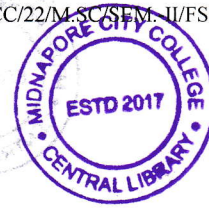


Total pages: 02

PG (CBCS)
M.SC Semester- II Examination, 2023
FISHERIES SCIENCE
PAPER: FSC 201



(AQUATIC ECOLOGY AND ECOSYSTEM MANAGEMENT AND FISH
PROCESSING TECHNOLOGY AND QUALITY ASSURANCE)

Full Marks: 40

Time: 2 Hours

The figures in the right-hand margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

Write the answer for each unit in separate sheet

UNIT: FSC 201.1

AQUATIC ECOLOGY AND ECOSYSTEM MANAGEMENT

GROUP-A

1. Answer any **TWO** from the following questions: 2×2=4
- a) Define coastal zone.
 - b) Differentiate between gross primary productivity and net primary productivity.
 - c) What is the importance of producers in any ecosystem?
 - d) What is stenohaline fish?

GROUP-B

2. Answer any **TWO** from the following questions: 2×4=8
- a) Discuss the fisheries potentialities of wetland ecosystems.
 - b) Add a note on the different zones of a lake depending on light penetration with diagram.
 - c) Compare among detritus food chain and grazing food chain.
 - d) Write a note on significance of mangrove ecosystem.

GROUP-C

3. Answer any **ONE** from the following questions: 1×8=8
- a) Describe structural adaptation of deep sea animals with example. Distinguish between lotic and lentic ecosystem. 6+2
 - b) State the significance of benthos. Briefly describe the abiotic factors of pond ecosystem. Add a note on coral reef ecosystem. 2+4+2

(P.T.O)



(2)

UNIT: FSC 201.2

FISH PROCESSING TECHNOLOGY AND QUALITY ASSURANCEGROUP-A

1. Answer any **TWO** from the following questions: 2×2=4
- What is fast freezing?
 - Define Chilled Sea Water (CSW).
 - What is Super Chilling?
 - Mention two antioxidant used in Fish processing.

GROUP-B

2. Answer any **TWO** from the following questions: 2×4=8
- Briefly describe the microbial changes in fish tissues.
 - What do you mean by air blast freezer and plate freezer?
 - Write a short note on quality changes in fish during freezing.
 - Write down the difference between flake ice and plate ice.

GROUP-C

3. Answer any **ONE** from the following questions: 1×8=8
- Briefly describe the principles of HACCP. Write down Botulisms impact on Children health. 4+4
 - What is thawing? Give an account on the different types of thawing methods employed in processing plant. Add a note on Environmental impact of packaging materials. 1+4+3
