

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)

<u>ASSIGNMENT – 1</u>

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.

$\underline{ASSIGNMENT-2}$

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

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



Chennai - 15 School of Sciences Department of Zoology HOME / SPOT ASSIGNMENT

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

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



Chennai - 15 School of Sciences Department of Zoology

HOME / SPOT ASSIGNMENT

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

- 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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HOME / SPOT ASSIGNMENT

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

- 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.

$\underline{ASSIGNMENT-4}$

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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HOME / SPOT ASSIGNMENT

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.

<u>ASSIGNMENT – 3</u>

Max:25 marks

- 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.
