GOVERNMENT DEGERR COLLEGE ,AVANIGADDA
B.Voc.(Aquaculture)
Syllabus & Title of the papers(T=
Theory, P= Practical)

SEMESTER-III						
	GENERAL COMPONENTS					
No.	TITLE	Credits	Hours Week	Internal marks	External marks	Total
1	English	3T	4T	25	75	100
2	LIFE SKILL- I	2T	2T	-	50	50
3	LIFE SKILL –II	2T	2T	-	50	50
3	SKILL DEVELOPMENT- I	2T	2T	-	50	50
4	Chemistry	4T	4T	25	75	100
	Chemistry practical – III	1P	2P	25	25	50
5	Zoology	4T	4T	25	75	100
	Zoology practical – III	1P	2P	25	25	50
6	H atcher techonology in Aquatic organisms	3T	4T	25	75	100
	Aqua practical	1P	2P	25	25	50
7	Fishing Methods	3T	4T	25	75	100
	Aqua practical	1P	2P	25	25	50
8	FISH PROCESSING TECHNOLOGY	3T	4T	25	75	100
	Aqua practical	1P	2P	25	25	50
	GRAND TOTAL	31			TOTAL	1000

SEMESTER – III

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,

Hatchery Technology in Aquatic organisms

Syllabus

OBJECTIVES:	LEARNING OUT COME
To understand the current methodology and various techniques of commercial seedproduction. To develop basic knowledge on thespawning, larval rearing and feeding of the commercially important species. Hatchery management stratigies..	Knowledge on the biology and biological cycle of the brackish water & marine cultivable specieswill be learnt. .Knowledge on the brackish water culture practices will be learnt bythe student. Knowledge on the Mari culture will be learnt by the student.

UNIT 1: Carp Hatchery

1.Hatchery management-seed production of carps.
2Hypophysation of Indian major carps and exotic carps, history of hypophysation.
3.Pituitary gland. Collection and preservation of gland. Other ovulating agents. Brood stock management, sexing, dosage for injection, mechanism of ovulation.

UNIT 2: Carp Production System and Seed production of other Fishes

1.Transport of fish seed and brood fishes. Causes of mortality during transport, techniques of transport, open and closed systems, methods of transportation, use of anaesthetics.
2.Bundh breeding, types of bundh breeding techniques. Problems of bundh breeding.

UNIT 3: Seed Production of Crustaceans and Molluscs

1.Seed production and nursery rearing of *Penaeus indicus, Penaeus monodon* and *Macrobrachium rosenbergii.*
2.Hatchery operations of pearl oysters, crabs, lobster.

UNIT 4: Hatchery Management and Design of shrimp hatcheries

1.Site selection
2.Operation and management of maturation section.
3.Operation and management of larval section.
4.Operation and management of post larval section
5.Live feed culture system,Mechanical and biological filters.

Internal Evalution

- **Assignments**
- **Seminars**
- **Quiz**
- **Field Trips**

Suggested Reading

Core reading

1. **Chodar SL Hypophysation in Indian Major Carps**
2. **CMFRI Spl. Bul. Hatchery Operation of Penaied Shrimps**
3. **Venkataraman GS The Cultivation of Algae**
4. **MPEDA Sea Fishes**
5. **CMFRI sp Bul Artificial Reefs and Sea Farming Techniques**

Supplementary Reading

1. **Jhingran VG Fish and Fisheries of India**
2. **Raymond EG Plankton and Productivity of Oceans**
3. **Boney AD Phytoplankton**

Advanced Reading

1. **Pillay, TVR and Kutty MN, Principles and Practices of Aquaculture**
2. **Harvey BJ and Hoar WS, Principle and Practice of Induced Fish Breeding**
3. **Woyanarovich E and Horrath L., The Artificial Propagation of Warm, Water Fishes-Manualfor Extension.**

Other Reference Books:

