

APRIL - 2015

M.Sc. Marine Sciences Semester – II Examination

April - 2015

Paper no: 5

Subject Code: 2929

Title/name of paper: **Biochemistry, Genetics, Molecular biology and Biotechnology.**

Time: 2.30 hrs

Max. Marks: 70

- Q1.** Write detailed answers on: **14**
(A) Essential fatty acid
(B) Functions of protein

OR

- Q1.** What are disachharides? Write a detailed account on biologically important disaccharides. **14**

- Q2.** What is linkage? Write a detailed account on linkage giving examples. **14**

OR

- Q2.** Write as asked: **14**
(A) What is sex-linked inheritance? Describe giving one example in humans.
(B) Describe pleiotropism giving examples.

- Q3.** Write an account on: **14**
(A) Messelson and Stahl experiment
(B) Translation in prokaryotes

OR

- Q3.** Describe: **14**
(A) The structure of DNA
(B) The process of formation of DNA from RNA by Reverse Transcriptase enzyme

- Q4.** Explain: **14**
(A) The DNA sequencing method (ANY ONE)
(B) Recombinant DNA technology

OR

- Q4.** Write a note on: **14**
(A) Ribozyme
(B) Mutagens giving examples.

- Q5.** Write a detailed account on ways of improving strains for aquaculture using Marine Biotechnology? **14**

OR

- Q5.** Write an account on: **14**
(A) Biomass and Bioprocessing
(B) Environmental remediation.
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