

D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1
ALLIED - DEPARTMENT OF ZOOLOGY

SECTION -A (UNIT- I)

1. Plasma membrane.
2. Endoplasmic reticulum.
3. Smooth Endoplasmic reticulum.
4. Rough Endoplasmic reticulum.
5. Ribosomes.
6. Mitochondria/ Power house of the cell.
7. Golgi Complex/Dictyosomes.
8. Lysosomes/Suicidal Bag.
9. Centrosome.
10. Nucleolus.
11. Nucleus.
12. F1 Particles/Electron Transport Particles/Elementary Particles
13. Gene.
14. Nucleotide.
15. Exon.
16. Intron.

SECTION -B

1. Explain about the polymorphism of Lysosomes.
2. Describe the Structure of Endoplasmic Reticulum.
3. Describe the Structure of Golgi Complex.
4. Describe the Structure of Mitochondria.
5. Describe the Structure of Nucleus.
6. Describe the Structure of Plasma Membrane.
7. Draw a neat labelled sketch of Ultra Structure of Animal Cell.
8. Describe about the molecular structure of gene.
9. Explain about the gene function.

SECTION- C

1. Describe the Structure and functions of various organelles of an animal cell.
2. Describe about the sex-linked inheritance in man.

SECTION- A (UNIT -II)

1. Cleavage
2. Micromere
3. Macromere
4. Vegetal Pole
5. Animal Pole
6. Gastrula
7. Blastula
8. Gastrulation
9. Blastocoel
10. Blastoderm
11. Enzymes
12. Ptyalin
13. Proteases
14. Lipases
15. Maltase
16. Lactase
17. Sucrase
18. Cellulase
19. Trypsin
20. Pepsin
21. Curdling of Milk
22. Bowman's capsule
23. Glomerulus
24. Duct of Bellini
25. Calyx
26. Column of Bertin

27. Medulla
28. Cortex
29. Nephron
30. Malphigian Tubules
31. Henle's Loop
32. Ultrafiltration
33. Reabsorption
34. Secretion
35. Collecting Duct

SECTION -B

1. Write short notes on Cleavage
2. Explain the role of enzyme in carbohydrate digestion
3. Explain the role of enzyme in protein digestion
4. Explain the role of enzyme in lipid digestion
5. Describe the structure of kidney
6. Describe the structure of Nephron

SECTION- C

1. Describe about the gastrulation of Amphioxus
2. Explain the role of enzymes involved in digestion
3. Describe the structure of nephron and explain the mechanism of urine formation

SECTION-A(UNIT -III)

1. Non-Renewable natural resources
2. Renewable natural resources
3. Endangered Species
4. Wild Life
5. Environmental Degradation
6. Pollution
7. Air Pollution
8. Water Pollution
9. Soil Pollution

10. Emission
11. Deforestation
12. Erosion
13. Urbanisation
14. Aforestation
15. Global warming
16. Climate Change
17. Use and disuse theory
18. Variation
19. Struggle for existence
20. Survival of the fittest
21. Natural Selection
22. Origin of New Species
23. Inheritance of Acquired characters

SECTION-B

1. Write notes on Lamarckism
2. Explain about non-renewable natural resources with example
3. Explain about renewable natural resources with example
4. Describe about wild life conservation

SECTION-C

1. Give an account on Darwinism
2. Explain in detail about the natural resources with suitable examples
3. Describe about environmental degradation

SECTION-A (UNIT-IV)

1. Bioinformatics
2. Computational Biology
3. Genomics
4. Proteomics
5. DNA Sequencing
6. BLAST

7. Phylogenetic tree
8. GenBank
9. Gene therapy
10. Biotechnology
11. Restriction Endonucleases
12. DNA Ligase
13. Recombinant DNA
14. Plasmid
15. Cloning Vector
16. Vaccine

SECTION-B

1. Discuss about sequence analysis.
2. Describe the most common tools used in bioinformatics.
3. Write about the scope of bioinformatics.

SECTION-C

1. Explain in detail about the insilico areas of bioinformatics and historical overview of bioinformatics.
2. Give an account on mechanism of Genetic Engineering
3. Give an account on application of biotechnology in medicine.
4. Discuss the application of bioinformatics in various fields

SECTION-A (UNIT-V)

1. Medical microbiology
2. Epidemiology
3. Antibiotics
4. Vector Transmission
5. Mantoux skin test
6. AFB Staining
7. Mycobacterium
8. HIV
9. AIDS
10. ELISA

11. Anti-Retroviral Treatment
12. Malaria
13. Anopheles
14. Plasmodium
15. Vector borne diseases
16. CDC

SECTION-B

1. Describe the different species of plasmodium infecting humans.
2. Discuss about the symptoms and preventive measure of malaria.
3. Explain the causes and symptoms of Tuberculosis.
4. Discuss about the causes, symptoms and preventive measure of AIDS.

SECTION-C

1. Write the protocol for AFB staining.
2. Describe the laboratory methods for the diagnosis of TB.
3. Explain about the plate-based assay *technique* designed for detecting and quantifying HIV.