1. **Pillay, T.V.R. & M.A. Dill. Advances in Aquaculture. Fishing News (Books) Ltd., England,1979.**
2. **Stickney, R.R. Principles of Warm water Aquaculture. John Wiley & Sons Inc.,1979.**
3. **Hepher, B. & Y. Prugim. Commercial Fish Farming. John Wiley & Sons Inc.,1981.**
4. **Boyd, C.E. Water Quality Management for Pond Fish Culture. Elsevier Scientific PublishingCompany, 1982.**
5. **Jhingran, V.G. Fish and Fisheries of India. Hindustan Publishing Corporation India, 1982**
6. **Turcker, C.S. (ed.). Channel Catfish Culture. Elsevier, 1985.**
7. **Bose, A.N. et. Al. Coastal Aquaculture Engineering. Oxford & IBH Publishing Company Pvt.Ltd., 1991.**

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
Hatchery Technology in Aquatic organisms

Theory- Internal **Total Marks: 25**

1Internals (2) Best of Two : 10 marks
2. Assignments (5) : 5x1=5marks
3. Seminar : 5 marks
4. Attendance : 5marks

…….

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,

Hatchery Technology in Aquatic organisms

Aquaculture :Theory- **External Total Marks: 75**

Section –A

Short Answer questions 1 to 8 (Any 5 from given 10) **5×5=25**

Section –B

Essay Questions 9 to 13 (With internal choice) **5×10=50**

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
Question Paper Blue Print

PAPER – VII

Hatchery Technology in Aquatic organisms

BLUE PRINT MODEL FOR EXTERNAL EXAMINATIONS 75Marks

	Section A Short Questions			Section B Essay Questions		
	NO OF QUESTIONS	MARKS ALLOTED FOREACH QUESTION	TOTAL MARKS	NO OF QUESTIONS	MARKS ALLOTED FOREACH QUESTION	TOTAL MARKS
UNIT –I	02	5	10	02	10	20
UNIT-II	02	5	10	02	10	20
UNIT-III	02	5	10	02	10	20
UNIT-IV	02	5	10	02	10	20

Section-A: Questions numbers 1 to 8

Out of 10 Questions 5 has to be answered.

Section-B: Questions numbers 9 to 13,

Internal Choice (either / or) and 5 Questions has to be answered.

1. **ShortQuestions : 5 x 5 = 25**
2. **EssayQuestions : 5 x 10 = 50**

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
MODEL QUESTION PAPER
TITLE: HATCHERY TECHNOLOGY IN AQUATIC ORGNISMS,

Time: 3 hrs. **Marks: 75**

PART – 1

Note: Answer any FIVE of the following , Draw labeled diagrams wherever necessary **5x5=25**

SECTION- A

1. **Seed production of carps**
2. **Closed carp seed transportation**
3. **Techniques of transportation of seed**
4. **Transport of breeders**
5. **Seed production of molluscs**
6. **Quarantine management**
7. **Mechanical filters**
8. **Any two types of live feeds**

II. Answer any FIVE of the following, Draw labeled diagrams wherever necessary **5x10=50**
5x10=50

9. **Give an account of Hypophysation technique in Indian major carps.**

   (Or)
   Explain the brood stock management in Indian major carps.
10. **What is the Bundh breeding? Explain the types of bundh breeding and theirproblems.**
    (Or)
    Explain the tranc port of fish seed & brood fish
11. **Give an account on shrimp seed production.**

    (Or)
    Describe the hatchery operations of pearl oyster
12. **Explain the quarantine and disease management in hatcheries**
    (Or)
    Describe the shrimp hatchery management.
13. **Collection and preservation of pituitary gland.**
    (Or)
    Describe the live feed culture system in hatchery

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
PRACTICAL SYLLABUS
TITLE: HATCHERY TECHNOLOGY IN AQUATIC ORGNISMS, COR

I. Identification of **phytoplanktons**

A. Diatoms
1. *Coscinodiscus* sp.
2. *Chaetoceros* sp.
3. *Biddulphia* sp.
4. *Skeletonema* sp.
5. *Leptocylindrus* sp.
6. *Pleurosigma* sp.
7. *Thalassionema* sp.
8. *Thalassiothix* sp.
9. *Asterionella* sp.
10. *Amphora* sp.

