

Total No. of Questions : 05]

DZOO21

M.Sc. DEGREE EXAMINATION, JUNE/JULY - 2019
(Second Year)
ZOOLOGY
Animal Physiology

Time : 3 Hours

Maximum Marks : 70

Answer All Questions.
All questions carry equal marks.

- Q1)** a) Give an account on the significance of vitamins and minerals in metabolism.
OR
b) Write short notes on
i) Lipids
ii) Enzymes
- Q2)** a) Describe the general account of circulatory system in animals.
OR
b) Write short notes on :
i) Respiratory Pigments.
ii) Transport of gases.
- Q3)** a) Give an comparative account of nervous system in animal groups.
OR
b) Write short notes on :
i) Neurons.
ii) Brain.
- Q4)** a) Give a detailed account on excretion in animals.
OR
b) Write short notes on :
i) Kidney.
ii) Urine formation.
- Q5)** a) Describe the hormones as vehicles for intercellular communications.
OR
b) Write short notes on :
i) Types of muscles.
ii) Muscle contraction.



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DZOO22

M.Sc. DEGREE EXAMINATION, JUNE/JULY - 2019
(Second Year)
ZOOLOGY
Aquaculture

Time : 3 Hours

Maximum Marks : 70

Answer All Questions.
All questions carry equal marks.

- Q1)** a) Give an account on Procurement of carp seed from natural water.
OR
b) Write short notes on :
i) Significance of aquaculture.
ii) Bundh breeding.
- Q2)** a) Give an account on breeding and culture of common carp.
OR
b) Write short notes on :
i) Nursery pond.
ii) Fresh water gaint prawn.
- Q3)** a) Give an account on culture of air breathing fishes.
OR
b) Write short notes on :
i) Sea bass.
ii) Tiger Shrimp.
- Q4)** a) Give an account on culture of seaweeds.
OR
b) Write short notes on :
i) Edible oysters.
ii) Pearl oysters.
- Q5)** a) Give an account on Indian studies on hybridization of fish.
OR
b) Write short notes on :
i) Gynogenesis.
ii) Breeding of ornamental fishes.



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DZOO23

M.Sc. DEGREE EXAMINATION, JUNE/JULY - 2019

(Second Year)

ZOOLOGY

Parasitology and Immunology

Time : 3 Hours

Maximum Marks : 70

Answer All Questions.

All questions carry equal marks.

- Q1)** a) Describe the of morphology and life cycle of Entamoeba histolytica.
OR
b) Write short notes on :
i) Kinds of Parasities.
ii) Balantidium coli.
- Q2)** a) Describe the biology, life cycle and portals of entry of Opisthorchis sinensis.
OR
b) Write short notes on :
i) Echinococcus granulosus.
ii) Diphyllobothrium latum.
- Q3)** a) Give an account on biology, and life cycle of Dracunculus medinensis.
OR
b) Write short notes on :
i) Wuchereria bancrofti.
ii) Trichuris trichiura.
- Q4)** a) Give an detailed account on acquired immunity.
OR
b) Write short notes on :
i) Antigens.
ii) Natural immunity.
- Q5)** a) Give an account on the cells of the immune system.
OR
b) Write Short notes on
i) Antigen - antibody interactions
ii) Structure of IgG

Total No. of Questions : 05]

DZOO24

M.Sc. DEGREE EXAMINATION, JUNE/JULY - 2019

(Second Year)

ZOOLOGY

Biotechnology

Time : 3 Hours

Maximum Marks : 70

Answer All Questions.

All questions carry equal marks.

- Q1)** a) Describe the scope and overview of biotechnology.
OR
b) Write short notes on :
i) Biotechnology in agriculture.
ii) Biotechnology in medicin.
- Q2)** a) Give a detailed account on enzymes useful in gene cloning.
OR
b) Write short notes on :
i) Recombinant DNA technology.
ii) Genetic engineering.
- Q3)** a) Give an account on initiation and maintenance of cultures.
OR
b) Write short notes on :
i) Preparation of media.
ii) Single cell culture.
- Q4)** a) Describe the techniques of animal tissue culture.
OR
b) Write short notes on :
i) Cell culture media.
ii) Applications of animal cell culture.
- Q5)** a) Give an account on the industrial production of vaccines.
OR
b) Write short notes on :
i) Enzymes.
ii) Antibiotics.

