



January, 2015

Post Graduate Diploma in Agricultural Extension Management (PGDAEM)

**2nd Semester 2013-14 Term End Examinations &
Supplementary Examinations of 2007-08 to 2012-13**

AEM-205 C: Sustainable Fisheries Development (3 Credits)

Max. Marks-70

Duration - 2 ½ hrs.

ANSWER ANY 5 QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS

1. Discuss the various Integrated Fish Farming systems for effective utilization of resources with suitable example.
2. Describe in detail the concept of sustainability and conservation in Aquatic environment Management with suitable examples.
3. Define Ecology. Briefly discuss the structure, functions and benefits of Aquatic Eco Systems.
4. Explain the benefits of Induced fish breeding and modern fish hatchery operations
5. Describe the preparation of fish and shell fish pickles for commercial marketing.
6. Describe good management practices in brackish water shrimp farming.
7. Writes short notes on any two of the following:
 - A) Major issues in marine fisheries sector
 - B) Ex-situ conservation
 - C) Issues in sustainable brackish water aquaculture development
 - D) Types of shrimp farming systems
8. Write short notes on **any four** of the following
 - a. Potential Fishing Zone (PFZ) information
 - b. Paddy cum- Fish culture
 - c. National Fisheries Development Board (NFDB)
 - d. Maximum Sustainable Yield (MSY)
 - e. Indian Fisheries Act (1897)
 - f. Breeding of freshwater prawn



December-2014

Post Graduate Diploma in Agricultural Extension Management (PGDAEM)

**2nd Semester 2013-14 Term End Examinations &
Supplementary Examinations of 2007-08 to 2012-13**

**AEM-205 C: Sustainable Fisheries Development
(3 Credits)**

Max. Marks-70

Duration - 2 ½ hrs.

ANSWER ANY 5 QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS

1. Discuss in detail about Integrated Fish Farming.
2. What is Social Mobilization? Explain different approaches for Sustainable Aquaculture Development.
3. Define Ecology. Briefly discuss the structure, functions and benefits of Aquatic Eco Systems.
4. Discuss the method of induced breeding in fishes.
5. Describe the preparation of fish and shell fish pickles for commercial marketing.
6. Describe the problems and prospects of freshwater aquaculture.
7. A) Major issues in marine fisheries sector.
B) Ex situ conservation.
8. A) Issues in sustainable brackish water aquaculture development
B) Types of shrimp farming systems.



**Post Graduate Diploma in Agricultural Extension Management (PGDAEM)
EXAMINATION – July, 2014**

AEM 205C: Sustainable Fisheries Development (3 Credits)

MAX MARKS-70

DURATION- 2 ½ hrs.

Answer **FIVE** of the following Nine questions. **6th question is compulsory.**

1. How to identify compatible fish species for aquaculture and their suitability to different agro-climatic regions (12 marks)
2. Explain the following two aspects of aquaculture (12 marks)
 - A) Soil and water quality parameters in fresh water fish farming
 - B) Good management practices in brackish water shrimp farming
3. Type of fish farming practices you promote with regard to the different economic status of farmers interested in fish farming (12 marks)
4. What are the efforts required for bringing value addition to low valued (in terms of cost in the market) fish? (12 marks)
5. Explain the following two aspects of Marine fisheries (12 marks)
 - A) Marine fishing regulations
 - B) Importance of co-management
6. Prepare unit economics covering different components of interest of any of the following two subjects? **(Compulsory question)** (22 marks)
 - A) Fish retail outlet
 - B) Brackish water shrimp farming
 - C) Cold water fish farming
 - D) Scampi farming
7. Write short notes on the purpose of any of the following four (12 marks)
 - a) Bottom up approach planning
 - b) Agriculture Technology Management Agency (ATMA)
 - c) Farm schools
 - d) Farmer Interest Groups
 - e) Fisheries cooperatives
 - f) Coastal Zone Protection
8. Write short notes on any **four** of the following (12 marks)
 - a) PCR
 - b) FCR
 - c) GPS
 - d) PFZ
 - e) HACCP
 - f) IQF
9. Write short notes on any **four** of the following in regard to the economic importance of fish body part (12 marks)
 - a) Chitin
 - b) Isinglass
 - c) Shagreen
 - d) Guanine
 - e) Ambergris
 - f) Silage



Post Graduate Diploma in Agricultural Extension Management (PGDAEM)

SUPPLEMENTARY EXAMINATION (2011-12 BATCH) – JANUARY 2014

Course 205 C: SUSTAINABLE FISHERIES DEVELOPMENT (3 Credits)

Maximum Marks: 70

Duration: 2 1/2 hrs

Answer any **five** questions. All questions carry equal marks.

1. Define "sustainable development". Discuss the issues in the sustainable development of Brackish water Aquaculture.
2. Write short note on any **three** of the following
 - a) Anti Dumping
 - b) Aquatic Biodiversity
 - c) Role of Village knowledge Center in aquaculture
 - d) Cage culture
 - e) Induced Breeding
3. Explain in detail about fish by-products and their uses?
4. Write short notes on any **three** of the following:
 - A. Paddy cum-fish Culture.
 - B. Breeding of Fresh water prawn.
 - C. Technology Assessment and Refinement in aquaculture.
 - D. Polyculture.
5. Describe good management practices for enhancing fish production in reservoirs, citing a case you know.
6. Describe the impact of water quality and pollution in fish culturing.
7. What is integrated fish farming system? Describe any two models supporting sustainable fishery development.
8. Explain the role of Remote Sensing and GIS tools in fisheries resource management.