II. Identification of **zooplankton**

1. Copepods
2. Amphipods
3. Luciferans
4. Ephasids
5. Mysids
6. Zoea larvae
7. Megalopa larvae
8. Pteropods
9. Ostracoda
10. Cladocerans

III. Biology and Identification of fresh **water prawns (Scampi)**

1. *Macobrachium rosenbergii*
2. *M. malcolmsonii*

IV. Biology and Identification of **shrimps (Marine/Brackish water)**

1. *Penaeus monodon*
2. *P. indicus*
3. *Litopenaeus vennamei*

V. Biology and Identification of **crabs**

1. *Scylla serrata*
2. *S. oceanica*
3. *S. caribdis*

VI. Dissections

A. Mounting of the prawn appendages
B. Digestive system of prawn
C. Nervous system of prawn
D. Eye stalk ablation in Prawn

GOVERNMENT DEGERR COLLEGE ,AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
PAPER – VII
HATCHERY TECHNOLOGY IN AQUATIC ORGNISMS

Practical's – External:

Time: 2 hrs. **Total Marks: 25**

1. Identification of given sample : 6 marks
2. Identification of given sample : 6 marks
3.Identification (2) : 5 marks (2x2 1/2)
4.Record : 5 marks
5.Viva voce : 3 marks

Practical's – Internal : **Total Marks: 25**

1.Assessment including viva voce : 6 marks
2.Record : 6 marks
3.Field note book : 5 marks
4.Project : 8 marks

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
PAPER – VII

Time: 2hrs **Max.Marks:25**

PRACTICAL MODEL PAPER

I. **10marks**
II. `Identify thefollowingspotters **10marks**
III. Record **5marks**

****

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
Fishing Methods

Hours 4 **Credits 4**

OBJECTIVES:	LEARNING OUT COME
To develop basic knowledge aboutvarious crafts To understand operation of variousfishing gears To create awareness about fishfinding devices.	Student will learn the knowledge on the crafts. Mechanism involved in the operation of the fishing gear will be learnt by the student. Tools for the identification of fishery resources will be learnt by the student.

UNIT 1: Inland Fishing Crafts and Gears

1. **Introduction, Different types of fishing crafts and gears in India; Crafts-Rafts, Boats; Gears-Trap net, Hand net, Drag net, fixed net and miscellaneous types.**
2. **Boat building materials - wood, steel, FRP, ferro-cement, aluminum etc.**

UNIT 2: Marine Fishing Crafts and Gears

1. **Introduction, Crafts-crafts of the east coast and west coast. Gears-Fixed nets, Trawl nets, shore seines, drift nets, cast nets, trap nets, dip nets (scoop nets), long line and hoocks.**
2. **Factors affecting the design of fishing gears and fish catching methods. Fishing accessories.**

UNIT 3: Active Fishing Gears: Passive and Traditional Fishing Gears

1. **Destructive and Prohibited fishing practices, fishing methods like electrical fishing, poisoning and use of dynamites.**
2. **Introduction to netting materials - natural and synthetic fishing gear materials. Yarn numbering systems.**

UNIT 4: Fish Finding Devices and Conservation.

1. **Introductory information on echo-sounder, sonar, net sonde, global positioning systems, remote sensing.**
2. **Potential fishing zones (EEZ) Turtle Exclusion Devices (TED) - By-catch Reduction Devices (BRD).**

Internal Evalution

- **Assignments**
- **Seminars**
- **Quiz**
- **Field Trips**

Suggested reading

Core reading

1. Boopendranath, M.R., Meenakumari, B., Joseph, J., Sankar, T.V., Pravin,P., and Edwin, L. (Eds.) 2002, Riverine and ReservoirFisheries of India, Society of Fisheries Technologists (India),Cochin.

2. Brandt. A. v. (1984) Fish catching methods of the world. Fishing News Books Ltd., London: 432 p.

3. George V.C. (1971) An account of the inland fishing gears and methods of India. Spl. Bull.No.1.CIFT

4. Hameed, M.S. and Boopendranath, M.R. (2000) Modern Fishing Gear Technology, DayaPublishing House, Delhi:186 p.

5. Klust, G. (1982) Netting materials for fishing gear, FAO Fishing Manual, Fishing News Books(Ltd)., Farnham, 192p.

6. Sainsbury, J.C. (1986) Commercial fishing methods- An introduction to vessels and gear.Fishing News Books, Oxford: 208pp

7. Sreekrishna, Y. and Shenoy L. (2001) Fishing gear and craft technology, Indian Council ofAgricultural Research, New Delhi.

