**Dr. V. S. Krishna Govt. Degree College (Autonomous)**

**Visakhapatnam – 13**

[Affiliated To Andhra University, Visakhapatnam]

**MODEL QUESTION PAPER FOR SEMESTER END EXAMINATIONS**

**B.SC. SEMESTER – I**

**COURSE 2: INTRODUCTION TO APPLIED BIOLOGY [23BSBM12]**

Time: **3 hours** Maximum Marks: **60**

**PART- A**

Answer any **Five** of the following questions [5 X 4 M = 20 M]

1. Koch postulates

2. B- and T-lymphocytes

3. Ribonucleic acids

4. Cholesterol

5. Bioremediation

6. Biofuel

7. Eugenics

8. Gene therapy with example

9. Median estimation

10. Sequence alignment

**PART- B**

Answer all the followingquestions. [5 X 8 M = 40 M]

11 (A). Discuss the applications of Microorganisms in Industry.

(OR)

11 (B). Discuss the types, structure, functions of cells of Immune system.

12 (A). Describe the composition, structure and functions of DNA.

(OR)

12 (B). Describe different levels of structure, types and functions of proteins.

13 (A). Elaborate the complete process of gene cloning.

(OR)

13 (B). Elaborate the applications of biotechnology in pharma industry and agriculture.

14 (A). Write about the principle, procedure and applications of ELISA technique.

(OR)

14 (B). Write about applications of monoclonal antibodies in therapy and diagnosis.

15 (A). Explain different types of means and their calculation.

(OR)

15 (B). Explain about various biological databases and their uses to biotechnology research.