SUBJECT CODE: ZOO-1A

# CH.S.D.ST. THERESA'S AUTONOMOUS COLLEGE FOR WOMEN: ELURU

#### I B.Sc. - I SEMESTER SUPPLEMENTARY EXAMINATION - OCTOBER 2017

#### ZOOLOGY PAPER I

# BIOLOGY OF NON CHORDATES AND CELL BIOLOGY

For 2013-2016 Batch

Time: 3 hrs. Max.Marks: 50

PART - A

Long Answer Questions. Answer the following: 3x10=30M

Draw labeled diagrams wherever necessary.

1. a) Explain conjugation in Paramecium.

OR

- b) Describe the Canal system in Sponges
- 2. a) Explain the phenomenon of Polymorphism in Coelenterata.

OR

- b) Explain the digestive system of Leech.
- 3. a) Give an account of ultra structure of animal cell.

OR

b) Explain various stages involved in Mitosis.

PART - B

Write short notes on any FIVE of the following: 5x2=10M

- 4. Protozoa general characters
- 5. Skeleton in Sponges
- 6. Obelia Structure
- 7. Protonephridia of Fasciola
- 8. Coelorn in Annelida
- 9. Poly chaeta
- 10. Fluid Mosaic Model of Plasma Membrane.
- 11. Polytene Chromosomes.

#### PART –C

Answer the following in one or two sentences.

10x1=10M

- 12. Slipper animalcule
- 13. Sycon
- 14. Coral
- 15. Ascaris
- 16. Vermiculture
- 17. Testis Sacs
- 18. Ribosome
- 19. RER
- 20. Power House of the Cell
- 21. Cell Cycle.

PAPER CODE: ZOO-1A

# CH.S.D.ST.THERESA'S AUTONOMOUS COLLEGE FOR WOMEN:ELURU I B.Sc. – I SEMESTER END EXAMINATION – OCTOBER 2016 ZOOLOGY PAPER I

# ANIMAL DIVERSITY NON-CHORDATES

Time: 3 hrs. Max.Marks:50

**PART-A** 

Long Answer Questions. Answer the following.

Draw labeled diagrams wherever necessary.

3x10=30M

1.a) Discuss the alternation of generations shown in the life cycle of Elphidium.

OR

- b) Explain different types of Cells present in Sycon.
- 2.a) Classify phylum Cnidaria upto classes with suitable examples.

OR

- b) Explain the processing of Vermiculture.
- 3.a) Give an account of the affinities of Peripatus.

OR

b) Describe water vascular system of Star fish.

**PART-B** 

Write short notes on any FIVE of the following.

5x2 = 10M

Draw labeled diagrams wherever necessary.

- 4. Calcarea
- 5. Pneumatophore
- 6. Miracidium larva
- 7. Monostichodent Jaw
- 8. Statocyst
- 9. Cephalopoda
- 10. Enteropheusta
- 11. Nauplius larva

#### PART-C

Answer the following in one or two sentences.

10x1=10M

- 12. Schizocoelomata
- 13. Euplectella
- 14. Adradial tentacles
- 15. Atoll
- 16. Rhabdites
- 17. Pre testicular nephridia.
- 18. Green gland
- 19. Radula
- 20. Aristotle's lantern
- 21. Amphiblastula

#### PAPER CODE:ZOO-2A

# CH.S.D.ST.THERESA'S AUTONOMOUS COLLEGE FOR WOMEN:ELURU II B.Sc. – III SEMESTER END EXAMINATION – OCTOBER 2016 ZOOLOGY PAPER III

# CYTOLOGY, GENETICS AND EVOLUTION

Time: 3 hrs. Max.Marks:50

PART - A

Long Answer Questions. Answer the following.

Draw labeled diagrams wherever necessary.

3x10=30M

1 a) Describe ultra Microscopic structure of Eukaryotic cell with the help of diagram.

OR

- b) Explain Polymorphism in Lysosomes. Add a note on its functions.
- 2. a) Define Allelic gene interaction. Explain it with any two examples.

