers. 10
10. a) Genomic imprinting. 5+5  
b) Type I hypersensitivity reaction.

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