

Total Page - 4

PG/2nd Sem/FSC/19

2019

M.Sc.

2nd Semester Examination

FISHERIES SCIENCE

Paper - FSC 203

Full Marks : 40

Time : 2 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 - 1

(Aquatic Pollution & Ecotoxicology)

1. Write in brief any *two* questions of the following :

2×2=4

- (a) Give an idea about EIA.
- (b) What do you mean by point and non-point source of aquatic pollution ?
- (c) Define poison and Venom.
- (d) What do you mean by biomagnification ?

[Turn Over]

2. Answer any *two* questions from the following :

2×4=8

- (a) Write down the role of Central Pollution Control Board with special references to water pollution.
- (b) Enumerate the different factors modify the toxicity.
- (c) State about chelation therapy.
- (d) Discuss about oil biodegradation in water.

3. Answer any *one* question from the following :

1×8=8

- (a) (i) Define toxicokinetics and toxicodynamics.
- (ii) Discuss about the source, toxicokinetics and problems of arsenic pollution in human.
- (iii) Add a note on maximum residual limit.

3+4+1

(b) (i) Define LC_{50} and LD_{50} .

(ii) Give an idea about toxicity bioassay.

(iii) State about phytotoxins impact on fish.

2+4+2

(Aquatic Microbiology & Public Health Fisheries)

4. Answer in brief any *two* questions of the following :

2×2=4

- (a) State about Koch's postulates.
- (b) What do you mean by microbial bioremediation ?
- (c) Define probiotics and prebiotics. Give example.
- (d) Classify bacteria on the basis of their morphology.

5. Answer any *two* questions from the following :

2×4=8

- (a) Write down the gram staining procedure.
- (b) Write about the chemical control of microbial growth.
- (c) Discuss about different instrument require for microbiology laboratory.
- (d) State about different phages of growth of bacteria.

[Turn Over]

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

- (a) (i) Define Sewage and Sludge.
- (ii) Discuss the method of domestic sewage treatment.
- (iii) Add a note on microbial biofilm and its importance. 2+4+2
- (b) (i) Classify different culture media.
- (ii) Discuss about nitrogen cycle in aquatic ecosystem. 4+4
-