

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2019

(CUCSS - PG)

(Zoology)

CC17P ZO4 E10 - FISHERY SCIENCE – I, TAXONOMY, BIOLOGY, PHYSIOLOGY & ECOLOGY

(2017 Admission Regular)

Time: Three Hours Maximum: 36 Weightage

- I. Answer *all* questions. Each question carries 1 weightage.
 - 1. Salient features of family cyprinidae with an example.
 - 2. Fish chromatophores.
 - 3. Functions of fish fins.
 - 4. Oviparity.
 - 5. Catadromous migration and its significance.
 - 6. Gastric enzymes in fish.
 - 7. Food and feeding of herbivorous fishes.
 - 8. Explain labyrinthine organ.
 - 9. Secretions and functions of pituitary gland.
 - 10. X organs and functions in crustaceans.
 - 11. Ecological adaptations of cave fishes.
 - 12. Differentiate between continental shelf and slope.
 - 13. Ecological significance of coral reefs.
 - 14. Salinity and its significance in the life of fish.

 $(14 \times 1 = 14 \text{ Weightage})$

- II. Answer any seven questions. Each question carries 2 weightage.
 - 15. Limnological peculiarities of reservoirs.
 - 16. Physico-chemical properties of inland waters.
 - 17. Ocean currents.
 - 18. Coral reef ecosystem.
 - 19. Crustacean neurosecretory system.
 - 20. Regulation of endocrine secretion in fishes.
 - 21. Structure of excretory organs in fishes.
 - 22. Composition of blood and its functions in fish.
 - 23. Food and feeding mechanism in fish.

24. Age and growth in fishes.

 $(7 \times 2 = 14 \text{ Weightage})$

- III. Answer any two questions. Each question carries 4 weightage.
 - 25. Elucidate the characteristics, ecological significance and productivity of estuarine waters.
 - 26. Describe the adaptive physiology of deep sea fishes, cave fishes and hill stream fishes.
 - 27. Explain the structure of gills, mechanism of respiration and accessory air breathing organs in fishes.
 - 28. Describe the body shape, musculature and mechanism of propulsion in fish.

 $(2 \times 4 = 8 \text{ Weightage})$
