## (DZOO21)

Assignment 1

### M.Sc. DEGREE EXAMINATION, DECEMBER 2020.

## Second Year

Zoology

# ANIMAL PHYSIOLOGY MAXIMUM MARKS: 30 ANSWER ALL QUESTIONS

- 1. What is digestion? Give an account on the role of enzymes in digestion.
- 2. Write short notes on :
  - a) Minerals
  - b) Carbohydrates.
- 3. What is Respiration? Give a detailed account of respiration in animals.
- 4. Write short notes on :
  - a) Transport of gases
  - b) Circulatory system.
- 5. Describe the mechanism of nerve impulse transmission in animals.

# (DZOO21)

Assignment 2

M.Sc. DEGREE EXAMINATION, DECEMBER 2020.

Second Year

Zoology

# ANIMAL PHYSIOLOGY MAXIMUM MARKS: 30 ANSWER ALL QUESTIONS

- 1. Write short notes on :
  - a) Heart
  - b) Brain.
- 2. Describe the ionic and osmatic balance in animals.
- 3. Write short notes on :
  - a) excretion
  - b) formation of urine.
- 4. What is the role of hormones in respiration? Explain.
- 5. Write short notes on :
  - a) Types of muscles
  - b) Intercellular Communication.

# (DZOO 22)

Assignment 1

## M.Sc. DEGREE EXAMINATION, DECEMBER 2020. Second Year Zoology

# AQUACULTURE MAXIMUM MARKS: 30 ANSWER ALL QUESTIONS

- 1. What is the criterion for the selection of species for culture?
- 2. Write short notes on
  - a) Hypophysation
  - b) Bundh breeding
- 3. Describe the design and construction of fish pond.
- 4. Write short notes on
  - a) Stocking ponds
  - b) Exotic fishes
- 5. Give an account on culture of <u>chanos chanos</u>.

## (DZOO 22)

Assignment 2

## M.Sc. DEGREE EXAMINATION, DECEMBER 2020. Second Year Zoology

# AQUACULTURE MAXIMUM MARKS: 30 ANSWER ALL QUESTIONS

- 1. Write short notes on
  - a) <u>Penaeus monodon</u>
  - b) Air breathing fishes
- 2. Give an account on sewage–fed fish culture.
- 3. Write short notes on
  - a) Edible oysters
  - b) Sea weeds
- 4. Describe the common diseases in culture ponds.
- 5. Write short notes on
  - a) Androgenssis
  - b) Cryopreservation.

## (DZOO 23)

#### Assignment 1

# M.Sc. DEGREE EXAMINATION, DECEMBER 2020.

### Second Year

#### Zoology

# PARASITOLOGY AND IMMUNOLOGY MAXIMUM MARKS: 30 ANSWER ALL QUESTIONS

- 1. Give a detailed account on morphology and life cycle of <u>Trypanosoma</u> gambiense.
- 2. Write short notes on
  - a) <u>Giaradia intestinalis</u>
  - b) <u>Entamoeba histolytica</u>
- 3. Describe the biology, life cycle and nature of infection of <u>Diphyllobothrium</u> <u>latum.</u>
- 4. Write short notes on
  - a) <u>Schistosoma mansoni</u>
  - b) <u>Opisthorchis sinensis</u>
- 5. Give an account on biology and life cycle of <u>Ancylostoma duodenale</u>.

## (DZOO 23)

Assignment 2

# M.Sc. DEGREE EXAMINATION, DECEMBER 2020.

## Second Year

#### Zoology

# PARASITOLOGY AND IMMUNOLOGY MAXIMUM MARKS: 30 ANSWER ALL QUESTIONS

- 1. Write short notes
  - a) <u>Trichuris trichiura</u>
  - b) <u>Drawnwlus medinensis</u>
- 2. Give an account on structure and major class of antigens.
- 3. Write short notes on
  - a) Overview of immunology
  - b) Acquired immunity
- 4. Give an account on the organs of the immune system
- 5. Write short notes on
  - a) IgG
  - b) Antigen

## (DZOO 24)

Assignment 1

### M.Sc. DEGREE EXAMINATION, DECEMBER 2020.

## Second Year

### Zoology

# BIOTECHNOLOGY MAXIMUM MARKS: 30 ANSWER ALL QUESTIONS

- 1. Give an account on the importance and applications of biotechnology.
- 2. Write short notes on
  - a) Different fields of biotechnology
  - b) Scope and overview of biotechnology
- 3. Give an account on vectors used in genetic engineering.
- 4. Write short notes on
  - a) Gene cloning
  - b) r–DNA technology
- 5. Give an account on cell suspension and single cell cultures.

## (DZOO 24)

Assignment 2

## M.Sc. DEGREE EXAMINATION, DECEMBER 2020.

Second Year

## Zoology

# BIOTECHNOLOGY MAXIMUM MARKS: 30 ANSWER ALL QUESTIONS

## $1. Write short notes on % \left( {{{\mathbf{T}}_{{\mathbf{T}}}} \right)$

- a) Callus culture
- b) Sterilization of media

2. Give a detailed account on applications of animal cell culture.

- 3. Write short notes on
  - a) Techniques of animal tissue culture.
  - b) Growth of animal cell lines in laboratory.

4. Give an account on the industrial production of alcohol.

## 5. Write short notes on

- a) Vaccines
- b) Antibiotics