Supplementary & advanced reading

1. Gulland, J.A.1974, Guidelines for Fishery Management, IOFC Dev. 74-36 FAO Rome

2. FAO (1997) Fisheries management. FAO Technical Guidelines for Responsible Fisheries. No. 4. Fishery Resources Division and Fishery Policy and Planning Division, FAO. Rome: 82p.

3. FAO (1995) Code of Conduct for Responsible Fisheries, FAO, Rome: 41 p.

4. FAO (1997) Inland fisheries. FAO Technical Guidelines for Responsible Fisheries. No. 6Fisheries Department, FAO, Rome: 36 p.

Other Reference Books:

1. **Jhingran, V.G. 1993. Fish and fisheries of India. Hindustan Publishing Corporation(India), New Delhi.**
2. **Ricker, W.E. 1984. Methods for assessment of fish production in freshwaters. BlackwellPublications.**
3. **Srivastava, C.B.L., 1985. Textbook of Fishery Science and Indian Fisheries. KutubMahal Publications, Allahabad.**
4. **S.S. Khanna. An introduction to fishes**
5. **Kurian, C.V. and Sebastian, V.O. 1986. Prawns and prawn fishery of India. HindustanPublishing Corporation (India), New Delhi.**
6. **Yadav, B.N. Fish and Fisheries. Daya Publishing House.**

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
PAPER – VIII
Fishing Methods

Theory- Internal **Total Marks: 25**

1Internals (2) Best of Two : 10 marks
2. Assignments (5) : 5x1=5marks
3. Seminar : 5 marks
4. Attendance : 5marks

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
PAPER – VIII
Fishing Methods

Aquaculture :Theory- **External Total Marks: 75**

Section –A

Short Answer questions 1 to 8 (Any 5 from given 10) 5×5=25

Section –B

Essay Questions 9 to 13 (With internal choice) 5×10=50

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
Question Paper Blue Print
PAPER – VIII

Fishing Methods

BLUE PRINT MODEL FOR EXTERNAL EXAMINATIONS 75Marks

	Section A Short Questions			Section B Essay Questions		
	NO OF QUESTIONS	MARKS ALLOTED FOREACH QUESTION	TOTAL MARKS	NO OF QUESTIONS	MARKS ALLOTED FOREACH QUESTION	TOTAL MARKS
UNIT –I	02	5	10	02	10	20
UNIT-II	02	5	10	02	10	20
UNIT-III	02	5	10	02	10	20
UNIT-IV	02	5	10	02	10	20

Section-A: Questions numbers 1 to 8

Out of 10 Questions 5 has to be answered.

Section-B: Questions numbers 9 to 15,

Internal Choice (either / or) and 5 Questions has to be answered.

1. **ShortQuestions : 5 x 5 = 25**
2. **EssayQuestions : 5 x 10 = 50**

Total : 75 Marks

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
MODEL QUESTION PAPER

Time: 3 hrs. **TITLE: FISHING METHODS,** **Marks: 75**

Answer any five Questions **5x5=25**

1. **Mechanized boat**
2. **Fishing accessories**
3. **Modern fishing gears**
4. **Traditional fishing gears**
5. **Prohibited fishing practices**
6. **Electrical fishing**
7. **Remote sensing**
8. **Any two types of carfts.**

Answer any <u>five</u> questions choosing at least one question from each section **5x 10 = 50**

9 Give an account of the different types of fishing crafts in India? Explain thetraditional methods.

(Or)

Give an account of boat building materials .

10 Explane carfts and gares of the eat cost & west cost .

(Or)

Explain the factors affecting the design of fishing gears and methods.

11 What is netting material? Explain the natural and synthetic fishing gear materials.

(Or)

Explain the distructive and prohibited fishing practices

12 Describe the modern fishing gears.

(Or)

Explain the design and operation of different types of fishing gears.

