

PATHOLOGY  
PAPER-I

PATH/J/18/32/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:

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|-----|--|-------|
| 1.  | a) Oxidative stress in cell injury.<br>b) Role of macrophages in chronic inflammation.   | 5+5   |
| 2.  | a) Micro-RNA and its role in diagnostic pathology.<br>b) Diseases caused by protein misfolding   | 5+5   |
| 3.  | a) Epigenetic changes in cancer.<br>b) Mechanism by which tumour evade immune system.  | 5+5   |
| 4.  | a) Polymorphonuclear function defects.<br>b) Mechanisms of T cell mediated hypersensitivity reactions.   | 5+5   |
| 5.  | a) Components of extracellular matrix.<br>b) Pathology of tertiary syphilis.   | 5+5   |
| 6.  | a) Reasons of dreadful pathogenicity of Plasmodium falciparum.<br>b) Mechanism of host resistance in malaria<br>c) Pathological spectrum of Leishmaniasis  | 3+2+5 |
| 7.  | a) Applications of Next Generation Sequencing.<br>b) RNA analysis in tumour biology.   | 5+5   |
| 8.  | a) Pathological findings and spectrum of disease in Ig G4 Related disease.<br>b) Mechanism of transformation of Stem cell like properties of cancer cells. | 5+5   |
| 9.  | a) Importance of calibration in clinical laboratory.<br>b) Immune mechanism in SLE   | 5+5   |
| 10. | a) Leptin<br>b) Diet and cancer  | 5+5   |

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