



**TAMIL NADU OPEN UNIVERSITY**  
**Chennai - 15**  
**School of Sciences**

**HOME / SPOT ASSIGNMENT**

Programme Code No : 184

Programme Name : III B.Sc., Zoology

Course Code & Name: BZOO3-3 Cell Biology

Batch : AY 2018-19

No. of Assignment : One Assignment for Each 2 Credits

Maximum CIA marks: 25 ( Average of Total No. of Assignments )

**ASSIGNMENT – 1**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Explain the structure, functions and role of metabolism in mitochondria.
- 2) Detail account of the structure of bacteria.
- 3) Discuss the major differences in prokaryotic and eukaryotic cell.

**ASSIGNMENT – 2**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Detail account of the cellular metabolism.
- 2) Explain the structure and role of function in golgi complex.
- 3) Explain the general organization of ribosome in prokaryotic and eukaryotic cells.

**ASSIGNMENT – 3**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Discuss the cellular organelles in eukaryotic cell.
- 2) Describe the structural and functions of nucleus.
- 3) Elaborate the salient features of chromosome.

**ASSIGNMENT – 4**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Detail account of cell cycle.
- 2) Define the cancer cell? Explain the significance and types.
- 3) Elaborate the types of chromosome.



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Programme Code No : 184

Programme Name : III B.Sc., Zoology

Course Code & Name: BZOO3-4 – Genetics and Evolution

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum CIA marks: 25 (Average of Total No. of Assignments)

**ASSIGNMENT – 1**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Elaborate the Mendelian inheritance and Mendelian laws.
- 2) Detail account of the interaction of genes.
- 3) Given account of Blood Groups and their Inheritance in Human.

**ASSIGNMENT – 2**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Detail account of the linkage and crossing over.
- 2) Explain the sex determination and sex Linkage in *Drosophila* and Man.
- 3) Describe the cytoplasmic inheritance.

**ASSIGNMENT – 3**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Discuss the fine structure of gene and Gene regulation.
- 2) Describe the fundamentals of mutation.
- 3) Given account of Hardy Weinberg Law.

**ASSIGNMENT – 4**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Detail account of the evolution of man.
- 2) Explain the zoogeographical realms.
- 3) Elaborate the theory of natural selection.



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Programme Code No : 184

Programme Name : III B.Sc., Zoology

Course Code & Name: BZOO3-5 – Developmental Biology and Immunology

Batch : AY 2018-19

No.of Assignment : One Assignment for Each 2 Credits

Maximum CIA marks: 25 (Average of Total No. of Assignments)

## ASSIGNMENT – 1

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Detail account of the significance spermatogenesis and oogenesis in vertebrates.
- 2) Detail account of the blastulation and gastrulation.
- 3) Discuss the major events of fertilization.

## ASSIGNMENT – 2

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Define the Cleavage? Explain the factors influencing cleavages.
- 2) Elaborate the regeneration of Invertebrates.
- 3) Explain the Embryonic membranes and their functions in chick

## ASSIGNMENT – 3

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Discuss about reproductive technology used in artificial insemination.
- 2) Describe the menstrual cycle and contraception family welfare.
- 3) Given account of the immunity.

**ASSIGNMENT – 4**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Detail account of the Immunization schedule for children.
- 2) Explain the hypersensitivity and graft rejection.
- 3) Elaborate the structure and classifications immunoglobulin.

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Programme Code No : 184

Programme Name : III B.Sc., Zoology

Course Code & Name: BZOO3-6 – Animal Physiology

Batch : AY 2018-19

No. of Assignment : One Assignment for Each 2 Credits

Maximum CIA marks: 25 (Average of Total No. of Assignments)

## ASSIGNMENT – 1

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Define the enzyme? Explain their role in digestion.
- 2) Detail account of the Carbohydrate metabolism.
- 3) Discuss the major events in respiration.

## ASSIGNMENT – 2

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Detail account of the blood circulation and their biological functions.
- 2) Explain the structure and role of function in golgi complex.
- 3) Explain the general organization of ribosome in prokaryotic and eukaryotic cells.

## ASSIGNMENT – 3

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Describe the mechanism of urine formation in mammals.
- 2) Describe the structural and functions of neuran and its types .
- 3) Elaborate the different types of muscles and mechanism of muscle contraction.

**ASSIGNMENT – 4**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Detail account of the mechanism of photoreceptor and phonoreceptors.
- 2) Explain the hormones of insects and crustaceans.
- 3) Elaborate the secretions and functions of endocrine glands in vertebrate.

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Programme Code No : 184

Programme Name : III B.Sc., Zoology

Course Code & Name: BZOO3-7 – Environmental Biology and Biotechnology

Batch : AY 2018-19

No. of Assignment : One Assignment for Each 2 Credits

Maximum CIA marks: 25 (Average of Total No. of Assignments)

## ASSIGNMENT – 1

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Explain the impotent events of gaseous cycle and sedimentary cycle.
- 2) Detail account of the animal associations.
- 3) Essay on different concepts of population ecology.

## ASSIGNMENT – 2

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Elaborate the conservation of wild life management.
- 2) What is natural resource? Explain
- 3) Discuss the environmental degradation.

## ASSIGNMENT – 3

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Discuss the role of Governmental agencies for environmental monitoring.
- 2) Explain the importance of r-DNA technology.
- 3) Elaborate the human genome project.

**ASSIGNMENT – 4**

Max :25 marks

**Answer any one of the question not exceeding 1000 words**

- 1) Detail account of the fundamental facilities required for animal cell culture.
- 2) Define the animal cell culture? Explain
- 3) Elaborate the transgenic animals.

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