

M.Sc.- II (Zoology) CBCS Pattern Semester-IV  
**PSCZOOT15.7 - Paper-XV - Special Group : Aquaculture-IV**  
**(Fish Pathology and Fish Genetics)**

P. Pages : 1

Time : Three Hours



**GUG/W/23/11445**

Max. Marks : 80

- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Draw well labelled diagram.

1. Give a detailed account on methods of Fish preservation. 16
- OR**
- a) Biochemical composition of raw fish. 8
- b) Fish preservation objectives. 8
2. Explain the effects of water pollution on fishes. 16
- OR**
- a) Fish product and by product. 8
- b) Rigor mortis and fish spoilage. 8
3. Explain in details about fungal, bacterial and protozoan diseases of farm fish. 16
- OR**
- a) Nutritional diseases of fish. 8
- b) Diseases caused by aquatic pollutants. 8
4. Write a detailed note on Gene banking and application of genetic engineering in aquaculture. 16
- OR**
- a) Transgenic fish. 8
- b) Cryopreservation of gametes. 8
5. Write a short notes on the following. 16
- a) Nutritional value of preserved fish.
  - b) Toxicity from fish as food.
  - c) Crustacean diseases of farm fish.
  - d) Fish genetic resources.

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