

FINAL EXAM
JUNE 2014

NATIONAL BOARD OF EXAMINATIONS

PATHOLOGY**PAPER - I**

PATH/J/14/32/I

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) Define the process of angiogenesis and lymphangiogenesis. 3+5+2
b) Discuss in brief role of angiogenesis in cancer.
c) Enumerate immunohistochemical markers of lymphangiogenesis.
2. a) Chemical carcinogenesis 5+5
b) Spontaneous tumour regression and tumour lysis syndrome
3. Enumerate the functions of lysosomes and describe their role in cell injury and disease. 2+3+5
4. a) HIV infection associated malignancies 5+5
b) Immune status and pathology of leprosy
5. a) Epigenetic change in cancer 5+5
b) Inherited cancer syndromes
6. Define autoimmunity. Enumerate various autoimmune disorders and write in brief on factors associated with development of autoimmune diseases. 2+(4+4)
7. a) Biomedical waste management in Pathology 5+5
b) Audit in histopathology laboratory
8. Define vasculitis. Describe recent classification of vasculitis. Write morphological features of polyarteritis nodosa. 2+3+5
9. a) Cell proliferation markers and their methods of analysis 5+5
b) Recent concepts in atherosclerosis
10. What are different types of study designs? How will you design a case control study? What statistical methods would you apply in a prospective case control study with clinical follow up of five years? 3+4+3