

Chittagong Veterinary and Animal Sciences University, Chittagong

Faculty of Fisheries

Year -01, Semester-02, Final Examination' 2015

Course No: CSC-102(T), Course Title: Computer Science (Theory)

Total Marks: 70, Time: 3 hour

Answer any 04 (four) questions from each section where question 1 & 6 are compulsory. The figures in the right margin indicate full mark. Use separate answer script for each section.

Section-A

1. a) Add the following binary numbers (i) $100101_{(2)}$ and (ii) $10100_{(2)}$. 1.5
b) Calculate the differences: (i) $100101001 - 11010101$. 1.5
c) What do you mean by 1's complement and 2's complement method? 2.0
2. a) Write down the characteristics of the following types of computer: (i) Workstation 2×3=6.0
(ii) Super computer (iii) Desktop computer
b) Write short note on ALU. 4.0
3. a) What do you mean by information? Explain the four phases of information processing cycle. 6.0
b) Write down some major distinctions between storage and memory. 4.0
4. a) Define Operating System (OS). 2.0
b) What are the primary functions that an operating system performs? 4.0
c) Briefly explain the difference between CLI and GUI. 4.0
5. a) What is network? List some benefits of using a computer network. 5.0
b) What is internet? Are web and internet the same? Justify your answer. 3.0
c) Write the difference between Data bus and Address bus. 2.0

Section-B

6. a) Convert to hexadecimal from $11010110111_{(2)}$. 2.5
b) Convert to decimal from $101010011_{(2)}$. 2.5
7. a) Define software. Briefly explain the system software and application software with examples. 6.0
b) List some common input and output devices. 4.0
8. a) What is network topology? Discuss shortly three basic topologies (Bus, Ring and Star). 6.0
b) Explain how computer data travels over telephone lines. 4.0
9. a) Define computer virus. Write down some harmful affects of computer virus. 6.0
b) Explain the function of cache memory during data processing. 4.0
10. a) What do you mean by database management system (DBMS)? Briefly explain major operations of DBMS. 5.0
b) Write down the advantages and disadvantages of high and low level languages. 5.0

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Chittagong Veterinary and Animal Sciences University, Chittagong

Faculty of Fisheries

B. Sc. Fisheries (Hons.) Year -01, Semester-02 (July-December); Final Examination, 2015

Course Code: ASS-102(T), Course Title: Aquatic Soil Science (Theory)

Full Marks: 70; Time: 3 hour

Answer any 05 (five) questions from each section. Figures in the right margin indicate full marks. Use separate answer script for each section.

Section-A

1. a. What are the functions of soil? 2.0
b. Write down the importance of studying "Soil Science" as a fisheries student. 2.0
c. Briefly describe the soil processes. 3.0
2. a. Define "soil texture" and "soil textural class". 1.0
b. Show the soil separates and their diameter ranges in a tabular form. 2.0
c. Discuss the suitability of soil textural classes for aquaculture. 4.0
3. a. What is the importance of cation exchange in fisheries? 2.0
b. What are the functions of plant nutrients? 2.0
c. How to enhance nutrients of a waterbody? 3.0
4. a. How the bottom mud of a pond can be managed? 2.0
b. Write down importance of probiotics used in bottom mud. 2.0
c. Describe the influence of soil-water interaction in soil productivity. 3.0
5. a. Sandy soils have the lowest water retention - why? 1.0
b. Write down the advantages and disadvantages of sandy soil for aquaculture. 3.0
c. How can you manage sandy soils in aquaculture? 3.0
6. a. What do you understand by "Bio-turbation"? 1.0
b. Draw and label five "Bio-turbators" of pond. 2.0
c. "The chemical effects of bio-turbation are highly inter-linked"- discuss the statement. 4.0
7. a. What are soluble salts? 1.0
b. What do you mean by saline, sodic and saline sodic soils? ~~2.0~~ 3.0
c. Mention the general reclamation techniques of different salt affected soils. 3.0