OR

- b) Formulate Mendel's Laws of inheritance with the help of suitable examples.
- 3. a) Explain "X" linked inheritance with any two examples.

OR

b) Define gradual speciation. Discuss it in detail.

**PART-B** 

Write short notes on any FIVE of the following:

Draw labeled diagrams wherever necessary.

5x2 = 10M

- 4. Fluid mosaic model of plasma membrane.
- 5. Polytene chromosomes.
- 6. Pleiotropy
- 7. Gynandromorphs.
- 8. Human Karyotype
- 9. Hardy Weinberg law
- 10. Industrial melanism
- 11. Land of Marsupials.

#### **PART-C**

Answer the following in one or two sentences.

10x1=10M

- 12. Zymogen gramules
- 13. Sat chromosomes
- 14. Viroids
- 15. Detoxification
- 16. Alleles
- 17. Free martin
- 18. Barr body
- 19. Genetic drift
- 20. Use and disuse theory
- 21. Wallace line.

#### SUBJECT CODE: ZOO-3A

# CH.S.D.ST. THERESA'S AUTONOMOUS COLLEGE FOR WOMEN: ELURU

# III B.Sc. – V SEMESTER END EXAMINATION - OCTOBER 2017

## ZOOLOGY PAPER V ANIMAL BIOTECHNOLOGY

Time: 3 hrs. Max.Marks: 50

#### PART - A

- I Long Answer Questions. Answer all the following: 3x10=30M Draw labeled diagrams wherever necessary.
- 1. a. Explain different types of DNA modifying enzymes used in Biotechnology.

#### OR

- b. Write about various types of Natural cell culture media.
- 2. a. Write an essay on Hybridoma technology.

#### OR

- b. Give an account of Stem cell Technology.
- 3. a. Explain the process of Artificial insemination.

#### OR

b. Describe the process of DNA fingerprinting.

## PART - B

- II Write Short notes on any FIVE of the following: 5x2=10M Draw labeled diagrams wherever necessary.
- 4.  $P^{BR}$
- 5. PCR
- 6. Polymer Chain Reaction.
- 7. Microinjection
- 8. Cryopreservation
- 9. Transgenic Sheep
- 10. Super Ovulation
- 11. Chromatography

#### PART-C

- II Answer the following in one or two sentences. 10x1=10M
- 12. YAC
- 13. Ligase
- 14. cDNA Library
- 15. Western blotting
- 16. CHO
- 17. Primary culture.
- 18. Dolly
- 19. Xenotransplantation
- 20. Air Lift
- 21. Feb Batch

## SUBJECT CODE: ZOO-4A

21.

Steaming up

# CH.S.D.ST. THERESA'S AUTONOMOUS COLLEGE FOR WOMEN: ELURU III B.Sc. – V SEMESTER END EXAMINATION - OCTOBER 2017

# ZOOLOGY PAPER VI

	ANIMAL HUSBANDRY	
Time:	3 hrs.	Max.Marks: 50
	PART - A	
I	Long Answer Questions. Answer the following:	3x10=30M
	Draw labeled diagrams wherever necessary.	
1.a.	Give an account on the Management of Chicks.	
	OR	
b.	Explain the Management of growers in detail.	
2.a.	Explain Viral and Bacterial diseases you have studied. OR	
b.	Discuss various methods of hatching of Poultry birds.	
3.a.	Write an essay on Housing of dairy animals. OR	
b.	Discuss the Care and Management of heifer.  PART – B	
II	Write Short notes on any FIVE of the following.	5x2=10M
	Draw labeled diagrams wherever necessary.	
4.	Vaccination to Chicks	
5.	Ranikhet disease	
6.	Grit	
7.	Brooding	
8.	Exotic breed.	
9.	Castration	
10.	Weaning of Calf	
11.	Dry animal	
	PART - C	
III	Answer the following in one or two sentences.	10x1 = 10M
12.	Cannibalism	
13.	Dubbing	
14.	Curled Toe Paralysis	
15.	Crazy chick disease.	
16.	Nipple drinking.	
17.	Fumigation	
18.	Pen type barn	
19.	Central herd book	
20.	FMD	

