

PATHOLOGY
PAPER-I

TIME: 3 HOURS
MAX. MARKS: 100

PATH/J/20/32/I

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. Discuss mechanism of septic shock and MODS. Enumerate and elaborate the role of various serum prognostic markers of sepsis. 5+(2+3)
2. Classify chromosomal defects. Give examples of each type. Elaborate karyotyping and its use in detection of such defects. 3+2+5
3. Discuss the mechanism of whole slide imaging. Enumerate and elaborate the utilization of the same in teaching and diagnostics. 5+(2+3)
4. a) Lesions of Alzheimer's disease. 5+5
b) Epigenetic changes in cancer.
5. a) Regulators of angiogenesis. 5+5
b) HLA gene and autoimmunity.
6. a) Xenobiotics. 5+5
b) Cellular and immunological interactions in an atherosclerotic plaque.
7. What is tumor immunity? Elaborate on the mechanism of immunotherapy. 5+5
8. a) Liquid biopsy and its utility in cancer management. 5+5
b) Application of proteomics in cancer.
9. a) Fibrinoid necrosis. 5+5
b) Cytosolic calcium and cell injury.
10. Pathophysiology of bone healing. 10
