

PATHOLOGY
PAPER-I

Time: 3 hours
Max. Marks:100

PATH/J/19/32/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. Define apoptosis. Discuss the biochemical features and pathogenesis of apoptosis. 1+(3+6)
2. A 25-year-old multipara is admitted with severe bleeding and breathlessness after a stillborn baby is delivered by her. Discuss the investigations and pathology behind her condition. 5+5
3. a) Gene silencing 5+5
b) Gene expression profiling
4. a) Classification of leprosy 2+5+3
b) Immunopathology of leprosy
c) Type I reaction
5. a) Radiation injury. 5+5
b) Basement membrane role in disease.
6. a) Tissue Microarray. 5+5
b) Pathogenesis of steatosis
7. a) Endothelial leukocyte interaction in acute inflammation. 5+5
b) Signaling mechanism in cell growth.
8. a) Preanalytical variables in histopathology laboratory. 5+5
b) Protein misfolding diseases.
9. a) Pathophysiology of autoimmune diseases. 5+5
b) APLA syndrome
10. a) Cytogenetic disorders involving sex chromosomes 5+5
b) Mosaicism
