

## B. SC. FOOD SCIENCE & TECHNOLOGY

### SECOND SEMESTER

### FOOD ANALYSIS

### BFST-204

Duration: 3 Hrs.

Marks: 70

{ PART : A (OBJECTIVE) = 20  
PART : B (DESCRIPTIVE) = 50 }

Duration: 2 Hrs. 40 Mins.

Marks: 50

[ PART-B : Descriptive ]

[ Answer question no. One (1) & any four (4) from the rest ]

1. Write in brief about the types of sensory tests employed for food evaluation. 10
2. Why proximate analysis of food is done? Enlist some methods to remove moisture content of food materials. How can you measure total ash content of a particular food? 3+3+4 =10
3. What do you mean by sampling? How samples are prepared & preserved for future use? Write the principle involved in crude fiber estimation 2+6+2 =10
4. What is the difference between subjective & objective evaluation? Briefly explain some sensory characteristics of food. What are the limitations of sensory evaluation? 2+6+2 =10
5. What is the significance of food analysis? Mention some physical properties of agricultural raw materials. What are the main steps involved in Micro-Kjeldahl method for protein estimation? 3+3+4= 10
6. Define Chromatography. Write in brief about Paper Chromatography & Thin layer Chromatography. 2+4+4 =10
7. Explain Atomic Absorption Spectroscopy. How it is different from Atomic Emission Spectroscopy? Write the working principle of Spectrophotometer. 4+3+3 =10
8. What do you mean by Statistical Quality Control? Write in brief about the Statistical Methods employed in food analysis to analyze data. 4+6 = 10



**B. SC. FOOD SCIENCE & TECHNOLOGY**

SECOND SEMESTER

FOOD ANALYSIS

BFST-204

Duration: 20 Mnts.

Marks: 20

[ PART-A : Objective ]

Choose the correct answer from the following:

1×20=20

1. The full form of HPLC is

- a. High Pressure Liquid Chromatography
- b. High Performance Liquid Chromatography
- c. Heavy Pressure Liquid Chromatography
- d. High Purification Liquid Chromatography

2. Soxhlet method is for the estimation of

- a. Crude Protein
- b. Crude fat
- c. Vitamin C
- d. Amino Acid

3. Peroxide value is the measure of

- a. Degree of un-saturation
- b. Type of fatty acid present
- c. Amount of cholesterol present
- d. Rancidity

4. Iodine test is for the detection of presence of \_\_\_\_\_ in food.

- a. Fat
- b. Starch
- c. Reducing sugars
- d. Triglycerides

5. Xanthoproteic test is to identify

- a. Aromatic amino acids
- b. Fatty acids
- c. Reducing sugars
- d. None of these

6. Small transparent container which holds sample during spectrophotometric analysis is called \_\_\_\_\_

- a. Quartz
- b. Crucible
- c. Cascade
- d. Cuvette

7. Paper Chromatography is based on

- a. Ion-exchange chromatography
- b. Size exclusion chromatography
- c. Partition chromatography
- d. Adsorption chromatography

8. The number of members in a drained panel should be

- a. 1-4
- b. 5-10
- c. 10-20
- d. None of these

9. The constituent of FCR is

- a. A mixture of Tungstomolybdate & Molybdc acid
- b. A mixture of Phosphotungstic acid & Phosphomolybdic acid
- c. A mixture of Copper & Phosphoric acid
- d. All of the above

10. \_\_\_\_\_ is a Spectroanalytical procedure for quantitative determination of chemical elements using the absorption of optical radiation by free atoms in the gaseous state

- a. Nuclear Magnetic Resonance
- b. Differential scanning calorimetry
- c. Atomic absorption spectroscopy
- d. None of the above

11. In case of estimation of sugars, \_\_\_\_\_ is added to neutralize the acidity

- a. Sodium Chloride
- b. Potassium metabisulphite
- c. Calcium carbonate
- d. None of the above

12. The absorbance of ascorbic acid is measured at

- a. 660 nm
- b. 540 nm
- c. 450 nm
- d. 760 nm

13. Instrument used to measure the butter content of milk is

- a. Butterometer
- b. Butyrometer
- c. Refractometer
- d. pH meter

14. TPA is the instrument that measure \_\_\_\_\_ of any food sample

- a. Color
- b. Taste
- c. Texture
- d. Quality

15. Water soluble ash = \_\_\_\_\_

- a. Total ash- water
- b. Total ash -water insoluble ash
- c. Water -water insoluble ash
- d. None of these.

16. The appropriate temperature for the determination of ash content is

- a. 50°C
- b. 750°C
- c. 102°C
- d. 550°C





17. Full form of the chemical DNPH reagent is

- a. Dinitro Phenyl Hydrazine
- b. Dinitro Propyl Hydrogen
- c. Dinitro Para Hydroxyl
- d. Dinitro Propyl Hydrazine

18. When the moisture content is \_\_\_\_\_% or above, non-enzymatic browning will occur

- a.25 %
- b.0.25 %
- c.6 %
- d.50 %

19. Dilution test comes under

- a. Sensitivity test
- b. Difference test
- c. Rating test
- d. Descriptive test

20. Nitrogen can be estimated by

- a. Lowry's method
- b. Micro-Kjeldahl method
- c. Bradford method
- d. None of these

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Course : .....

Semester : ..... Roll No : .....

Enrollment No : ..... Course code : .....

Course Title : .....

Session : ..... 2016-17 ..... Date : .....

Instructions / Guidelines

- The paper contains twenty (20) / ten (10) questions.
- The student shall write the answer in the box where it is provided.
- The student shall not overwrite / erase any answer and no mark shall be given for such act.
- Hand over the question paper cum answer sheet (Objective) within the allotted time (20 minutes / 10 minutes) to the invigilator.

Full Marks	Marks Obtained	Remarks
20		

Scrutinizer's Signature

Examiner's Signature

Invigilator's Signature