

FINAL EXAM
JUNE 2014

NATIONAL BOARD OF EXAMINATIONS

PATHOLOGY**PAPER - II**

PATH/J/14/32/II

Time : 3 hours

Max. Marks : 100

Important instructions:

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

Write short notes on:

1. a) Role of mast cells in inflammation 5+5
b) Pre-cancerous states
2. Describe in brief cytomorphologic features of malignant small round cell tumours of childhood. What ancillary technique would you apply on cytological material for final diagnosis? 5+5
3. a) Causes of osteoporosis and laboratory tests for its evaluation 5+5
b) HbA_{1c} estimation and its significance in Diabetes Mellitus
4. a) Method of collection and processing of synovial fluid and role of cytological analysis 5+5
b) Fixation techniques and fixatives used in cytology
5. a) Tumour suppressor genes 5+5
b) Chronic renal allograft rejection
6. a) Application of current molecular techniques in diagnostic cytology 5+5
b) DiGeorge syndrome
7. a) Role of electron microscopy in diagnostic pathology 5+5
b) Applications of Hemopoietic stem cell transplantation
8. a) Cytodiagnosis of infections and role of immunocytochemistry 5+5
b) Applications of flow cytometry in fine needle aspirate specimens.
9. a) Metabolic PET biopsy 5+5
b) Glandular lesions in cervical cytology
10. a) Telomerase activity in health and disease 5+5
b) Recent tests for diagnosis of tuberculosis and concept of point of care (POC) testing.