(AUTONOMOUS)

### **BSc DEGREE EXAMINATION MAY 2018**

(First Semester)

# Branch - NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS

# **CHEMISTRY OF FOODS**

Maximum: 75 Marks Time: Three Hours

### **SECTION-A (20 Marks)**

Answer **ALL** questions

ALL questions carry EQUAL marks  $(10 \times 2 = 20)$ 

- Mention the states of water and p<sup>H</sup> of water. 1
- What is nutrient and non nutrient components in foods? 2
- 3 Define Colloids.
- What is Mayonnaise? 4
- 5 What is Starch and Glycogen?
- Mention the properties of pectic substances. 6
- Write the significance of Iodine number and saponification number. 7
- 8 Give a note on egg proteins.
- 9 What is enzymatic browning?
- 10 Mention the functions of animal proteins.

## SECTION - B (25 Marks)

Answer ALL Questions

**ALL** Questions Carry **EQUAL** Marks  $(5 \times 5 = 25)$ 

Explain the effect of individual uniformity and variability on chemical 11 a aspects of foods.

OR

- b Mention the factors affecting the composition of foods.
- 12 a What are the factors affecting gel formation?

- b Write short notes on the significance of egg and dairy foams.
- Explain the effect of acids and enzymes on starch. 13 a

- Write a note on disaccharides with suitable examples and structures. b
- Give any five physical properties of fats. 14 a

OR

- b Write the nutritional classification of amino acids and proteins of fleshy foods.
- Write the uses and optimum levels of certified artificial colours. 15 a

OR

Explain non-enzymatic browning reactions and steps for its prevention. b

### SECTION - C (30 Marks)

Answer any THREE Questions

**ALL** Questions Carry **EQUAL** Marks  $(3 \times 10 = 30)$ 

- How moisture content is determined in food? Write a note on hardness of Water. 16
- Narrate the properties of Colloids. 17
- Explain the structure, properties and uses of pectic substances. 18
- Elaborate the classification and denaturation of proteins. 19
- Discuss on the characteristics and uses of plant pigments and natural 20 flavoring compounds in species and condiments. **END**

Z-Z-Z