M.Sc.

#### 2015

## 2nd Semester Examination

#### FISHERIES SCIENCE

PAPER-FSC-203

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.

Illustrate the answers wherever necessary.

## Unit--I

# (Aquatic Pollution)

- 1. Write in brief any two of the following:
- $2\times2$
- (a) Define acute poison and accumulative poison.
- (b) What do you mean by algal bloom?

- (c) State the pollution indicator species with example.
- (d) Mention different criteria of drinking water.
- **2.** Answer any *two* questions from the following:  $2\times4$ 
  - (a) Discuss the impact of radioactive pollution on aquatic habitat.
  - (b) Discuss the harmful effects of chlorination in pollution abatement.
  - (c) Sate the cause and effect of Eutrophication.
  - (d) Discuss the role of Central Pollution Control Board of India.
- 3. Answer any one question of the following: 1×8
  - (a) (i) What do you mean by sewage and sludge?
    - (ii) Discuss Sewage treatement process.
    - (iii) Add a note on sewage fed fishery in East Kolkata Wetland. 2+4+2
  - (b) (i) Mention the causes of Arsenic pollution in ground water.
    - (ii) Add a note on thermal pollution.
    - (iii) Discuss anerobic treatment of water for improving its quality. 2+2+4

#### Unit-II

## (Ecotoxicology & Environment)

- **4.** Answer any two questions from the following:  $2 \times 2$ 
  - (a) Define 'xenobiotics' and 'exnobionts'.
  - (b) State the concepts of chilation therapy.
  - (c) What do you mean by Minamata disaster?
  - (d) Mention the causes of ozone layer depletion.
- **5.** Answer any two questions from the following:  $2\times4$ 
  - (a) Discuss the biotransformation of xenobiotic materials.
  - (b) Write a note on Biodiversity Indices.
  - (c) Enumerate the role of UNEP to control pollution.
  - (d) Discuss toxicity bioassay technique.
- **6.** Answer any *one* questions of the following:  $1 \times 8$ 
  - (a) (i) Define biodiversity. Mention its types.
    - (ii) Add a note on fisheries biodiversity in India.
    - (iii) How would you conserve aquatic biodiversity?

2+2+4

- (b) (i) Discuss the relation among Green House Effect and Global Warming.
  - (ii) Add a note on biomagnification.
  - (iii) Mention role of WTO for environmental protection.