

GOVERNMENT COLLEGE (A) RAJAMAHENDRAVARAM
M.Sc. Aquaculture-I Semester Model Question Paper
CORE-I AQC 101. Principles of Aquaculture

Time: 3hours

Max. Marks: 60M

Answer ALL questions.

All questions carry equal marks

4X10=40M

SECTION-A

1. What is scope and basis of Aquaculture?
(OR)
2. Describe how you select a site for construction of a fish farm.
3. Explain the details in designing and construction of a hatchery.
(OR)
4. Discuss about water intake system into the farms and hatcheries. Add a note on Water consumption and water budgets involved.
5. What are the criteria for selection of Aquaculture species?
(OR)
6. Discuss about the pa management practices.
7. Explain about the factors involved in post stocking management of ponds.
(OR)
8. What is growth? Discuss about different methods of age determination in fishes.

Section-B

Answer any FOUR of the following:

4X5=20M

9. Poly culture
10. Integrated fish farming
11. Types of feed
12. Aeration
13. Seed resources
14. Stocking density
15. Types of ponds
16. Pre stocking

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UNIT	ESSAY	SHORT
UNIT-I	2	2
UNIT-II	2	1
UNIT-III	2	1
UNIT-IV	2	2

GOVERNMENT COLLEGE (A) RAJAMAHENDRAVARAM
M.Sc. Aquaculture-I Semester Model Question Paper
CORE-II AQC 102. Aquatic Ecology

Time: 3hours

Max. Marks: 60M

Answer ALL questions. All questions carry equal marks

Section-A

4X12=48M

1. What is Ecology? Explain the features of organism and environment and their relationships.

(OR)

2. Discuss about the Marine Ecosystem.

3. Explain light as factor of the environment.

(OR)

4. Discuss about the gases dissolved in water.

5. Write in detail about the Nitrogen cycle and its importance.

(OR)

6. Discuss about the aquatic fauna.

7. What is productivity? Explain.

(OR)

8. Discuss about ecological pyramids.

Section

Answer any FOUR of the following:

4x3=12M

9. Habitat

10. Lentic ecosystem.

11. Turbidity

12. Alkalinity.

13. Dissolved O₂

14. Eutrophication

15. Phosphorous cycle

16. Food chain

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UNIT	ESSAY	SHORT
UNIT-I	2	2
UNIT-II	2	1
UNIT-III	2	1
UNIT-IV	2	2

GOVERNMENT COLLEGE (A) RAJAMAHENDRAVARAM

**M.Sc. Aquaculture-I Semester Model Question Paper
CORE-III AQC 103. Water Quality Management**

Time: 3hours

Max. Marks: 60M

Answer ALL questions. All questions carry equal marks

Section-A

4X12=48M

1. Write in detail the management of water quality in fresh water fish & brackishwater Shrimp culture.

(OR)

2. Discuss about the different kinds of fertilizes and measures used in aquaculture. Add a note on use of bioactive compounds by microorganisms.

3. Write the reasons for changes in dissolved oxygen concentration. Add a note on Identification of oxygen problems.

(OR)

4. What are the principles of aeration, emergency aeration & add a note ondesertification and practical considerations.

5. Write in detail about the seed rearing technology. Add a note on packing and .transportation Of seed.

(OR)

6. Write the problems control methods for Aquatic weed management.

7. What are the different methods for applying and treatment of chemicals?

(OR)

8. Write in detail about pollution caused in relation to Aquaculture practices.

Section-B

Answer any FOUR of the following:

4X3=12M

9. Effect of liming on pond ecosystem
10. Bio fertilizers in aquaculture
11. Oxygen budget of culture ponds
12. Desertification
13. Effluent treatment in hatcheries
- 14 Turbidity
15. Transportation Of seed
- 16.Types aquatic weeds

BLUE PRINT

UNIT	ESSAY	SHORT
UNIT-I	2	2
UNIT-II	2	1
UNIT-III	2	1
UNIT-IV	2	2

GOVERNMENT COLLEGE (A) RAJAMAHENDRAVARAM

**M.Sc. Aquaculture-I Semester Model Question Paper
SEC I (A). FISH PATHOLOGY**

Time: 3hours

Max. Marks: 60M

Answer ALL questions. All questions carry equal marks

Section-A

4X12=48M

1. Write in detail the symptoms of pathology and control of viral haemorrhagic septicemia .

(OR)

2. Write in detail the symptoms, treatment and preservation of baculovirus disease

3. What are the symptoms of pathology, prevention and control causes of bacterial Diseases in Fish?

(OR)

4. What are the symptoms, pathology preservation & control measures of shrimp diseases?

5. Write the symptoms pathology and control measures of protozoan and helminthic Diseases in Fish

(OR)

6. Write the symptoms pathology and control measures of shrimp diseases caused due to protozoa and helminthes parasites.

7. Write the clinical symptoms pathology control measures of vitamin deficiency diseases and Bubble disease in fishes.

(OR)

8. Write in detail the clinical symptoms, pathology and control measures of muscle narcosis, gas bubble diseases Black Death diseases in shrimp.

Section-B

Answer any FOUR of the following

4X3=12M

9. Taura syndrome
10. White spot syndrome
11. Control measure of saprolegniasis disease.
12. Lagenidium disease.
13. Gyrodactylosis and Dactylogyrosis
14. Ecto commensal protozoan diseases in shrimps
15. viral diseases
16. Protozoan disease

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UNIT	ESSAY	SHORT
UNIT-I	2	2
UNIT-II	2	1
UNIT-III	2	1
UNIT-IV	2	2

Paper-I AQC 401 FISH IMMUNOLOGY AND MICROBIOLOGY

Time: 3hours

Max. Marks: 60M

Answer **ALL** questions

All questions carry equal marks

4X12=48M

Section-A

1. Write an account on Fish Health and Management.
(OR)
2. Describe in detail about Fish Lymphoid Organs and cells.
3. Explain in detail Types of Immune response in various representative fish groups.
(OR)
4. Explain in detail about types of vaccines
5. Explain in detail the constituents of growth media, type's maintenance and preservation.
(OR)
6. Write an essay on salmonella occurrence pathogenicity, pathogen growth and
Inactivation.
7. Describe in detail about laboratory techniques.
(OR)
8. Explain about sterilization principles and methods.

Section-B

Answer any **FOUR** of the following:

4X3=12M

- 9.. History of Immunology.
10. Ig -M
11. Immuno-suppression.
12. Vibrio cholerae,
13. Bright field microscope
14. Types of strains.
15. Fluorescence microscope
16. CELL MEDIATED IMMUNITY

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