Section-B

8. a. What is aquatic soil science? 1.0
b. What are the components of soil? 2.0
c. Write down the factors affecting soil formation. 4.0
9. a. Differentiate between "soil clays" and "humus". 2.0
b. What are the unique features of cation exchange capacity (CEC)? 2.0
c. Give a diagrammatic feature of the cation and anion exchange by plant root hair. 3.0
10. a. What is acid sulphate soils (ASS)? 2.0
b. How ASS is formed? 2.0
c. Discuss balanced fertilization of three essential nutrients mentioning their deficiency symptoms and fertilizer sources. 3.0
11. a. What do you mean by soil biota? 1.0
b. Classify soil microorganisms. 3.0
c. What are the optimum conditions for microbial growth in soil? 3.0
12. a. Clay soils have the highest water retention - why? 2.0
b. How to solve fertility problems in sandy soil? 2.0
c. Write down the significance of soil micro organisms in nutrient regeneration. 3.0
13. a. "Controlling harmful microbes may not always bring better results"- justify the statement. 2.0
b. Write down the actions of bacteria and fungi on soils. 3.0
c. How beneficial microbes in soils can be increased? 2.0
14. a. Define sandy soil and very sandy soil. 2.0
b. What are the basic differences between productivity and fertility? 2.0
c. How the alteration of physical properties of soil can affect the normal development of aquaculture? 3.0

Chittagong Veterinary and Animal Sciences University, Chittagong

Faculty of Fisheries

B. Sc. Fisheries (Hons.) Year -01, Semester-02 (July-December); Final Examination, 2015

Course Code: WQM-102(T), Course Title: Water Quality Management (Theory)

Full Marks: 70; Time: 3 hour

Answer **any 05 (five)** questions from each section. Figures in the right margin indicate full marks. Use separate answer script for each section.

Section-A

1. a. Why is water quality management important for aquaculture? 2.0
b. What are major parameters used in water quality management? 3.0
c. Write down the acceptable range of water quality parameters required in aquaculture. 2.0
2. a. What are the sources of turbidity in waterbody? 2.0
b. How turbidity in fish pond can be controlled? 3.0
c. How will you measure the water quality deterioration? 2.0
3. a. Why does water pH value fluctuate from morning to evening? 2.0
b. What do you know different forms and toxicity of ammonia in aquaculture? 2.0
c. How will you manage ammonia toxicity in fish pond? 3.0
4. a. What are the possible sources of DO in a culture pond? 2.0
b. How can you enrich dissolved oxygen in oxygen depleted pond? 2.0
c. How and why anoxic condition is harmful for culture species? 3.0
5. a. What do you mean by eutrophication and biomagnification? 2.0
b. Why eutrophication is harmful for culture species? 2.0
c. What are the major causes of pollution in waterbody? 3.0
6. a. Why is nitrogen fertilizer less important than phosphorus fertilizer in fish pond? 2.5
b. Discuss effects of over fertilization on pond water quality. 2.5
c. Note down different liming agents and explain which one is best to use in aquaculture? 2.0
7. a. Which form of iron is more harmful for fish culture? Explain. 2.0
b. How do you solve iron problem in fish hatchery? 2.0
c. How does excess iron affect fish? 3.0

Section-B

8. a. Write down the significance of water depth and light to maintain water quality in fish pond. 2.0
b. How does coagulant work to control clay turbidity in water? 2.0
c. How will you maintain good water quality in fish hatchery? 3.0
9. a. How will you identify and solve H₂S gas problem in pond? 2.0
b. When pond should not be fertilized? 2.0
c. What are the roles of liming in aquaculture? 3.0
10. a. What are the effects of high pH on aquatic life? 2.0
b. Explain the relationship of pH and total alkalinity of water. 2.0
c. How will you maintain acceptable range of pH in fish pond? 3.0
11. a. What are the characteristics of persistent organic pollutants (POPs)? 2.0
b. List down the major water pollutants with example. 2.0
c. What are the effects of water pollution on aquatic animals? 3.0
12. a. What are the site selection criteria for cage culture? 2.0
b. What are mechanisms of water quality maintenance in recirculatory aquaculture system? 2.0
c. Point out criteria to be considered for successful integrated culture system. 3.0
13. a. Write down standard value of different water quality parameters of a shrimp hatchery. 2.0
b. What are the major water quality problems in a coastal aquaculture pond/gher in Bangladesh? 2.0
c. Briefly describe the mitigation measures of the effects of coastal aquaculture. 3.0
14. Write short on **any two (2)** of the following: 3.5x2 = 7
 - a. Biological Oxygen Demand (BOD).
 - b. Significance of temperature to produce fish.
 - c. Turbidity affect in aquaculture.
 - d. Pond fertilization.

Chittagong Veterinary and Animal Sciences University, Chittagong
Faculty of Fisheries

B. Sc. Fisheries (Hons.) Year -01, Semester-02 (July- December), Final Examination, 2015

Course Code: LAN-102(T), Course Title: Communicative English

Full Marks: 35, Time: 2 hour

Answer all questions from each section. The figures in the right margin indicate full mark. Use separate answer scripts for each section.