PAPER CODE: ZOO-3B CH.S.D.ST. THERESA'S AUTONOMOUS COLLEGE FOR WOMEN: ELURU. III B.Sc. VI SEMESTER END EXAMINATION – MARCH 2016 **ZOOLOGY PAPER III** ANIMAL PHYIOLOGY. GENETICS AND EVOLUTION Time: 3 hrs. Max.Marks: 50 PART - A Long Answer Questions. Answer the following: 3x10=30

I

Explain "Sliding Filament mechanism" in a skeletal muscle and add a note 1a) on Chemical changes during contraction.

- Give an account on conduction and Propagation of Nerve impulse. b)
- Describe the structure of Thyroid gland and their hormones and Functions. 2 a)

OR

- b) Explain the basic mechanism of Homeostasis and Temperature regulation in Man.
- 3.a) Give an account on Gene regulation in Bacteria OPERON MODEL, LAC OPERON.

OR

b) Explain the role of Mutations in the process of Organic Evolution.

#### PART - B

II Write short notes on any FIVE of the following. 5x2 = 10

- All or none principle/response 4.
- Cardiac muscle 5.
- 6. Adrenal hormones
- 7. **FSH**
- Hypoglycemic hormone 8.
- Genetic code 9.
- 10. Palindrome sequence
- 11. Allopatry and Sympatry

#### PART - C

Answer the following in one or two sentences.

10x1=10

- 12. Schwann Cell
- 13. 'Z' Line
- 14. Master gland
- 15. Ductless gland
- 16. Homeostasis
- Physical and chemical role of ATP 17.
- Ribosome 18.
- 19. Codon
- 20. Demes
- 21. Migration

PAPER CODE: ZOO-2B CH.S.D.ST. THERESA'S AUTONOMOUS COLLEGE FOR WOMEN: ELURU. I B.Sc. – II SEMESTER END EXAMINATION – MARCH 2016

#### ZOOLOGY PAPER I

ANIMAL DIVERSITY OF VERTEBRATES

Time: 3 hrs. Max.Marks: 50

NOTE: Answer ALL questions.

Draw labeled diagrams wherever necessary.

#### PART-A

I Long Answer Questions. Answer the following: 3x10=30

1 a) Describe the life history of Hudmania.

OR

- b) Explain the differences between Petromyzon and Myxine.
- 2 a) Describe the Parental care in Amphibia.

OR

- b) Write the General characters and classification of Reptilia.
- 3. a) Write an essay on Flight adaptations in Binds.

OR

b) Describe the Dentition in Mammals.

#### **PART-B**

- II Write short notes on any FIVE of the following: 5x2=10
- 4. Branchiostoma
- 5. Scoliodon.
- 6. Dipnoi
- 7. Apoda.
- 8. Calotes Brain.
- 9. Archaeoptenyx.
- 10. Retiti.
- 11. Prototheria.

#### PART - C

- III Answer the following in One or Two sentences. 10x1=10
- 12. Retrogressive Metamorphosis.
- 13. Tunicata.
- 14. Cycloid Scales
- 15. Cyclostomes
- 16. Rachophorons
- 17. Sphenodon.
- 18. Quill feather.
- 19. Neoguathae
- 20. Entheria
- 21. Primates.

#### PAPER CODE: ZOO-3A

# CH.S.D.ST.THERESA'S AUTONOMOUS COLLEGE FOR WOMEN:ELURU III B.Sc. – V SEMESTER END EXAMINATION - OCTOBER 2016 ZOOLOGY PAPER III

### ANIMAL PHYSIOLOGY, GENETICS AND EVOLUTION

Time: 3 hrs. Max.Marks:50

#### PART - A

I Long Answer Questions. Answer ALL the following. Draw Labelled diagrams wherever necessary.

3x10=30M

1 a) Explain the process of chemical Digestion of food materials like proteins, carbohydrates and Lipids.

