

Dr.V.S.KRISHNA GOVT. DEGREE COLLEGE (A), VISAKHAPATNAM

SEMESTER -III
ZOOLOGY - PAPER - III
CELL BIOLOGY, GENETICS, MOLECULAR BIOLOGY
AND EVOLUTION

Max. Marks : 75

Time : 3 hrs

Section - A

5x5=25

I. Answer any FIVE of the following :

Draw labeled diagrams wherever necessary

1. Drawinsm
2. Lysosomes
3. Lethal genes
4. Giant Chromosomes
5. Sex linked inheritance
6. Human Karyotyping
7. Prokaryotic cell
8. Genetic drift

Section - B

5x10=50

II. Answer any FIVE of the following:

Draw labeled diagrams wherever necessary

9.a) Describe the Structure and functions of Golgi complex

OR

b) Describe the structure of Mitochondria and a note on its functions

10. a) Write essay on polygenic inheritance with suitable examples

OR

b) Write about the different types of sex determination based on chromosomal theory

11. a) Write an essay on Mendel's laws of inheritance.

OR

b) Explain about the chromosomal disorders in detail in man.

12. a) Describe the process of transcription in prokaryotes

OR

b) Describe the Structure and functions of the nucleus.

13) a) Give a detailed account of theories of Evolution?

OR

b) Write an essay on speciation.