

2022

1st Semester Examination

FISHERIES SCIENCE

Paper : FSC 104

Full Marks : 40

Time : Two Hours

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

Unit-104.1

[Pollution, Ecotoxicology
and Aquatic Microbiology]

1. Answer any *two* questions from the following : $2 \times 2 = 4$
 - (a) "All pollutants are not xenobiotics" — explain.
 - (b) What is microbial biofilms ?
 - (c) Mention the criteria of a good chelating agent. Give two examples.
 - (d) What do you mean by environmental genotoxicity ?
2. Answer any *two* questions from the following : $4 \times 2 = 8$
 - (a) Discuss the different methods adopted to combat pollutional hazards in aquaculture system.

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- (b) Write down the toxicokinetics of Lead.
- (c) State the role of probiotics in Aquaculture.
- (d) Discuss the role of microbes in biogeochemical cycle.
3. Answer any *one* question from the following : $8 \times 1 = 8$
- (a) What do you mean by biotransformation ? Write the steps of biotransformation of any xenobiotics. Add a note on Cytochrome P450. $2+4+2$
- (b) Enlist different types of media used in microbiological study. Discuss the different control method for microbial growth. $4+4$

Unit-104.2

[Oceanography, Remote Sensing & GIS and Disaster Management]

4. Answer any *two* questions from the following : $2 \times 2 = 4$
- (a) State the renewable and non-renewable resources in the ocean.
- (b) What is GPS ?
- (c) What meiobenthos and microbenthos ?
- (d) Write the principle and importance of GIS.
5. Answer any *two* questions from the following : $4 \times 2 = 8$
- (a) Discuss the Potential Fishing Zone identifying through Remote Sensing Technology.

- (b) Write down the impact of COVID-19 pandemic in the marine Fisheries sector of India.
- (c) Discuss the anthropogenic activities in the ocean and their management.
- (d) State the characteristics of ocean water.

6. Answer any *one* question from the following : $8 \times 1 = 8$

- (a) Discuss the different zonation of ocean. How salinity changes with the ocean depth ? State the causes of salinity in the ocean. $4+2+2$
 - (b) Importance of ocean current from the fisheries point. Discuss the pre-disaster and post-disaster management of coastal aquafarm. $3+5$
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