$D_{r.}$ V S. KRISHNA GOVERNMENT DE $_{GREE}$ COLLEGE AND PG COLLEGE (A), VISAKHAPATNAM

B.Sc. (Hons) ZOOLOGY - SEMESTER II

PAPER: CELL AND MOLECULAR BIOLOGY - 23 700M

QUESTION PAPER

Time: 3 Hours

Max. Marks: 60

PART-A

Answer any FIVE of the following Questions. Each question carries Four marks. 5×4=20 M

1. Fluid mosaic model of Plasma membrane

- 2. Ribosomes
- 3. Structure and functions of Nucleus
- 4. Cell cycle
- 5. Semi-conservative mode of DNA replication
- 6. Central dogma of molecular biology
- 7. Lac Operon
- 8. Initiation of Translation
- 9. Structure of Glucose
- 10. Glycolysis

PART-B

Answer ALL the following Questions. Each question carries Eight marks.

 $5 \times 8 = 40 \text{ M}$

11. (a) Write about the structure and functions of Golgi complex.

OR

- (b) Write about the structure and functions of Lysosomes.
- 12. (a) Write about the structure and functions of Mitochondria.

OR

- (b) Define Cell division? Write the differences between mitosis and meiosis.
- 13. (a) Explain the basic concept of DNA replication.

OR

- (b) Discuss the process of transcription in prokaryotes.
- 14. (a) Give a detailed account of translation in prokaryotes.

OR

- (b) Write an essay on gene expression in prokaryotes.
- 15. (a) Write about the biological importance of carbohydrates.

OR

(b) write an essay on krew cycles

B.Voc. COURSE IN AQUACULTURE Dr.V.S Krishna Govt., Degree College (A) Visakhapatnam Semester -V; III B.Voc

Title: CELL BIOLOGY HISTOLOGY

Time: 3Hrs CODE: 52293

Man. Marks:75

Section - A

I Answer any FIVE of the following Draw labelled diagrams wherever necessary

5x5 = 25M

- 1 Fluid mosaic model
- 2 Briefly explain cell theory
- 3 Structure of Lysosomes
- 4 Ribosome's
- 5 Cell cycle
- 6 What is Meiosis
- 7 Types of muscle
- 8 Structure of Nerve cell

Section - B

II Answer any FIVE of the following Draw labelled diagrams wherever necessary

5x10=50M

9.a) Describe the structure of animal cell?

Or

- b) Describe the structure functions of plasma membrane
- 10.a) Describe the structure and function of Ribosome's

Or

- b) Describe the structure and function of Mitochondria?
- 11 a.) Explain the structure and function of Golgi complex?

Or

- b) Describe the structure and function of Lysosomes?
- 12 a.) Explain the histology and structure functions of epithelial tissue?

Or

- b.) Write an essay on connective tissue.
- 13.a) Explain cell division

Or

b.) Give an account of the structure of plasma membrane.