

Dr. V.S KRISHNA GOVT. DEGREE & PG COLLEGE (A), VISAKHAPATNAM

ZOOLOGY SYLLABUS (W.E.F. 2016 – 17)

SEMESTER – VI

CORE -VI

Hrs/week: 3/2

COURSE-VI : APPLIED (2) ELECTIVE - (II)– AQUACULTURE

MAX MARKS : 100

HOURS : 30

**Module - I AQUACULTURE TYPES**

6 Hrs

1. Introduction to Aquaculture systems - Extensive, semi-intensive, intensive, Open, closed, pen, cage culture types. (3hrs)
2. Monoculture, polyculture, Composite fish culture. (2hrs)
3. Integrated fish culture. (1hrs)

**Module - II FRESHWATER AQUACULTURE**

4 Hrs

1. Indian Major Carp culture. (2hrs)
2. Fresh water prawn culture. (2hrs)

**Module - III FISH SEED PRODUCTION**

10 Hrs

1. Induced breeding in major carps. (2hrs)
2. Bund breeding. (1hr)
3. Fish seed transport. (1hr)
4. Hatchery Management. (2hrs)
5. Fish pond management - nursery, rearing, production ponds. (4hrs)

**Module - IV SHRIMP CULTURE AND DISEASES**

4 Hrs

1. *Penaeus monodon* culture. (2hrs)
2. Viral diseases of prawns. (2hrs)

**Module - V FINFISH PATHOLOGY AND POST HARVEST TECHNOLOGY**

6 Hrs

1. Bacterial diseases – bacterial gill disease, vibriosis, gill rot disease
2. Viral diseases – Infectious Pancreatic Necrosis, Viral Haemorrhagic Septicemia, Carp pox.
3. Fungal diseases – Saprolegniasis, Branchiomycosis.
4. Parasitic diseases – Whirling disease, gyrodactylosis, Argulosis, Lerniasis.
5. Preservation of fish through freezing, salting, Drying, smoking and Canning.

**Reference Books:**

1. A Text Book of Fishery Science and Indian Fisheries by Dr C B L Srivastava.
2. Aquaculture principles and practices : TVR Pillay.

**Module - I CAPTURE FISHERIES**

**9 Hrs**

1. Capture fisheries - Introduction to finfish fisheries and shellfish fisheries (2hrs)
2. Fishery resources - Freshwater, Brackish water and marine. (5hrs)
3. Fishing craft and gear. (2hrs)

**Module - II CULTURE FISHERIES**

**10 Hrs**

1. Aquaculture systems - Extensive, semi-intensive, intensive, Open, closed, pen, cage culture types. (3hrs)
2. Monoculture, polyculture, composite and integrated fish culture. (3hrs)
3. Pond management - nursery, rearing and production ponds. (4hrs)

**Module - III PATHOLOGY**

**7 Hrs**

1. Viral diseases of prawns. (3hrs)
2. Fish diseases (bacterial, viral, fungal, protozoan and crustacean only). (4hrs)

**Module - IV POST HARVEST TECHNOLOGY**

**4 Hrs**

1. Fish preservation- Freezing, drying, canning, salting, and smoking. (2hrs)
2. Fish byproducts. (2hrs)

**Reference Books:**

1. *A Text Book of Fishery Science and Indian Fisheries* by Dr C B L Srivastava.
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III B.Sc. ZOOLOGY  
SEMESTER VI (W.E.F 2016 - 17)  
CORE -VI

COURSE VI : APPLIED (2) ELECTIVE (II) – AQUACULTURE

BLUE PRINT FOR QUESTION PAPER SETTER

TIME : 3HRS

MAX MARKS :75

MODULE NO. & NAME	VERY SHORT ANSWER QUESTIONS 2 MARKS	SHORT ANSWER QUESTIONS 5 MARKS	ESSAY QUESTIONS 10 MARKS	MARKS ALLOTTED TO THE MODULE
MODULE I (AQUACULTURE TYPES)	02	01	01	19
MODULE II (FRESHWATER AQUACULTURE)	01	01	02	27
MODULE III (FISH SEED PRODUCTION)	02	02	02	34
MODULE IV (SHRIMP CULTURE & DISEASES)	01	01	01	17
MODULE V (POST HARVEST TECHNOLOGY & FISH DISEASES)	02	03	02	39
Total no. of Questions	08	08	08	
TOTAL MARKS INCLUDING CHOICE				136

NOTE : 1. The Question paper setters are requested to kindly adhere to the format given in the above table.

2. The Question paper setters are also requested to set the questions in the following way:

- 80% of questions – memory and understanding based.
- 20% of questions – Creativity, application and skill based.

*(Dr. T. S. D. RAJ)*  
lect. in-charge



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III B.Sc. ZOOLOGY SEMESTER VI (W.E.F 2016- 17)

CORE –VI

COURSE VI : APPLIED (2) ELECTIVE (1) – FISHERIES SCIENCE.

BLUE PRINT FOR QUESTION PAPER SETTER

TIME : 3HRS

MAX MARKS :75

MODULE NO. & NAME	VERY SHORT ANSWER QUESTIONS 2 MARKS	SHORT ANSWER QUESTIONS 5 MARKS	ESSAY QUESTIONS 10 MARKS	MARKS ALLOTTED TO THE MODULE
MODULE I (CAPTURE FISHERIES)	02	02	02	34
MODULE II (CULTURE FISHERIES)	02	02	02	34
MODULE III (PATHOLOGY)	02	02	02	34
MODULE IV(POST HARVEST TECHNOLOGY)	02	02	02	34
Total no. of Questions	08	08	08	
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