Section-A

1. Use the right form of verbs in the following sentences: 5.0
 - a. It's been long since I (visit) my little village.
 - b. If she (know) that he was coming, she would have come to the station.
 - c. My father is used to (run) for an hour every morning.
 - d. If I (be) you, I would agree to her proposal.
 - e. You had better (study) more to stand first in the exam.
2. Fill up the blanks with appropriate prepositions 5.0
 - a. I have no prejudice foreigners.
 - b. The child is found sweets.
 - c. I have great respect learning.
 - d. The teacher impressed us the value of discipline.
3. Write a letter to the editor to any English daily newspaper about the requirement of foot over-bridge in front of CVASU. 7.0

Section-B

4. Conversion of indirect speech into direct speech 5.0
 - a. The Major said that it gave him great pleasure to be there that evening.
 - b. It's said that he would go as soon as it was possible.
 - c. He proposed that they should wait for the award.
 - d. He inquired whether his name was not Ahmed.
 - e. She asked how she, a girl who could not ride or use sword or lance would be of any help, rather would she stay at home and spin beside her dear mother.
5. Complete the following sentences: 5.0
 - a. He always carries umbrella as.....
 - b.with a view to completing higher studies.
 - c. As Bangladesh is playing good cricket.....
 - d. They are moving to a new city since.....
 - e. You will never keep fit unless.....
6. Read the passage carefully and answer the questions that follow: 8.0

Right now, I am looking at a shelf full of relics, a collection of has-beens, old timers, antiques, fossils. Right now I am looking at a shelf full of books. Yes, that's right. If you have some spare cash (the going rate is about \$89) and are looking to enhance your reading experience, then I highly suggest you consider purchasing an e-reader. E-readers are replacing the books of old, and I welcome them with open arms (as you should).

If you haven't heard of an e-reader and don't know what it is, then please permit the following explanation. An e-reader is a device that allows you to read e-books. An e-book is a book-length publication in digital form, consisting of text, images, or both, and produced on, published through, and readable on computers or other electronic devices. Sometimes the equivalent of a conventional printed book, e-books can also be born digital. The Oxford Dictionary of English defines the e-book as "an electronic version of a printed book," but e-books can and do exist without any printed equivalent.

So now you know what an e-reader is. But you still may be wondering why they put printed books to shame. E-readers are superior to printed books because they save space, are environmentally friendly, and provide helpful reading tips and tools that printed books do not.

E-readers are superior to printed books because they save space. The average e-reader can store thousands of digital books, providing a veritable library at your fingertips. What is more, being the size and weight of a thin hardback, the e-reader itself is relatively petite. It is easy to hold and can fit in a pocketbook or briefcase easily. This makes handling ponderous behemoths such as *War and Peace*, *Anna Karenina* and *Les Misérables* a breeze. Perhaps the only drawback to the space-saving aspect of an e-reader is that it requires you to find new things to put on your shelves.

In addition, e-readers are superior to books because they are environmentally friendly. The average novel is about 300 pages long. So, if a novel is printed 1000 times, it will use 300,000 pieces of paper. That's a lot of paper! If there are about 80,000 pieces of paper in a tree, this means it takes almost 4 trees to make these 1000 books. Now, we know that the average bestseller sells about 20,000 copies per week. That means that it takes over 300 trees each month to sustain this rate. And for the super bestsellers, these figures increase dramatically. For example, the Harry Potter book series has sold over 450 million copies. That's about 2 million trees! Upon viewing these figures, it is not hard to grasp the severe impact of printed books on the environment. Since e-readers use no trees, they represent a significant amount of preservation in terms of the environment and its resources.

Finally, e-readers are superior to books because they provide helpful reading tips and tools that printed books do not. The typical e-reader allows its user to customize letter size, font, and line spacing. It also allows highlighting and electronic bookmarking. Furthermore, it grants users the ability to get an overview of a book and then jump to a specific location based on that overview. While these are all nice features, perhaps the most helpful of all is the ability to get dictionary definitions at the touch of a finger. On even the most basic e-reader, users can conjure instant definitions without having to hunt through a physical dictionary.

It can be seen that e-readers are superior to printed books. They save space, are environmentally friendly, and provide helpful reading tips and tools that printed books do not. So what good are printed books? Well, they certainly make nice decorations.

