



NTK/KW/15/5862

Bachelor of Science (B.Sc.) Semester-IV Examination
ZOOLOGY
(Molecular Biology & Immunology)
Paper—II

Time—Three Hours]

[Maximum Marks—50

- N.B. :-** (1) **ALL** questions are compulsory.
(2) All questions carry equal marks.
(3) Illustrate your answers with suitable diagrams.

1. Describe the Watson and Crick's model of DNA. 10

OR

Write notes on :

- (A) mRNA and its functions. 5
(B) Griffith's transformation experiment. 5
2. Give an account of translation mechanism of protein synthesis. 10

OR

Write notes on :

- (A) Wobble hypothesis. 5
(B) Meselson and Stahl's experiment. 5



3. Describe in brief the structure, types and functions of antibody. 10

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OR

Write notes on :

- (A) Organs of immune system. 5
(B) Precipitation reaction. 5
4. Give an account of classical and alternative complement pathways. 10

OR

Write notes on :

- (A) Cell mediated immune response. 5
(B) Cytokine related diseases. 5
5. Write four or five lines on the following : (any Ten) 10
- (i) Operator gene
 - (ii) Z-DNA
 - (iii) tRNA
 - (iv) Structural gene
 - (v) Initiation codon
 - (vi) Bidirectional replication
 - (vii) Inflammation
 - (viii) Immunodiffusion
 - (ix) Types of antigen
 - (x) Opsonization
 - (xi) Interferon
 - (xii) Rheumatoid arthritis.

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