

Total Pages : 3



B.F.Sc./5th Sem /25

2025

## 5th Semester Examination

4-Years B.F.Sc.

Paper : BFSC-502

(Fish Toxicology)

*Dayan*

Full Marks : 50

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.*

### Group - A

1. Answer any *ten* questions :

2×10=20

~~(a)~~ What is toxicant? How does it differ from poison?

~~(b)~~ Write a short note on effects of toxic plants.

~~(c)~~ What do you mean by ED<sub>50</sub>?

~~(d)~~ Define biomagnification.

~~(e)~~ What are neurotoxic substances?

~~(f)~~ What is post-mortem toxicology?

~~(g)~~ What preservative is commonly used for toxicological sample collection?

P.T.O.



- (h) Name two De-toxification enzymes in fish.
- (i) What is drug residue?
- (j) Mention two toxic effects on bacterial toxins.
- (k) State about organophosphate poisoning.
- (l) Write the characters of heavy metal. Give two examples.
- (m) What is forensic toxicology?
- (n) Differentiate between metal and non-metal toxicity.
- (o) Write down the impact of mercury poisoning.

**Group - B**

2. Answer any *six* questions : 5×6=30

(a) What is LC<sub>50</sub>? Explain its significance in fish toxicity studies. 1+4

(b) Write the toxico-kinetics of lead (Pb) and its impact in ecosystem. 2+3

(c) Write short notes on : 2½×2=5

(i) Aflatoxin toxicity

(ii) Botulinum toxin

(d) Describe the role of liver and gills of fish in detoxification.

(e) Discuss the biotransformation process of toxic component.

# cytochrome P450 ( 3 )

✓ (f) Differentiate between acute and chronic toxicity with examples.

(g) Why proper dispatch of specimen is important?  
Define nitrite toxicity. 4+1

✓ (h) Define MRL. Why is it important in fish culture?  
1+4

(i) Explain the role of antidotes in poisoning.

~~(j) Describe the effects of herbicides on fish health.~~



cruthamione - S<sub>2</sub> - transferase