

PATHOLOGY

PAPER - IV

PATH/D/13/32/IV

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:

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| 1. | Describe the mechanisms of Apoptosis. Discuss morphological and biochemical changes in Apoptosis. | 6+(2+2) |
| 2. | a) Microwave tissue processing
b) Biomedical waste management | 5+5 |
| 3. | a) RANKL in metastasis.
b) Natural killer cells in tumour immunity | 5+5 |
| 4. | a) FISH and its applications
b) Lifestyle associated diseases | 5+5 |
| 5. | a) Role of Arachidonic acid metabolites in inflammation.
b) Role of growth factors & cytokines in wound healing. | 5+5 |
| 6. | a) Etiopathogenesis of SLE.
b) List the antinuclear antibodies in various autoimmune diseases. | 6+4 |
| 7. | a) Role of Vitamin D in calcium metabolism.
b) Acute radiation injury | 5+5 |
| 8. | a) Septic shock
b) Fat embolism | 5+5 |
| 9. | a) Endothelial – Leucocyte Adhesion Molecules
b) The RAS oncogene in neoplasia. | 5+5 |
| 10. | a) Molecular methods in diagnosis of genetic diseases.
b) List the trace metals and the syndromes associated with their deficiencies. | 6+4 |
