C 80884 (Pages : 2) Name.....

Reg. No.....

FOURTH SEMESTER (CUCBCSS—UG) DEGREE EXAMINATION, APRIL 2020

Food Technology

FTL 4B 07—FOOD CHEMISTRY AND ANALYTICAL INSTRUMENTATION

(2017 Admissions)

Time : Three Hours Maximum : 80 Marks

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

Multiple Choices

1 Enzyme responsible for browning in fruits (cellulase, polyphenol oxidase, esterase, tannase)

2 Which is an example for a complete protein (Egg, Milk, Fish, Meat).

3 Which is the storage polysaccharide in animals (Glucose, Starch, Glycogen, Cellulose).

Answer in a single *or* two words

4 The linkage between fatty acids and alcohol in fats and oils.

5 Polypeptides are made up of

Write True /False :

6 ELSD is a Detector in HPLC (true / false)

7 Rf value = Distance travelled by solvent / Distance travelled by solute (true/false)

Fill in the blanks :

8 Fructose is otherwise known as ————————

9 Protein present in wheat ————————

———————— is the enzyme that hydrolyses sucrose to glucose and fructose.

(10 × 1 = 10 marks)

II. Short Answer Type Questions (Answer any *five* questions) :

11 What are amino acids ? Give example.

12 Why sucrose is non-reducing sugar ?

13 Write a short note on Paper Chromatography.

14 What are fatty acids ? Give example.

Turn over

15 Explain denaturation of protein.

16 Describe suspensions and give an example.

17 Define enzyme activity.

(5 × 2 = 10 marks)

III. Short Essay Questions Answer any *six* questions) :

18 Describe in detail about the occurrence of pigments ?

19 Write briefly about anthocyanins .

20 Describe the role of antioxidants in lipids.

21 Write the role of fibre

22 Write short notes on gelatinisation of starch.

23 Explain in detail about column chromatography.

24 What is the role of enzymes in food processing ?

25 Describe in detail about Partition Chromatography.

(6 × 5 = 30 marks)

IV. Essay Questions (Answer any *two* questions)

26 Write in detail about Gas Chromatography.

27 What are carbohydrates and how these are classified ? Explain any *one* reaction involved in the identification of sugars.

28 Describe in detail about chemistry of colloids and their role in foods.

29 Narrate the classification of lipids. Describe the rancidity of fats and oils.

(2 × 15 = 30 marks)