**Post Graduate Diploma in Agricultural Extension Management (PGDAEM)
SPECIAL SUPPLEMENTARY EXAMINATION – DECEMBER 2013**

Course 205C: Sustainable Fisheries Development (3 Credits)

Maximum Marks: 70

Duration: 2 1/2 hrs

Answer **FIVE** of the following nine questions **6th question is compulsory**. All questions carry equal marks.

1. What are the optimum levels of key soil and water quality parameters and their significance during scientific fish farming?
2. Explain the benefits of Induced fish breeding and modern fish hatchery operations.
3. Describe good management practices in brackish water shrimp farming.
4. What are the problems in fish marketing? Suggest a few measures to overcome them.
5. Give any two examples of income generating activities in fisheries and explain issues and concerns for their sustainability?
6. Write short notes on any of **four** of the following (**Compulsory question**)
 - a. Bottom up approach planning in extension management
 - b. Role of sectoral departments in ATMA system
 - c. Block Technology Manager (BTM)
 - d. Purpose of Farm schools
 - e. Farmer Interest Groups (FIGs)
 - f. Commodity Interest groups (CIGs)
7. Write short notes on any **four** of the following
 - a. Scampi farming
 - b. Integrated fish farming
 - c. Mud crab fattening
 - d. Cold water fisheries
 - e. Sea weed cultivation
 - f. Ornamental fisheries
 - g. Cage culture
 - h. Pen culture
8. Write short notes on any **four** of the following
 - a. Potential Fishing Zone (PFZ) information
 - b. Cyclones & Tsunamis
 - c. National Fisheries Development Board (NFDB)
 - d. Maximum Sustainable Yield (MSY)
 - e. Indian Fisheries Act (1897)
 - f. Participatory Rural Appraisal (PRA)
 - g. Co-management
 - h. Ban on marine fishing



**Post Graduate Diploma in Agricultural Extension Management (PGDAEM)
Final Examination (February 2010)**

Course 205 C: Sustainable Fisheries Development (3 Credits)

Maximum Marks: 70

Duration: 2 ½ hrs

Answer any five questions. All questions carry equal marks

1. Define "sustainable development". Discuss the issues in the sustainable development of Brackish water Aquaculture.
2. Describe good management practices for enhancing fish production in reservoirs citing a case from your area.
3. Write short note on any three of the following
 - a. Anti Dumping
 - b. Aquatic Biodiversity
 - c. Role of Village Knowledge Center in Aquaculture
 - d. Cage Culture
 - e. Induced Breeding
4. Describe the concept of sustainability and conservation in Aquatic Environment Management with suitable examples.
5. Discuss the various Integrated Fish Farming systems for effective utilisation of resources with suitable example.
6. Explain the role of Remote Sensing and GIS tools in fisheries resource management.
7. Give an overview of marine fisheries in India? Suggest suitable strategies for conserving and sustaining the production.
8. What are the types of shrimp farming systems? How intensive farming is different from extensive farming? Explain with illustrations



**Post Graduate Diploma in Agricultural Extension Management (PGDAEM)
Final Examination, First Semester 2008-09 (August 2009)**

Course 205 C: Sustainable Fisheries Development (3 Credits)

Maximum Marks: 70

Duration: 2 ½ hrs

Answer any five of the following questions. All questions carry equal marks.

1. What are the key issues in Coastal Aquaculture development? Suggest strategies for sustainable development of Coastal Aquaculture?
2. Explain the role of Remote Sensing and GIS tools in fisheries resource management.
3. Explain an Integrated Fish Farming System. Discuss any two models supporting sustainable fishery development.
4. Write short note on any three of the following
 - a. Anti Dumping
 - b. Aquatic Biodiversity
 - c. Role of Village Knowledge Center in Aquaculture
 - d. Cage Culture
 - e. Induced Breeding
5. Discuss the concept and principles of HACCP. Give two examples of popularizing HACCP among the farmers.
6. Describe the concept of sustainability and conservation in Aquatic Environment Management with suitable examples.
7. List out the various byproducts of fishery and explain its economic importance.
8. Elaborate Good Management Practices for enhancing fish production in reservoirs citing a case from your area.



**Post Graduate Diploma in Agricultural Extension Management (PGDAEM)
Final Examination (August 2010)**

AEM-205 C: Sustainable Fisheries Development (3 Credits)

Maximum Marks: 70

Duration: 2 ½ hrs

Answer any five questions. All questions carry equal marks

1. Discuss precautions to be undertaken in handling and transportation of fish.
2. What are the advantages and disadvantages of ice for cooling fish?
3. Fish culture can be made profitable by value addition. Justify with example.
4. Discuss various models for assessment of marine fish stocks.
5. Discuss the prospects and problems of freshwater aquaculture.
6. Discuss various non-conventional culture systems in freshwater aquaculture.
7. Write short notes on the following
 - a. Fish passes
 - b. Remote sensing application in Fisheries Resource Management.
 - c. Group approach in Extension.
8. Discuss the concept, advantages and problems of
 - a. Integrated Fish Farming.
 - b. Shrimp Farming Systems.

