

Reg. No

Name

17P123

MSc DEGREE END SEMESTER EXAMINATION- NOVEMBER 2017
SEMESTER 1 : AQUACULTURE AND FISH PROCESSING
COURSE : 16P1AQCT02 ; BIOPHYSICS, INSTRUMENTATION, MICRO TECHNIQUES AND
RESEARCH METHODOLOGY

(Common for Regular - 2017 / Supplementary - 2016 Admissions)

Time : Three Hours

Max. Marks: 75

Section A

Describe any 8 of the following (2 marks each)

1. Reverse osmosis
2. Concentration gradient.
3. Role of urea in elasmobranchs
4. Plasma membrane
5. Functions of membrane receptor
6. Elution volume
7. Canada Balsam
8. What is basic research?
9. What are the characteristics of research?
10. What is Discrete variable?
11. What is the meaning of interpretation in research?
12. What is citation?

(2 x 8 = 16)

Section B

Write short notes on any 7 (5 marks each)

13. Explain Vant Hoff's law.
14. Outline the physical properties of cell membrane?
15. What are the factors effecting the passage of materials across cell membrane?
16. Outline pinocytosis
17. Discuss the parts of a simple spectrophotometer.
18. What is the difference between colorimetry and spectrophotometry?
19. How do you calculate Rf value in chromatography?
20. Discuss about the different types of literature review.

21. What is meant by primary data collection in research?
22. What are the factors to be considered in selection of appropriate method for data collection?

(5 x 7 = 35)

Section C

Write an essay on any 2 (12 marks each)

23. Biological significance of osmosis in fishes.
24. Different types of membrane transport
25. Explain the basic methods involved in protein purification.
26. Write an essay on different types of research.

(12 x 2 = 24)