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Total No. of Pages : 02

Total No. of Questions : 9

**M.Sc (Food technology) (2018 Batch) (Sem.-1)****FOOD CHEMISTRY****Subject Code : MSFT-511-18****Paper ID : [75591]****Time : 3 Hrs.****Max. Marks : 70****INSTRUCTIONS TO CANDIDATES :**

1. **SECTION-A** contains **SEVEN** questions carrying **TWO** marks each and students has to attempt any **ALL** questions.
2. **SECTIONS-B** consists of **FOUR** Subsections : Units-I, II, III & IV. Each Subsection contains **TWO** questions each carrying **FOURTEEN** marks each and student has to attempt any **ONE** question from each Subsection.

**SECTION-A****Q1 Answer briefly :**

- a) Define soluble fibres.
- b) Name the types of food additives with examples.
- c) What are modified starches?
- d) Define enzyme inhibitors.
- e) Enlist **any four** examples of polyphenols.
- f) What do you understand by denaturation of protein?
- g) Write two functions of beta amylase.

**SECTION-B****UNIT-I**

- Q2 What do you understand by fibres? Discuss the types, its constituents and their important functions. (14)
- Q3 Define carbohydrates. Explain the chemical and physical properties of carbohydrates. (14)

## UNIT-II

Q4 Write short notes on :

- a) Toxic constituents of foods. (5)
- b) Anti-nutritional factors of foods. (9)

Q5 Define amino acids. Describe the functions of proteins from milk, egg and meat. (14)

## UNIT-III

Q6 Define oxidative rancidity. Explain the classification of lipids along with examples. (14)

Q7 Write short notes on :

- a) Functions of minerals. (5)
- b) Chemistry of flavor compounds. (9)

## UNIT-IV

Q8 What is maillard reaction? Explain the enzymatic browning in fruits and vegetables during processing and its applications in food products. (14)

Q9 a) What is caramelization? Explain the non-enzymatic browning foods. (7)

- b) Describe the different chemical changes during storage and cooking of foods with some suitable examples. (7)