Agricultural and Food Engineering Dept. IIT, Kharagpur

Date of examination: 21 April, 2012, 2.00 pm

End-Spring semester exam.: 2012

Subj. name: Advanced Aquaculture Technology

Course: M.Tech. in Aquacultural Engg.

Full marks: 100 Time: 3 hours

Subject no:AG60108 No. of students: 7

Instructions: Answer all questions

O1. What are the merits and demerits of cage culture of fish? (5+5=10)

Q2. Discuss the Open and Closed system of transportation of fish. (5+5=10)

Q3. What are the important biological and non-biological criteria for increasing production in aquaculture ponds? (5+5=10)

Q4. Discuss 'Integrated aquaculture' in China with the help of a flow diagram. How this system of aquaculture be adopted in India? (5+3=8)

Q5. What are the actions and methods of liming of aquaculture ponds? What are the factors which determine the time and dose of liming? (5+3+3+4=15)

Q6. What are the important actions of organic manure in aquaculture ponds? (5)

Q7. What are the main differences in the reproductive behaviour and breeding characteristics of penaeid and non-penaeid prawns? (6+6=12)

O8. Write short notes on:

 $(5 \times 6=30)$

- i) Use of anaesthetic drugs in aquaculture.
- ii) Environment controlled warm water aquaculture.
- iii) Removal of sticky layer of common carp eggs.
- iv) Eradication of aquatic insects.
- v) Pen culture of fish.
- vi) WHO recommended different categories of waste water.