

BIOCHEMISTRY

PAPER – III

Time : 3 hours
Max. Marks : 100

BIO/D/17/03/III

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. Role of chaperones in protein folding and diseases associated with protein misfolding. | 6+4 |
| 2. Define mutation, different types and its manifestations. | 1+3+6 |
| 3. DNA damage and repair mechanisms, and clinical aspects. | 3+3+4 |
| 4. Monoclonal antibody, their uses and related clinical aspects. | 6+4 |
| 5. Immunological tests for thyroid functions. | 10 |
| 6. Explain tumour index substances, their role in diagnosis and prognosis. | 6+4 |
| 7. a) Telomerase activity in ageing.
b) Anticancer drugs influencing cell cycle. | 5+5 |
| 8. a) Apoptosis
b) Immunological memory | 5+5 |
| 9. a) Cell mediated immunity
b) Complement system | 5+5 |
| 10. a) Mitochondrial DNA
b) Protein targeting | 5+5 |