- A. As used in paragraph 1, it can be inferred that 'relics', 'has-been', 'old-timers', 'antiques', 'fossils' are all words describe something
- ancient
 - useless
 - outdated
 - pathetic
- B. According to the author, e-books
- were all once printed books
 - may be "born digital"
 - are able to display images
- I only
 - I and II only
 - II and III only
 - I, II and III
- C. As used in paragraph 5, which is the best synonym for "sustain????"
- maintain
 - allow
 - enforce
 - yield
- D. According to the author, which of the following reading tips and tools are offered by the e-reader?
- line spacing customization
 - the ability to quickly jump to the end of a book
 - access to an online dictionary at the touch of a finger
- I only
 - I and II only
 - II and III only
 - I, II and III
- E. Why the author does thinks that e-books are environmentally friendly?
- F. What is the disadvantage of e-books space-saving nature?
- G. Fill in the blanks:
Printed books.....as much facilitates as e-books.
- H. True or false? if false, give the correct information.
'E-readers can hold thousands of printed books'.

Chittagong Veterinary and Animal Sciences University, Chittagong

Faculty of Fisheries

B. Sc. Fisheries (Hons.) Year -01, Semester-02 (July-December), Final Examination, 2015

Course Code: EME-102(T), Course Title: Estuarine and Marine Ecology (Theory)

Full Marks: 70, Time: 3 hour

Answer any 05 (five) questions from each section. Figures in the right margin indicate full marks. Use separate answer script for each section.

Section-A

1. a) What characteristics will you consider to define Estuary? 2.0
b) Write down the ecological roles of estuaries. 2.0
c) Classify estuary on the basis of geomorphology. 3.0
2. a) What is the status of biodiversity of estuarine organisms comparing adjacent waterbodies? 2.5
b) Draw and describe common habitats found in coastal areas. 4.5
3. a) Differentiate between coastal and oceanic ecosystem. 2.0
b) What is innocent passage? 1.0
c) Illustrate bottom topography of sea. 4.0
4. a) What is coral bleaching? 2.0
b) What are the factors responsible for coral bleaching? 2.0
c) Discuss the management strategies for coral conservation in Bangladesh. 3.0
5. a) What are the major groups of mammals found in the ocean? 2.0
b) Classify marine Phytoplankton. 2.0
c) Describe briefly different types of adaptations seen in marine organisms. 3.0
6. a) Draw and label earth surface zones on the basis of latitude circle. 2.0
b) Differentiate between torrid and temperate zone. 2.0
c) Write down the geographical distribution of Tuna fish. 3.0
7. Write short note on **any two** of the followings: 2×3.5= 7.0
a) Marine Benthic Community
b) Energy flow dynamics
c) EEZ

Section-B

8. a) Describe physical and chemical properties of an estuary. 3.0
b) Develop a morphological model of an estuary considering salinity. 4.0
9. a) Differentiate between pelagic and demersal fishes. 2.0
b) Define 'trophic structure' and 'trophic level'. 2.0
c) Briefly describe estuarine food web. 3.0
10. a) Describe 'continental shelf' and 'oceanic trench' with figure. 3.0
b) Enumerate and sketch oceanic divisions. 4.0
11. a) What is estuarine circulation? 1.0
b) Mention main driving forces responsible for estuarine circulation. 2.5
c) Describe circulation modes with necessary figure. 3.5
12. a) 'Body types of bottom fishes vary considering species'- Explain. 2.0
b) Differentiate between osmoconformer and osmoregulator. 2.0
c) Fishes are of various types regarding migration- Describe with examples. 3.0
13. a) How can you distinguish between seaweed and seagrass? Write two commercially important species names of each. 4.0
b) What are the problems and prospects of seaweed culture in Bangladesh? 3.0
14. Write short note on **any two** of the followings: 2×3.5= 7.0
a) Atoll
b) Aquatic Ecosystems
c) Salt Marsh

Chittagong Veterinary and Animal Sciences University, Chittagong

Faculty of Fisheries

B. Sc. Fisheries (Hons.) Year -01, Semester-02 (July-December), Final Examination, 2015

Course Code: HPF-102(T); Course Title: Handling and Preservation of Fish (Theory)

Full Marks: 70; Time: 3 hour

Answer any 05 (five) questions from each section. Figures in the right margin indicate full marks. Use separate answer script for each section.