13 What is the conservation? Explain the potential fishery zones.

(Or)

Explain the P.F.Z & T.E.D

GOVERNMENT DEGERR COLLEGE
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B.Voc.(Aquaculture)
Semester-III,
PRACTICAL SYLLABUS
TITLE: FISHING METHODS

Max. Marks: 50

Fishing Crafts and Gears in Lakes of India

1. Fishing crafts
   i. Dingi
   ii. Coracle
   iii. Dhoni
   iv. Plank built boats
   v. Thermocol raft
2. Fishing gears
   i. Hook and line
   ii. Box trap
   iii. Tubular trap
   iv. Bag net
   v. Hand lift net
   vi. Cast net
   vii. Drag Net
   viii. Gill net
3. **Crafts and Boats:**
   - **A. Marine Fishing Crafts:**
     - **I. Crafts used on the East Coasts: (1) Catamaran, (2) Masula Boat, (3) Tuticorin Boats or Fishing Luggers:**
     - **II. II. Crafts used on West Coasts: (1) Dugout Canoes (2) Plank-Built Canoes , (3) Outrigger Canoes:**
4. **fishing in rivers:**
   i. **Plank-Built Boat:**
   ii. **Kulnawa:**

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
PAPER – VIII
FISHING METHODS,

Practical's – External:

Time: 3 hrs. **Total Marks: 25**

1. Identification of given sample : 6 marks
2. Identification of given sample : 6 marks
3.Identification (2) : 5 marks (2x2 1/2)
4.Record : 5 marks
5.Viva voce : 3 marks

Practical's – Internal : Total Marks: 25
1. Identification of given sample : 6 marks
2. Identification of given sample : 6 marks
3.Identification (2) : 5 marks (2x2 1/2)
4.Record : 5 marks
5.Viva voce : 3 marks

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
FISHING METHODS,

Time: 2hrs **Max.Marks:25**

PRACTICAL MODEL PAPER

I. `Identify 10marks
II `Identify 10marks
III Record 5marks

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` GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III
PAPER – IX
FISH PROCESSING TECHNOLOGY

OBJECTIVES:	LEARNING OUT COME
To develop basic knowledge aboutvarious crafts **To understand operation of variousfishing gears** **To create awareness about fishfinding devices.**	➢ **Student will learn the knowledge on the crafts.** ➢ **Mechanism involved in the operation of the fishing gear will be learnt by the student.** ➢ **Tools for the identification of fishery resources will be learnt by the student.**

FISH PROCESSING TECHNOLOGY

Unit 1: Introduction:

1-1 Principles of fish preservation. Importance of hygiene and sanitation in fish handling.
1-2 Quality of water and ice in fish handling and processing. Preparation of ice.
1-3 Different types of ice used in the seafood industry and their merits.

Unit 2: Freezing and Canning:

2-1 Fundamental principles involved in chilling and freezing of fish and fishery products.
2-2 Various freezing methods. Freezing of shrimps and fishes.
2-3 Changes during the cold storage of fish and fishery products. Principles involved in canning of fish.
processing.

Unit 3: Drying, Smoking and Freeze-drying:

3-1 Principles of smoking, drying and salting of fish, factors affecting drying. Traditional drying / curing methods. Different types of drying.
3-2 Drying of fish and prawns. Packing and storage of dried products. Spoilage of dried products.
3-3 Preventive measures. Standards for dry fish products. Cold smoking. Principles of freeze
drying.
preservation by irradiation and modified atmospheric storage.

Unit 4: Packing, Cold Storage and Export of Fishery Products:

4-1 Functions of packing. Different types of packing materials and its quality evaluation.
4-2 Packing requirements for frozen and cured products. Statutory requirements for packing. Labeling requirements.
4-3 Different types of cold storages. Insulated and refrigerated vehicles.

Text books:

1. K.Gopakumar, Fish Processing Technology, ICAR, New Delhi
2. T.K. Govindan, Fish Processing Technology Oxfor & IBH Publication Co.
3. K.K. Balachandran Fish Canning – Principles & Practices.
4. Borgstrom,G. Fish as Food.
5. K.K. Balachandran, Postharvest Technology in Fish and Fishery Products. 6. Moorjani,M.V.
Fish Processing in India.
7. Connell,J.J. Advances in Fishery science and Technology.
8. CIFT. Manual of Quality Control in Fish and Fishery Products. 9. Gopakumar,K. Fish Packaging Technology

Reference Books:

1. A.M.Martin, Fisheries – Processing Chapman & Hall, Madras 2. Ed.G.M.Hall – Fish Processing Technology Chopra & Hall. Mad

