M. Sc DEGREE END SEMESTER EXAMINATION - MARCH 2020 SEMESTER 2 : AQUACULTURE AND FISH PROCESSING COURSE : 16P2AQCT05 : ECOLOGY OF CULTURAL SYSTEM AND AQUATIC BIOLOGY

(For Regular - 2019 Admission & Supplementary 2018/2017/2016 Admissions)

Time : Three Hours

Max. Marks: 75

Section A Answer any 8 (2 marks each)

- 1. How the pH in pond system can be maintaned at optimum level?
- 2. Define Cage culture
- 3. Fishes are found gasping air fom the surface of ponds during dawn why?
- 4. Ammonification
- 5. Define Monera kingdom.
- 6. What is meant by facultative anaerobic bacteria?
- 7. Define benthos and give its importance in a culture pond.
- 8. What are Inorganic fertilizers and what is its impact on aquaculture system?
- 9. Define benthic productivity
- 10. Name eight estuaries of India
- 11. Describe diurnal migration of zooplankton
- 12. Define Biological productivity of an ocean

(2 x 8 = 16)

Section B Answer any 7 (5 marks each)

- 13. How depth influences the productivity of water ?
- 14. Write a note on the seven colour patterns of a culture pond.
- 15. Estimation of sediment bacterial count
- 16. Classify bacteria based on shape and grams staining reaction.
- 17. What is Lentic ecosystem ? Briefly explain its characteristics
- 18. What is carrying capacity of a Pond ecosystem?
- 19. Effect of Organic fertilizer on pond productivity
- 20. Explain Chemical composition of sea water.
- 21. Describe the characteristics of continental shelf area.
- 22. Briefly explain the importance of Wet lands

(5 x 7 = 35)

Section C Answer any 2 (12 marks each)

- 23. What is turbidity? Classify turbidity. How can you measure and control turbidity in a pond? Explain the chemistry of colloid clay suspension.
- 24. Explain the microorganisms seen in culture ponds.
- 25. Importance of organic farming
- 26. What are the major estuaries systems of India? Describe the characteristics of any one major estuary in India.

 $(12 \times 2 = 24)$