Section-A

1. a. Why knowledge of chemical composition of fish is important to fish processor? 2.0
b. Write down the functions of vitamin and minerals in fish. 2.0
c. Describe in details the physical structure of fish muscle. 3.0
2. a. What do you mean by good practices in handling by raw material on the board of fishing vessel? 2.5
b. What are the different methods of chilling? 2.0
c. Write down advantages and disadvantages of quick and slow freezing. 2.5
3. a. Differentiate between sarcoplasmic and myofibrillar protein. 2.0
b. Write down the causes of fish spoilage. 2.0
c. Mention the methods of delaying microbial activity during onboard handling. 3.0
4. a. Distinguish between processing and preservation. 2.0
b. Why freezing of fish is considered as a long term fish preservation method? 2.0
c. Write down the principles of fish preservation. 3.0
5. a. Define semi-perishable food. 1.0
b. Draw a layout of shrimp processing plant. 4.5
c. How ice retards fish spoilage? 1.5
6. a. Write down the different methods of live fish transportation. 2.0
b. What are the factors affecting during transportation of live fish? 3.0
c. Describe briefly the major constraints in live fish transportation. 2.0
7. a. What is rigor? 1.0
b. Mention different stages of rigor mortis. 2.0
c. Give a brief account on the factors affecting the rigor mortis in fish. 2.0
d. What do you mean by 'thaw rigor' and 'gapping'? 2.0

Section-B

8. a. Define sorting and grading of fish. 1.0
b. "During fish freezing more than 50% heat has to be removed at thermal arrest period"- explain the statement. 4.5
c. Draw and label a typical fish freezing curve. 1.5
9. a. Mention five traditional packaging materials used in fish processing. 2.0
b. What type of packaging materials are used in wholesale market? 2.0
c. Write down the functions of packaging materials. 3.0
10. a. Define asepsis and water activity (a_w). 2.0
b. "Every 1 hour delay in icing reduces 1 day shelf-life of fish"- justify your answer. 3.0
c. Write a short note on bactericidal ice. 2.0
11. a. Define irradiation. 1.0
b. Discuss briefly about the effects of irradiation on fish. 4.0
c. Define CSW and RSW. 2.0
12. a. Define thermal arrest period. 1.0
b. Give a schematic diagram of working layout in a fish trawler. 4.0
c. Describe the advantages and disadvantages of bulking and shelving stowage methods. 2.0
13. a. Write a short note on NPN components of fish. 2.0
b. Prepare a list of suitable types of disinfectants used in fish processing plant. 3.5
c. Discuss the importance of fish washing after harvesting. 1.5
14. a. Why biological value of animal protein is superior to vegetable protein? 2.0
b. Why fish spoils more quickly than any other higher animals after death? 2.0
c. What do you mean by potable water? 1.0
d. Write down the quality attributes to assess the degree of freshness of fish. 2.0

Answer any 05 (five) questions from each section. Figures in the right margin indicate full marks. Use separate answer script for each section.

Section-A

1. a. Define 'fish' and 'Ichthyology'. 2.0
b. Mention an example of commercially important marine fish of Bangladesh. Write down its identifying characters. 3.0
c. Write down the importance of studying 'Ichthyology'. 2.0
2. a. What do you mean by 'pisces'. 1.0
b. Write down the identifying characters of the following orders (**any two**): i) Perciformes 4.0
ii) Syngathiformes iii) Pleuronectiformes
c. Compare the evolutionary changes in rayfin fishes (Actinopterigii). 2.0
3. a. Draw a labeled diagram of structure of a typical fish skin. 2.0
b. Briefly describe the derivatives of fish skin. 4.0
c. Write down the functions of fish skin. 1.0
4. a. What are the constituents of fish blood? 1.0
b. Write down the functions of fish blood. 2.0
c. What do you know about blood formation in different groups of fishes? 4.0
5. a. What are the challenges of respiration in aquatic environment faced by fish? 1.0
b. Is pseudobranch a respiratory organ? Justify your answer with example. 1.0
c. What are the factors responsible for changes in respiratory volume in fish? 2.0
d. What are the basic differences in respiratory mechanism of lamprey and sharks? 3.0
6. a. Define excretion. 1.0
b. Mention the excretory organs with their purposes found in fishes. 2.0
c. Briefly describe the structural unit of mesonephric kidney of fishes with diagram. 4.0
7. Write notes on any two of the followings: 3.5×2=7.0
a. Neuron
b. Ovoviviparous
c. Spiracle

