

Total Pages – 4

M.Sc. RNLK-/Zoology/303/21

2021

Zoology

[Third Semester]

Paper - 303 Fishery Spl. Paper

Full Marks : 40

Time : 2 hours

*The figures in the right-hand margin indicate marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

**Group -A**

**(Ichthyotaxonomy and Biology)**

1. Answer any two questions from the following. 2×2=4

- a) Write the scientific name of two catadromous fishes. 2
- b) State the factors stimulate fish migration. 2
- c) Name two commercially important shell fishes of India. 2

*(Turn Over)*

( 2 )

d) Name one synthetic hormone which helps in fish breeding and write the mode of action of the same. 2

2. Answer any two of the followin questions. 4×2

a) Write in brief the history of Indian fishery. 4

b) Describe different developmental stages of a fine fish. 6

c) Name any four hormones and their antagonist with functions. 4

3. Answer any one question of the followings. 8×1

a) Draw and lebel the location of endocrine glands in a fish and state the functions of each gland. 4+4

b) Suppose 25 fishes are taken for consideration, each having initial weight 12.50 gm (average) and the final weight 17.00 gm (average). Feeds are given @6% of body weight, protein present in the feed is 40%. With the help of al these information calculate the PER, FCR and FCE. Make a relevant comment on your results. 8

( 3 )

**Group - B**

**Oceanography**

4. Answer any two : 2×2
- a) Write about salinity of the ocean with distribution of salinity in respect to depth in the ocean. 2
  - b) Make a list of renewable and nonrenewable resources in ocean. 2
  - c) Write scientific name of two completely marine fishes. 2
  - d) What is plankton? Classify it on the basis of size. 2
5. Answer any two questions of the following : 2×4
- a) What is up-welling? Write its importance in fishery. 2+2
  - b) Write the importance of Coral in marine environment. 4
  - c) Discuss on fish faunal diversity in Bay of Bengal. 4

( 4 )

d) Write down the importance of plankton in ocean productivity. 4

6. Answer any one question of the following : 1×8

a) Write about the division of marine environment in respect to benthic animals with suitable diagram. 8

b) Write down the cause of oil pollution and its remedy in marine environment. 6+2