(DZOO21)

ASSIGNMENT - 1 M.Sc. DEGREE EXAMINATION MARCH, 2023. Second Year Zoology Paper V — ANIMAL PHYSIOLOGY MAXIMUM : 30 MARKS ANSWER ALL QUESTIONS

- 1. (a) Give a detailed account on the digestion and metabolism of proteins.
 - (b) Write short notes on:
 - (i) Enzymes.
 - (ii) Minerals.
- 2. (a) Give a detailed account on circulatory system in animals.
 - (b) Write short notes on:
 - (i) Respiration.
 - (ii) Respiratory pigments.
- 3. (a) Give a detailed account on the mechanism of nerve impulse, transmission in animals.
 - (b) Write short notes on:
 - (i) Brain.
 - (ii) Neuron.

(DZOO21)

ASSIGNMENT - 2 M.Sc. DEGREE EXAMINATION MARCH, 2023. Second Year Zoology Paper V — ANIMAL PHYSIOLOGY MAXIMUM : 30 MARKS ANSWER ALL QUESTIONS

- 1. (a) Write an essay on excretion on animals.
 - (b) Write short notes on:
 - (i) Kidney.
 - (ii) Osmatic balance in animals.
- 2. (a) Describe the various theories of muscle contraction.
 - (b) Write short notes on:
 - (i) Hormones.
 - (ii) Striated muscles.

(DZOO22)

ASSIGNMENT - 1 M.Sc. DEGREE EXAMINATION, MARCH, 2023. Second Year Zoology Paper VI — AQUACULTURE MAXIMUM : 30 MARKS ANSWER ALL QUESTIONS

- 1. (a) Give a detailed account on the criteria for the selection of a species for culture.
 - (b) Write short notes on:
 - (i) Hypophysation.
 - (ii) Classification of aquaculture.
- 2. (a) Describe the breeding and culture of common carp.
 - (b) Write short notes on:
 - (i) Macrobrachium resenbergii
 - (ii) Nursery ponds.
- 3. (a) Give a detailed account on the culture of air breathing fishes.
 - (b) Write short notes on:
 - (i) Lates calcarifer.
 - (ii) Penaeus monodon.

(DZOO22)

ASSIGNMENT - 2 M.Sc. DEGREE EXAMINATION, MARCH, 2023. Second Year Zoology Paper VI — AQUACULTURE MAXIMUM : 30 MARKS ANSWER ALL QUESTIONS

- 1. (a) Describe the sewage-fed fish culture.
 - (b) Write short notes on:
 - (i) Edible oysters.
 - (ii) Sea weeds.
- 2 (a) Give a detailed account on the culture of ornamental fishes.
 - (b) Write short notes on:
 - (i) Cryopreservation.
 - (ii) Black spot disease.

2(DZOO22)

(DZOO23)

ASSIGNMENT - 1 M.Sc. DEGREE EXAMINATION, MARCH, 2023. Second Year Zoology Paper VII — PARASITOLOGY AND IMMUNOLOGY MAXIMUM : 30 MARKS ANSWER ALL QUESTIONS

- 1. (a) Give a detailed account on the biology and life cycle of *Balantidium coli*.
 - (b) Write short notes on:
 - (i) Giaradia intestinalis.
 - (ii) Symbiotic relationships.
- 2. (a) Describe the biology, life cycle and portals of entry of *Diphyllobothrium latum*.
 - (b) Write short notes on:
 - (i) *Echinococcus granulosus.*
 - (ii) Schistosoma mansoni.
- 3. (a) Describe the biology, life cycle and nature of infection of *Wuchereria* bancrofti.
 - (b) Write short notes on:
 - (i) Dracunculus medinensis.
 - (ii) Ancylostoma duodenale.

(DZOO23)

ASSIGNMENT - 2 M.Sc. DEGREE EXAMINATION, MARCH, 2023. Second Year Zoology Paper VII — PARASITOLOGY AND IMMUNOLOGY MAXIMUM : 30 MARKS ANSWER ALL QUESTIONS

- 1. (a) What is immunology? Give a detailed account on the natural immunity.
 - (b) Write short notes on:
 - (i) Antigens.
 - (ii) Overview of immunology.
- 2. (a) Describe the antigen-antibody interactions.
 - (b) Write short notes on:
 - (i) Organs of immune system.
 - (ii) IgG.

(DZOO24)

ASSIGNMENT - 1 M.Sc. DEGREE EXAMINATION, MARCH, 2023. Second Year Zoology Paper VIII — BIOTECHNOLOGY

MAXIMUM : 30 MARKS ANSWER ALL QUESTIONS

- 1. (a) Give a detailed account on the importance and applications of biotechnology.
 - (b) Write short notes on:
 - (i) Definition of biotechnology.
 - (ii) Scope of biotechnology.
- 2. (a) What is the role of enzymes in gene cloning? Explain in detial.
 - (b) Write short notes on:
 - (i) r-DNA technology.
 - (ii) Vectors.
- 3. (a) Give a detailed account on the preparation and sterilization of media.
 - (b) Write short notes on:
 - (i) Maintenance of cultures.
 - (ii) Single cell cultures.

(DZOO24)

ASSIGNMENT - 2 M.Sc. DEGREE EXAMINATION, MARCH, 2023. Second Year Zoology Paper VIII — BIOTECHNOLOGY

MAXIMUM : 30 MARKS ANSWER ALL QUESTIONS

- 1. (a) Give a detailed account on the techniques of animal tissue culture.
 - (b) Write short notes on:
 - (i) Media for animal cell culture.
 - (ii) Applications of animal cell culture.
- 2. (a) Give a detailed account on the industrial production of antibiotics.
 - (b) Write short notes on:
 - (i) Vaccines.
 - (ii) Enzymes.