Section- B

8. a. State the "Thayer's Principle" of coloration. 1.0
b. Mention the different factors that give colors to fishes. 1.0
c. Discuss briefly the significance of coloration in fishes with examples. 5.0
9. a. What do you understand by streamlined body? 1.0
b. Distinguish between (**any three**) the following pair:(i) Physostomous and Physoclistous 6.0
(ii) Endocrine gland and exocrine gland (iii) Kidney of freshwater fish and kidney of marine fish (iv) Cyclostomine and piscine
10. a. Define food and feeding habit. 1.0
b. What are the different types of feeding habits found in fish? 1.0
c. Describe briefly the feeding adaptation found in lip, teeth and stomach of different fishes. 5.0
11. a. Mention and diagrammatically show the blood circulatory systems found in fish. 2.0
b. Briefly describe arterial blood circulation system of bony fish with diagram. 5.0
12. a. Differentiate between air bladder and air sac. 1.0
b. Describe briefly the variations in swimbladder found in Latimeria, Chondrostei, and Teleostei. 4.0
c. "The gas bladder is a hydrostatic organ"-explain. 2.0
13. a. Illustrate the interaction of some endocrine glands of fish with appropriate figure. 2.0
b. Classify nervous system on the basis of anatomy. 1.0
c. Enlist the cranial nerves of fish with their functions. 4.0
14. Write notes on any two of the followings: 3.5×2= 7.0
a. Holocephali
b. Electric organ
c. Rheoreceptor

Chittagong Veterinary and Animal Sciences University, Chittagong
Faculty of Fisheries
B. Sc. Fisheries (Hons.) Year -01, Semester-02 (July- December), Final Examination, 2015
Course Code: CAM-102(T), Course Title: Coastal Aquaculture and Mariculture
Full Marks: 70; Time: 3 hour

Answer **any 05 (Five)** questions from each section. The figures in the right margin indicate full mark. Use separate answer scripts for each section.

Section-A

- | | | | |
|----|---|--|---------|
| 1. | a. | Define 'Coastal Aquaculture'. | 1 |
| | b. | Differentiate between freshwater and coastal aquaculture. | 1 |
| | c. | "Coastal Aquaculture plays an important role in the economy of Bangladesh"- justify your answer. | 5 |
| 2. | a. | Write down the criteria of different shrimp culture systems. | 2 |
| | b. | Point out the major problems of shrimp culture in the 'ghers' of Bangladesh. What is your recommendation for solution of these problems? | 5 |
| 3. | a. | Why Sea bass is the most important aquaculture species in Bangladesh? | 2 |
| | b. | What is the dramatic change in the life cycle of sea bass? | 2 |
| | c. | Explain 'sea bass is a catadromous and euryhaline species'. | 3 |
| 4. | a. | Mention the physiological aspects of eye ablation in shrimp. | 2 |
| | b. | Write down the characteristics of different larval stages of <i>Penaeus monodon</i> . | 5 |
| 5. | a. | Discuss the culture practice of lobster in cages. | 5 |
| | b. | What is the potentiality of lobster culture in the coastal region of Bangladesh? | 2 |
| 6. | a. | Describe the culture method of any one of seaweed with its advantages and disadvantages. | 1 |
| | b. | Write down economic importance of seaweed in Bangladesh. | 6 |
| 7. | Write short note on any TWO of the followings: | | 3.5x2=7 |
| | a. | Mullet culture, b. BOD, c. Feasibility of scallop culture in Bangladesh | |

Section-B

- | | | | |
|-----|---|---|---------|
| 8. | a. | Write down scientific names of four seaweed species commonly available in the St. Martin coast. | 2 |
| | b. | Describe the physicochemical characteristics for seaweed culture. | 5 |
| 9. | a. | Enlist some edible oysters. | 1 |
| | b. | Define veliger larvae. | 1 |
| | c. | Discuss the prospects and constraints of pearl culture in Bangladesh. | 5 |
| 10. | a. | What do you know about habitat and distribution of milkfish? | 2 |
| | b. | Give an account on milkfish culture in Bangladesh. | 5 |
| 11. | a. | What is mangrove? | 1 |
| | b. | Mention three major characteristics of a mangrove forest. | 2 |
| | c. | Why mangroves are considered as the heaven for coastal fisheries? | 4 |
| 12. | a. | What is scallop? | 2 |
| | b. | Describe the method of scallop culture. | 5 |
| 13. | a. | What is <i>Artemia</i> ? | 1 |
| | b. | How <i>Artemia</i> cyst is formed in nature? | 3 |
| | c. | Describe the method of <i>Artemia</i> hatching in the hatchery. | 3 |
| 14. | Write short note on any TWO of the followings: | | 3.5x2=7 |
| | a. | Crab marketing system, b. Mangrove conservation and restoration , c. Sea ranching | |