(6 pages) **Reg. No. :** .....

Code No. : 5912 **Sub. Code : PZOM 43**

M.Sc. (CBCS) DEGREE EXAMINATION,
APRIL 2020.

Fourth Semester

Zoology — Core

AQUACULTURE

(For those who joined in July 2017 onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Fish farming is known as

   (a) Aquaculture (b) Pisciculture

   (c) Sericulture (d) Moriculture

2. An area where fresh water meets sea water

   (a) Brackishwater (b) Saltwater

   (c) Freshwater (d) Ocean

3. Paddy cum fish culture is

(a) Integrated fish farming

(b) Interdependent fish farming

(c) Interlinked fish farming

(d) All of the above

4. An aquatic arthropod with modified appendages is known as a

(a) Aquatic plant (b) Fish

(c) Crustacean (d) Shellfish

5. In aquaculture, the main purpose of controlled reproduction is to achieve

(a) Manipulation and induction

(b) Sexual maturation and spawning

(c) Egg production

(d) Vitellogenesis

6. One-celled marine and freshwater microalgae and other plant like organisms are called

(a) Phytoplankton (b) Zooplankton

(c) Seaweed (d) None of the above

7. Which of the following is NOT Considered to be a stressor of fish

(a) Poor water quality

(b) Genetic composition of fish

(c) Environmental conditions

(d) Pathogens

8. A biological method for preservation of fish

(a) Smoking (b) Fermentation

(c) Drying (d) Salting

9. Aquatic pollution brings about

(a) Deterioration of aquatic wealth

(b) Loss of natural resources

(c) Undesirable changes to aquatic ecosystem

(d) All of the above

10. Rancidity is

(a) Oxidation of fats (b) Storage of fats

(c) Release of fats (d) None of the above

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Give an account on fishery resources of India.

Or

(b) Explain the scope of aquaculture and its importance.

12. (a) Explain the composite fish culture with suitable illustration.

Or

(b) Describe the importance of sewage fed fish culture.

13. (a) Describe the phenomenon of bundh breeding in fishes with suitable examples.

Or

(b) Describe the role of biotechnology in conservation of fishes.

14. (a) Describe the layout and construction of different fish ponds.

Or

(b) Comment on fishery by products and their economics.

15. (a) Briefly describe symptoms and causative agent of common bacterial diseases among fishes.

Or

(b) Comment on fisheries economics and marketing.

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Give an overview of Indian fisheries, production, utilization and demand.

Or

(b) Give a detailed account on ecological characteristics of lake.

17. (a) Discuss the criteria involved in selection of candidate species and identify methods for shrimp culture.

Or

(b) Discuss the seaweed resources and state its culture in India.

18. (a) Give an account on genomic manipulation and its uses in aquaculture.

Or

(b) Describe common aquatic weeds, their control measures and add a note on pest, predator and weed animals in aquaculture.

19. (a) Give a detailed account on setting and management of freshwater aquaculture.

Or

(b) Give a detailed account on spoilage of fishes and various preservation methods adopted in fish processing.

20. (a) Discuss in detail about the nutritional deficiency diseases and importance of nutritional factors fish culture.

Or

(b) Write an essay on common viral, fungal and protozoan diseases in fishes. Describe causative factors and control measures.

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