C 23308 (Pages : 2) Name.....

Reg. No.....

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2017

(CUCBCSS–UG)

Food Technology

FTL 4B 07—FOOD CHEMISTY AND ANALYTICAL INSTRUMENTATION

Time : Three Hours Maximum : 80 Marks

I. Objective type (*All* questions are compulsory)

Match the following :

1	Flavonoids	Glutein.
2	BHA	Pigment.
3	Milk	Antioxidant.
4	Wheat	Emulsion.

Fill in the blanks :

5 Alanine is an

6 Maltose is a

7 ———— is mobile phase in HPLC.

State whether true *or* false :

8 Oleic acid is an unsaturated fatty acid.

9 Proteins are made up of amino acids.

10 Cane sugar is called invert sugar.

(10 × 1 = 10 marks)

II. Answer any *five* questions :

11 Classify the carbohydrates and give *one* example each.

12 Write the structures of Threonine and tryptophan.

13 Write the structures of any two saturated fatty acids and name them.

14 Explain Rancidity in lipids.

Turn over

15 Write the structure of Chlorophylla.

16 Give one example of 'proteases' along with its reaction and potential application.

17 Classify chromatographic technique with reference to principle.

(5 × 2 = 10 marks)

III. Answer any *six* questions :

18 Write the difference between celluloses and hemicelluloses.

19 Describe denaturation in proteins comprehensively.

20 Explain in detail about the emulsions.

21 Give a brief account of enzyme specificity.

22 What are the advantages of using enzymes in food processing ?

23 Write a detailed account of dietary fibre.

24 Write short note food colloids.

25 Write short note on adsorption chromatography.

(6 × 5 = 30 marks)

IV. Answer any *two* questions :

26 Give a detailed account of starch and its importance in foods.

27 Classify the proteins from foods and describe the importance of each of them.

28 Explain in depth about the properties of solutions.

29 Explain in detail about Gas chromatography.

(2 × 15 = 30 marks)