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III
PAPER – IX
FISH PROCESSING TECHNOLOGY

Theory- Internal **Total Marks: 25**

1Internals (2) Best of Two : 10 marks
2. Assignments (5) : 5x1=5marks
3. Seminar : 5 marks
4. Attendance : 5marks

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III
FISH PROCESSING TECHNOLOGY

Aquaculture :Theory- **External Total Marks: 75**

Section –A

Short Answer questions 1 to 8 (Any 5 from given 10) **5×5=25**

Section –B

Essay Questions 9 to 13 (With internal choice) **5×10=50**

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III
PAPER – IX
Question Paper Blue Print
FISH PROCESSING TECHNOLOGY

BLUE PRINT MODEL FOR EXTERNAL EXAMINATIONS 75Marks

	Section A Short Questions			Section B Essay Questions		
	NO OF QUESTIONS	MARKS ALLOTED FOREACH QUESTION	TOTAL MARKS	NO OF QUESTIONS	MARKS ALLOTED FOREACH QUESTION	TOTAL MARKS
UNIT –I	02	5	10	02	10	20
UNIT-II	02	5	10	02	10	20
UNIT-III	02	5	10	02	10	20
UNIT-IV	02	5	10	02	10	20

Section-A: Questions numbers 1 to 8

Out of 10 Questions 5 has to be answered.

Section-B: Questions numbers 9 to 13,

Internal Choice (either / or) and 5 Questions has to be answered.

1. **ShortQuestions : 5 x 5 = 25**
2. **EssayQuestions : 5 x 10 = 50**

Total : 75

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III
PAPER – IX
MODEL QUESTION PAPER
. TITLE: **FISH PROCESSING TECHNOLOGY**

I. Answer any FIVE of the following : **5x5=25**
Draw labelled diagrams wherever necessary

1.
2.
3.
4.
5.
6.
7.
8.

II. Answer any FIVE of the following : **5x10=50**
Draw labelled diagrams wherever necessary

9.
a)
OR
b)

10.
a)
OR
b)

11.
a)
OR
b)

12.
a)
OR
b)

13.
a)
OR
b)

GOVERNMENT DEGERR COLLEGE
AVANIGADDA
B.Voc.(Aquaculture)
Semester-III,
PRACTICAL SYLLABUS
FISH PROCESSING TECHNOLOGY

FISH PROCESSING TECHNOLOGY

Title : Fish Processing Technology and Quality Control

Experiments:

1. Determination of moisture content in fish and fishery products
2. General description –freezing
3. Processing shrimp
4. Filleting of fish
5. Drying of fish
6. Organoloptic analysis of fish
7. Preparation of fishery by products
8. Preparation of shark fin rays fish maws, chitin, fish wafer
9. Fish pickling
10. Value added fishery products, fish curry, cutlets fish finger.
11. Preparation of surimi

Filed visit:

1. Visit to sea food pre-processing plants 2. Visit to fish processing plants

PRESCRIBED BOOK(S):

1. Adivi Reddy sv 1997. An introduction to extension education. Oxford & IBH Co.Pvt. Ltd. New Delhi
2. Jayaraman R 1996. Fisheries Economics. Tamilnadu Veterinary and Animal Science University. Tuticorn
3. Subba Rao N 1986. Economics of Fisheries. Daya publishing house, Delhi

GOVERNMENT DEGERR COLLEGEAVANIGADDA
B.Voc.(Aquaculture)
Semester-III

Practical's – External:

Time: 2 hrs. **Total Marks: 25**

1. Identification of given sample : 6 marks
2. Identification of given sample : 6 marks
3.Identification (2) : 5 marks (2x2 1/2)
4.Record : 5 marks
5.Viva voce : 3 marks

Practical's – Internal : **Total Marks: 25**

1.Assessment including viva voce : 6 marks2.Record : 6 marks
3.Field note book : 5 marks
4.Project : 8 marks

GOVERNMENT DEGERR COLLEGEAVANIGADDA
B.Voc.(Aquaculture)

Time: 2hrs **Max.Marks:25**

PRACTICAL MODEL PAPER

I. 1 0 marks

I. `Identify 10marks

II. Record 5marks

*****

B.JAYASAI
Lecturer in Aquacuture
9177678905