

(DZOO21)

Total No. of Questions : 5]

[Total No. of Pages :02

M.Sc. DEGREE EXAMINATION, DEC. – 2016

Second Year

ZOOLOGY

Animal Physiology

Time : 3 Hours

Maximum Marks : 70

Answer all questions

All questions carry equal marks

Q1) a) Describe the role of Vitamins and minerals in metabolism.

OR

b) Write short notes on

- i) Enzymes role in digestion
- ii) Metabolism of lipids

Q2) a) Give an account on circulatory system in animals.

OR

b) Write short notes on

- i) Respiratory pigments
- ii) Physiology of heat

Q3) a) Describe the mechanism of nerve impulse transmission in animals.

OR

b) Write short notes on

- i) Nuron
- ii) Brain

Q4) a) Give an account on osmotic regulation in animals.

OR

b) Write short notes on

- i) Formation of urine
- ii) Kidney

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Q5) a) Give a detailed account on theories of muscle contraction.

OR

- b) Write short notes on
- i) Types of muscles
 - ii) Mechanism of hormone action



(DZOO22)

Total No. of Questions : 5]

[Total No. of Pages :02

M.Sc. DEGREE EXAMINATION, DEC. – 2016

Second Year

ZOOLOGY

Aquaculture

Time : 3 Hours

Maximum Marks : 70

*All questions are compulsory
All questions carry equal marks*

Q1) a) Describe the criteria for the selection of a species for culture.

OR

- b) Write short notes on
i) Hypophysation
ii) Intensive culture

Q2) a) Give a detailed account on the culture of freshwater giant prawn.

OR

- b) Write short notes on
i) Rearing ponds
ii) Common carp

Q3) a) Give a detailed account on the culture of penaeus monodon.

OR

- b) Write short notes on
i) Sea bass
ii) Air breathing fishes

Q4) a) Describe the sewage – fed fish culture.

OR

- b) Write short notes on
i) Pearl oysters
ii) Sea weeds

Q5) a) Write an essay on common diseases in fish ponds

OR

- b) Write short notes on
- i) Ornamental fishes
 - ii) Gynogenesis



(DZOO23)

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[Total No. of Pages :02

M.Sc. (Second) DEGREE EXAMINATION, DEC. – 2016

ZOOLOGY

Second Year

Parasitology and Immunology

Time : 3 Hours

Maximum Marks : 70

Answer all questions.

All questions carry equal marks.

Q1) a) Give an account on morphology and life cycle of Trypanosoma gambiense
OR

- b) Write short notes
i) Entamoeba histolytica
ii) Giardiasis

Q2) a) Give an account on the biology and life cycle of schistosoma mansoni
OR

- b) Write short notes on
i) Diphyllbothrium latum
ii) Opisthorchis sinensis

Q3) a) Describe the biology and life cycle of wucherevia bancrofti
OR

- b) Write short notes on
i) Dracunculus medinensis
ii) Trichuris trichiura

Q4) a) Give a detailed account on Acquired immunity.
OR

- b) Write short notes on
i) Antigens
ii) Natural immunity

Q5) a) Give a detailed account on antigen – antibody interactions.

OR

- b) Write short notes on
- i) Coomb's test
 - ii) IgG



(DZOO24)

Total No. of Questions : 5]

[Total No. of Pages :02

M.Sc. (Second) DEGREE EXAMINATION, DEC. – 2016

Second Year

ZOOLOGY

Biotechnology

Time : 3 Hours

Maximum Marks : 70

Answer all questions.

All questions carry equal marks.

- Q1)** a) Give an account on importance and application of biotechnology
OR
b) Write short notes on
i) Scope of biotechnology
ii) Different fields of biotechnology
- Q2)** a) Give an account on the use of tools and techniques in recombinant DNA technology.
OR
b) Write short notes on
i) Gene cloning
ii) Genetic engineering
- Q3)** a) Describe the preparation and sterilization of media
OR
b) Write short notes on
i) Cell suspension
ii) Maintenance of cultures
- Q4)** a) Give a detailed account on growth of animal cell lines in laboratory.
OR
b) Write short notes on
i) Applications of animal cell culture
ii) Culture media

Q5) a) Give an account on industrial production of antibiotics

OR

- b) Write short notes on
- i) Production alcohol
 - ii) Enzymes

