

TKN/KS/16–5862

**Fourth Semester B. Sc. Examination**

**ZOOLOGY**

**Paper – II**

**(Molecular Biology and Immunology)**

Time : Three Hours ] [ Max. Marks : 50

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

1. Describe Watson and Crick model of DNA. 10

**OR**

Write notes on :—

- (A) Griffith's Experiment. 5  
(B) Types of RNA. 5

2. Describe the process of protein synthesis. 10

**OR**

Write notes on :—

- (A) Characteristics of genetic code. 5

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- (B) Tryptophan operon. 5

3. Explain Antigen-Antibody interaction in detail. 10

**OR**

Write notes on :—

- (A) Functions of Antibody. 5  
(B) Spleen. 5

4. Describe types of cell mediated (T-Cell) immune responses. 10

**OR**

Write notes on :—

- (A) Alternative pathway. 5  
(B) AIDS. 5

5. Write **4-5** lines on the followings. (Any **10**) :—

- (i) B-DNA.  
(ii) Intron  
(iii) Conjugation in Bacteria  
(iv) Wobble hypothesis.  
(v) RNA polymerase.

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(vi) Repressor protein.

(vii) IgM.

(viii) Lymph node.

(ix) Innate immunity

(x) Lectin

(xi) Cytokines

(xii) Hashimoto Disease.

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