

Roll No.

D-1011

**M. Sc. (Fourth Semester) (Main/ATKT)
EXAMINATION, 2020**

ZOOLOGY

(Optional Group—A)

Paper Fourth

**[Pisciculture and Economic Importance of Fishes
(Ichthyology)]**

Time : Three Hours] [Maximum Marks : 80

Note : Attempt all Sections as directed.

Section—A 1 each

(Objective/Multiple Choice Questions)

Note : Attempt all questions.

Choose the correct answer :

1. Cod liver oil is rich in :

- (a) Vitamin A and D
- (b) Vitamin A and C
- (c) Vitamin A and B
- (d) Vitamin A and E

2. Cultivation of fishes in artificially prepared ponds or water bodies is called :

- (a) Aquaculture

- (b) Pisciculture
- (c) Vermiculture
- (d) Agriculture

3. Drying of fishes by lowering temperature is known as :

- (a) Smoking
- (b) Freeze drying
- (c) Salting
- (d) Chilling

4. Fish flour is rich in :

- (a) Fat
- (b) Protein
- (c) Vitamins
- (d) Minerals

5. Hypophysation is done in major carps :

- (a) To increase size
- (b) To increase their growth
- (c) To increase breeding in fishes
- (d) To increase their palatability

6. Estuarine fish culture is a culture of fish in :

- (a) Marine water
- (b) Fresh water of river
- (c) Fresh water of pond
- (d) Aquatic medium where fresh and marine water get mixed together

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7. Gambusia is a :
- (a) Predator of mosquito larvae
 - (b) Parasite on crab
 - (c) Pathogenic protozoa
 - (d) Pest on fishes
8. A lake with an inflow of domestic sewage rich in organic waste may result in :
- (a) Drying of lake very soon due to algal bloom.
 - (b) An increased production of fish due to lot of nutrient.
 - (c) Death of fish due to lack of oxygen.
 - (d) Increased population of aquatic organism.
9. Isinglass is prepared from :
- (a) Air bladder of fish
 - (b) Liver of fish
 - (c) Stomach of fish
 - (d) Skin of fish
10. "Black Pearl" is obtained from :
- (a) *P. margaritifera*
 - (b) *P. maxima*
 - (c) *P. fucuta*
 - (d) *P. sutchi*
11. Which one is true fish in the following ?
- (a) Dog fish
 - (b) Cattle fish
 - (c) Star fish
 - (d) Jelly fish

(B-14) P. T. O.

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12. The productivity of a reservoir depends on its :
- (a) Area
 - (b) Plankton resources
 - (c) Storking rate, exploitation methods and conservation method
 - (d) All of the above
13. Pearl mother layer is :
- (a) Prismatic layer
 - (b) Periostracum
 - (c) Nacre
 - (d) Mantle
14. Spawning of fishes is induced by injecting females with :
- (a) Progesterone
 - (b) Prostaglandin
 - (c) FSH and LH
 - (d) Estrogen
15. The most common old method of fish preservation is :
- (a) Chilling
 - (b) Sundrying
 - (c) Smoking
 - (d) Salting
16. Which is purely a capture type of fishery ?
- (a) Marine fishery
 - (b) Inland fishery
 - (c) Culture fishery
 - (d) Aquaculture

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17. Which of the following is not obtained from sea water ?
- Catla
 - Shark
 - Mackerel
 - Sardine
18. Which one of the following is an economically important marine fish ?
- Rohu
 - Catla
 - Hilsa
 - Cyprinus
19. Polyculture is also known as :
- Sericulture
 - Composite fish culture
 - Monoculture
 - Monosex culture
20. Black-spot disease of marine fishes is caused by :
- Cryptocotyle lingua
 - Dinoflagellates
 - Ichthyophthirius multifillis
 - Anchor worm

Section—B

2 each

(Very Short Answer Type Questions)

Note : Attempt all questions. Write answer in two-three sentences.

1. Define Bundh breeding.

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- What do you mean by harvesting ?
- Define composite fish culture.
- What are fishery resources of C. G. ?
- Define deep sea fishery in India.
- What is sewage fed fisheries ?
- What do you mean by fish manure ?
- Define defensive devices in fishes against disease.

Section—C

3 each

(Short Answer Type Questions)

Note : Attempt all questions. Answer each question in about 75 words.

- Write a short note on control of predatory and weed fishes in fish farm.
- Give an account on nursery and stocking ponds for fresh-water fish culture.
- What is the importance of composite fish farming ?
- Give an account on “pearl formation.”
- What is offshore fishery ?
- What is the role of fisheries in rural development ?
- What is the economic importance of fish ?
- Give the reasons for spoilage of fishes.

Section—D

5 each

(Long Answer Type Questions)

Note : Attempt all questions. Answer each question in 300-350 words.

- Describe various physical factors of fresh water for fish-farming.

Or

Describe the techniques of induced breeding and its significance.

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2. Give an account on riverine fishery of India.

Or

Describe the Prawn culture in fresh water.

3. Describe coastal fisheries of India.

Or

Write an essay on sewage fed fisheries.

4. Describe various methods of fish preservation.

Or

Write an essay on marketing of fish in India.

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