OR

- b) Give an account of Transportation of Oxygen.
- 2.a) Describe the structure of Mammalian heart.

OR

- b) Write an essay on formation of Nitrogenous Wastes.
- 3. a) Describe the interaction of genes with suitable examples.

OR

b) Explain DNA as genetic material with the help of Griffith's experiment and Hershey chase experiment.

#### PART - B

II Write short notes on any FIVE of the following. Draw labeled diagrams wherever necessary.

5x2 = 10M

- 4. Gastrointestinal hormones.
- 5. Structure of mammalian lungs.
- 6. Ureotelic animals.
- 7. Open and closed circulation.
- 8. Barr bodies and Lyon hypothesis.
- 9. Edward Syndrome.
- 10. Natural Selection
- 11. Hardy Weinberg's Law.

III Answer the following in one or two sentences. 10x1=10

- 12. Intnacellular digestion.
- 13. Haemocynin
- 14. Tachycardia.
- 15. Nephron
- 16. Amniocentesis
- 17. Turner Syndrome
- 18. Internal respiration.
- 19. Neurogenic heart.
- 20. Genetic drift
- 21. Gene Frequency

PAPER CODE: ZOO-4B CH.S.D.ST. THERESA'S AUTONOMOUS COLLEGE FOR WOMEN: ELURU. III B.Sc. – VI SEMESTER END EXAMINATION – MARCH 2016 ZOOLOGY PAPER IV FISHERIES, AQUACULTURE AND ANIMAL BIOTECHNOLOGY Time: 3 hrs. Max.Marks: 50 NOTE: Answer ALL questions. Draw labeled diagrams wherever necessary. PART-A Long Answer Questions. Answer the following: Ι 3x10=301.a. What are the Gear used in Fresh water fish culture. Write an essay on Brackish water fish culture in Andhra Pradesh. b. Write a detailed account on Induced Breeding Technique used in Indian 2. a. major Carps. OR b. Write an essay on Fish-byproducts. 3. a. Describe the applications of Stem Cell Technology. OR b. Describe the cloning Vectors characters and types of Plasmids. **PART-B** II Write short notes on any FIVE of the following: 5x2 = 104. Catamaran. Polyculture 5. Macrobrachium rosembergii 6. Integrated Aquaculture 7. 8. Salting Fish Maws. 9. 10. Vector. 11. Insulin. PART-C Answer the following questions in one or two sentences. III10x1=1012. Lates calcarifer Sangadam 13.  $\mathbf{p}^{\mathrm{H}}$ 14. 15. Hapa

Nursery Pond

Ova prim.

Fish guano

Cloning.

Penaeus Monodon.

Parkinsan's disease

16.

17.

18. 19.

20.

21.

PAPER CODE: ZOO-1B

## CH.S.D.ST. THERESA'S AUTONOMOUS COLLEGE FOR WOMEN: ELURU. I B.Sc. – II SEMESTER SUPPLEMENTARY EXAMINATION – MARCH 2016

#### ZOOLOGY PAPER I

#### INVERTEBRATES AND BIO MOLECULES

(for Present II Years) Time: 3 hrs. Max.Marks: 50 PART - A Long Answer Questions. Answer the following: I Draw labeled diagrams wherever necessary. 3x10=30Explain the respiratory system of Prawn 1 a. OR Explain the structure and affinities of Peripatus b. Write about the water vascular system of Starfish. 2 a. OR Explain the digestive system of Pila. b. Explain the structure of DNA. 3 a. OR a. Classify Proteins based on functions. PART - BII Write short notes on any FIVE of the following 5x2 = 104. Pedicillaria 5. Pearl formation 6. **RNA** 7. Glucose 8. Balanoglossus 9. Mautle Complex 10. Starch 11. Sericulture. PART - CIIIAnswer the following in one or two sentences. 10x1=1012. Antennule 13. Ommatidium 14. Radula 15. Hemichordata 16. Madreporite Fructose 17. 18. Telson 19. Chitin 20. Chargaff's rule Peptide Bond 21.