

**PATHOLOGY**

**PAPER-I**

Time: 3 hours  
Max. Marks:100

PATHO/D/20/32/I

**Important Instructions:**

- *You are provided with 5 answer sheet booklets. Each individual answer sheet booklet consists of 10 pages excluding the covering jackets.*
- *Answers to all the questions must be attempted within these 5 answer sheet booklets which must be later tagged together at the end of the exam.*
- *No additional supplementary answer sheet booklet will be provided.*
- *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. Describe the pathophysiology of hypovolemic shock. Discuss the expected autopsy findings in a case of death from hypovolemic shock due to upper GI bleed. 10
2. a) Enumerate "Pattern recognition receptors" of immune system. 5+5  
b) Spectrum of autoantibodies in SLE.
3. a) Cellular and immunological interactions in atherosclerotic plaque. 5+5  
b) Chemical nature of amyloid.
4. a) Regulators of angiogenesis. 5+5  
b) Laboratory information system.
5. a) Significance of non-coding DNA. 5+5  
b) Triple repeat disorders of coding regions.
6. a) Telomeropathies. 5+5  
b) Inflammasomes.
7. a) Role of growth factors in tissue repair. 5+5  
b) Pathogenesis of ascites.
8. a) Xenobiotics. 5+5  
b) Pyroptosis and its role in health and disease.
9. a) Cellular Housekeeping. 5+5  
b) Cyclin Dependent Kinase Inhibitors (CDKIs).
10. Pathophysiology of Covid-19. 10

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