

M.Sc. (Final) DEGREE EXAMINATION, DECEMBER – 2015

(Final Year)

ZOOLOGY

Paper - V :Animal Physiology

Time : 3 Hours

Maximum Marks: 80

Answer all question

All questions carry equal marks

1) a) Give an account on Carbohydrate and Protein metabolism.

OR

b) Write short notes on:

- i) Fat soluble vitamins
- ii) Mineral role in metabolism

2) a) Explain physiology of heart

OR

b) Write short notes on:

- i) Human lungs
- ii) Respiratory pigments.

3) a) Give notes on mechanism of nerver impulse transmission in animals.

OR

b) Write short notes on:

- i) Human brain structure.
- ii) Synaptic function.

4) a) Describe osmotic regulation in animals.

OR

b) Write short notes on:

i) Hibernation

ii) Ultra filtration in kidney

5) a) Give detailed notes on mechanism of hormone action

OR

b) Write short notes on:

i) Types of muscles

ii) Hormones role in intercellular communication



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Paper – VI : Aquaculture

Time : 3 Hours

Maximum Marks: 80

Answer all question

All question carry equal marks

- 1) a) How do you procure carp seed from natural waters.

OR

- b) Write short notes on:

- i) Bundh breeding
- ii) Significance of aquaculture.

- 2) a) Explain the management of nursery ponds

OR

- b) Write short notes on:

- i) Breeding of common carp.
- ii) Culture of giant prawn.

- 3) a) Describe the culture of sea bass.

OR

- b) Write short notes on:

- i) *Penaeus monodon*.
- ii) Milk fish.

4) a) Explain the culture of sea weeds.

OR

b) Write short notes on :

i) Sewage fed fish culture.

ii) Pearl oysters

5) a) Give an account of common diseases in culture ponds

OR

b) Write short notes on:

i) Hybridization of fish.

ii) Polyploidy



M.Sc.(Final) DEGREE EXAMINATION, DECEMBER – 2015

(Second Year)

ZOOLOGY

Paper - VII : Parasitology And Immunology

Time : 3 Hours

Maximum Marks: 80

Answer all question

All questions carry equal marks

1) a) Write the life cycle of *Entamoeba histolytica*.

OR

b) Write short notes on:

i) *Trypanosoma gambiense*

ii) *Balantidium coli*

2) a) Give an account on biology, life cycle and portals of entry of *Echinococcus granulosus*

OR

b) Write short notes on:

i) *Diphyllbothrium latum*

ii) *Opisthorchis sinensis*.

3) a) Give an account on life cycle and nature of infection of *Wucheraria bancrofti*.

OR

b) Write short notes on:

i) *Ancylostoma duodenale*.

ii) *Trichuris trichiura*.

4) a) What is Antigen? Explain the structure and major class of antigens.

OR

b) Write short notes on:

i) Natural immunity.

ii) Overview of immunology

5) a) Explain antigen – antibody interactions

OR

b) Write short notes on:

i) Immunoglobulin G and Immunoglobulin E

ii) Organs of the immune system



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ZOOLOGY

Paper - VIII : BIOTECHNOLOGY

Time : 3 Hours

Maximum Marks: 80

Answer all questions

All questions carry equal marks

1) a) Write different fields of Biotechnology and applications of Biotechnology.

OR

b) Write the scope and overview of Biotechnology.

2) a) Write the techniques of Animal tissue culture.

OR

b) What is initiation? Write the maintenance of Callus culture.

3) a) What are the enzymes involved in Gene cloning and Explain.

OR

b) What is media? Write the preparation and sterilization of media.

4) a) Explain production of Alcohol and Enzymes and other chemicals in Biotechnology.

OR

b) Write short notes on:

i) Vectors used in Genetic Engineering

ii) Growth of Animal cell lines in laboratory

5) a) Give a detailed account on production of Antibiotics and Vaccines.

OR

b) Write short notes on:

- i) Applications of r DNA technology
- ii) Application of Animal cell culture

