



Progressive Education Society's
Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16
End Semester Examination: Jan.2022
Faculty: Science and Technology

Program: B.Voc (FPT)

Semester: I

SET: A

Program (Specific): Food Processing Technology

Course Type:

Class: F.Y. B.Voc (Food Processing Technology)

Max.Marks: 50

Name of the Course: Food Biochemistry

Course Code: FPT 102

Time: 3 Hr

Instructions to the candidate:

- 1) There are 4 sections in the question paper. Write each section on separate page.*
- 2) All Sections are compulsory.*
- 3) Figures to the right indicate full marks.*
- 4) Draw a well labelled diagram wherever necessary.*

SECTION: A

Q1. A. Multiple Choice Question

(01 X 6 = 06 M)

- i. Carbohydrate are _____ in nature.
a. Hydrophillic b. Hydrophobic c. Oleophillic d. None of above
- ii. Glucose is also known as _____.
a. Dextrose b. Levulose c. Milk Sugar d. Fruit sugar
- iii. Specific gravity of fat is _____.
a. Less than 1 b. More than 2 c. Less than 2 d. More than 1
- iv. Amino acids are insoluble in _____.
a. Water b. Ether c. Vitamin d. Chloroform
- v. _____ increases absorption of calcium.
a. Lactose b. Maltose c. Starch d. None of the above
- vi. Triglycerides are _____ at room temperature.
a. Solid b. Liquid c. Semi solid d. All of the above

Q1.B. True or False

(01 X 6 = 06 M)

- i. Minerals are required in large quantities in human body.
- ii. Starch is made up of amylose and amylopectin.
- iii. Fats float on water.
- iv. Proline has sulphur molecule in its structure.
- v. Fibers are examples of protein.
- vi. Carboxymethyl cellulose is used in ice-cream industry for production of ice-cream.

SECTION: B

Q 2. Explain/Define the following terms

(01 X 6 = 06 M)

- i. Gelatinization temperature
- ii. RM Value
- iii. Fat soluble vitamin
- iv. Essential Fatty Acids
- v. Polar Amino acid
- vi. Benedicts Test

SECTION: C

Q 3. Write Short Note on the following (Any Four)

(03 X 4 = 12 M)

- i. Structure of Amino acid
- ii. Glucose
- iii. Classification of lipids
- iv. Starch
- v. Water soluble vitamin

SECTION: D

Q 4. Short answer questions (Attempt any Two)

(05 X 02 = 10 M)

- i. Give classification of carbohydrates and explain polysaccharide in detail.
- ii. Explain physical properties of amino acids.
- iii. Elaborate on Egg protein.
- iv. Enlist various types of minerals and explain any one mineral in detail with respect to source, function and deficiency.

Q 5. Long answer type Questions (Attempt any Two)

(05 X 02 = 10 M)

- i. A company has prepared a protein rich product. They want to calculate amount of protein present in the product. Which analysis will can they do? Explain it in detail.
- ii. In an accident the person has suffered extreme blood loss and he also has a condition in which his blood cannot clot. Which Vitamin is responsible for this condition? Explain sources, function of that vitamin and write its scientific name.
- iii. You have an oil sample in your lab which is having an off odor. Elaborate on the condition responsible for the malodor in detail.
- iv. Give application of fibers in food industry.