

2019

B.Sc. (Hons.)

4th Semester Examination

AQUACULTURE MANAGEMENT

Paper - C8T

**(Fundamentals of Biochemistry,
Fish Nutrition and Feed Technology)**

Full Marks : 40

Time : 2 Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

1. Write briefly on any *five* questions from the following:
2×5 =10
 - (a) Define antioxidant. Give two examples
 - (b) What are digestive energy and metabolizable energy?
 - (c) Define unsaturated fatty acid. Give two examples.
 - (d) What do you mean by essential amino acids? Cite *examples*.

[Turn Over]

- (e) State about automatic feeder.
- (f) What is antinutritional factor? Cite two examples.
- (g) Enlist different factors affecting digestibility.
- (h) What is rancidity? State different causes of rancidity.

2. Answer *four* questions from the following : $4 \times 5 = 20$

- (a) Enumerate the nutritional deficiency diseases of fish.
- (b) Classify different types of Carbohydrates.
- (c) Give an idea about Michaelis-Menten equation.
- (d) Discuss on fish feed storage.
- (e) Write down the Pearson's Square method for feed formulation with an example.
- (f) State about β -Oxidation process with specific role of enzymes.

3. Answer *one* question from the following : 1×10

- (a) (i) What do you mean by feed additives?
- (ii) Make a list of feed additives used in aquafeed preparation.

(3)

(iii) State about FCR and PER.

(iv) Add a note on protein digestion enzyme in fish.

2+3+3+2

(b) (i) Discuss about fish growth curve.

(ii) State about non-conventional fish feed ingredients.

(iii) Discuss the of steroid hormone in fish growth.

3+4+3
