

PATHOLOGY
PAPER-IITIME: 3 HOURS
MAX. MARKS: 100

PATH/J/20/32/II

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. Bio banking technology and its utility in biomedical research. 5+5
2. Discuss Microsatellite Instability. What are the ways of establishing MSI. 5+5
3. Computer assisted tomographic autopsy: its role, advantages and disadvantages. 4+3+3
4. Append the 2016 WHO Classification of Brain Tumors. Discuss the role and the need of IHC and molecular biology in classifying these tumors. 5+5
5. What is Artificial Intelligence? Discuss the evolving role of AI and Machine learning in histopathology. 5+5
6. Enumerate categories of Paris System of Urinary Cytology reporting. Discuss each category. 5+5
7. a) Gene silencing. 5+5
b) Automation in histopathology laboratory.
8. What is Quality Assurance? Discuss the content of a quality assurance programme in Hematology laboratory. 5+5
9. Techniques and clinical utility of cell blocks in cytology specimens. 5+5
10. Discuss various platforms of Next Generation sequencing. Discuss its role for targeted therapy in lung cancer. 5+5
