# 2023

# 6th Semester Examination NUTRITION (Honours)

Paper: DSE 4-T

[CBCS]

Full Marks: 40

Time: Two Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

# (Methods for Epidemiological Data Analysis) Group - A

Answer any five questions from the following:

 $2 \times 5 = 10$ 

- 1. What do you mean by 'One Way ANOVA'?
- 2. Write down the significance of skewness and kurtosis in epidemiological data analysis.
- 3. What are Null and alternative hypothesis?
- 4. Write down the differences between ratio and proportion with example.
- 5. What is F crit value?

- 6. What do you mean by the term 'Epidemiology'?
- 7. What is tertiary prevention?
- 8. Write down the mode of transmission of cholera.

# Group - B

Answer any four questions from the following:

5×4=20

- 9. How do you avoid biasness during your sampling framing of experimental design?
- 10. Write down the differences between prospective study and retrospective study.
- 11. Calculate mean and median of the following data.

| Name of the Hospital | Infant Mortality Rate (%) |
|----------------------|---------------------------|
| A                    | 64                        |
| В                    | 14.3                      |
| C                    | 10.5                      |
| D                    | 34.9                      |
| E                    | 16.9                      |
| F                    | 6.1                       |
| G                    | 25                        |

12. Write down the differences between parametric and non parametric test with example.

- 13. State the type I and type II errors.
- 14. Write down the equation of maternal mortality and infant mortality.

Answer any one question from the following:

 $10 \times 1 = 10$ 

15. What do you mean by p value of a data? Calculate SD from the following data.

| Zone | Under 5 Yrs children population (%) |
|------|-------------------------------------|
| A    | 31                                  |
| В    | 64.3                                |
| С    | 29.5                                |
| D    | 10.7                                |
| E    | 76.5                                |
| F    | 21.9                                |
| G    | 18.7                                |

4+6

16. Write the differences between histogram and bardiagram with graphics. What is regression?7+3=10

#### OR

# (Food Packaging)

## Group - A

Answer any five questions:

2×5=10

- 1. What is CFB?
- 2. Write two testing procedures to test the thickness of a packaging material.
- 3. Write two disadvantages of using paper packaging material.
- 4. Writes two merits of tin packaging.
- 5. What is biodegradable plastic?
- 6. What kind of packaging should be used for fresh horticulture products?
- 7. What do you mean by puncture resistance?
- 8. Defind food packaging.

# Group - B

Answer any four questions:

 $5 \times 4 = 20$ 

- 9. Write a short note on different types of plastics used for packaging.
- 10. What package design should be adapted for moisture sensitive food and frozen food?

- 11. Write the functions of packaging. Write the importance of printing on packaging.

  3+2
- 12. Discuss any two regulatory aspects of food packaging.  $2\frac{1}{2}+2\frac{1}{2}$
- 13. Write the composition and properties of glass packaging.
- 14. Discuss the various factors that should be checked in packaging materials.

Answer any *one* question:  $10 \times 1 = 10$ 

- 15. Write a short note on the labelling laws. What is the importance of barcode? Name other markings used in packaging.

  6+2+2
- 16. What are MAPS and IPS? Explain with example. What is injection moulding? 3+3+2+2

#### OR

# (Bakery Technology and Mushroom Culture)

# Group - A

Answer any five questions:

2×5=10

- 1. What are the ingredients used for cake preparation?
- 2. What is fudge?
- 3. Differentiate between the characteristics of cookies and crackers.
- 4. Name two poisonous mushrooms.
- 5. What is spawn?
- 6. Write the importance of modified bakery products.
- 7. What are the nutritional benefits of mushroom?
- 8. What are hyphae?

## Group - B

Answer any four questions:

5×4=20

- 9. Write the types of breakfast cereals.
- 10. What is macaroni? Elaborate the importance of durum wheat in pasta processing. 2+3
- 11. What is the importance of bakery industry in India?
- 12. Write about the process of biscuit making.

- 13. Describe the life cycle of mushroom.
- 14. Write about short term and long term storage of edible mushroom.

Answer any *one* question:  $10 \times 1 = 10$ 

- 15. Write about the process of mushroom cultivation. Discuss about the medicinal value of mushroom?

  5+5
- 16. Write about the use of equipments for bread, bun and pizza preparation. What is meant by gluten free bakery products?

#### OR

# (Sea Food and Dairy Technology)

## Group - A

Answer any five questions from the following:

 $2 \times 5 = 10$ 

- f. What do you mean by water activity?
- 2. What is fish protein hydrolysis?
- 3. Write full form of MAP.
- Write example of smoked and dried fish product (one for each).
- 5. Differentiate alpha and beta lactose:
- 6. Define pH.
- 7. What is RM value?
- 8. By which enzyme test you will ensure milk is pasteurized?

## Group - B

Answer any four questions from the following:

5×4=20

- 9. Describe nutritive value of smoked fish.
- 10. Discuss on air blast freezing system of fish.
- 11. Write different salting methods of fish.

- 12. Write difference between casein and whey protein.
- 13. Write down the purpose of clarification and pasteurization of milk.
- 14. Write different uses of casein.

Answer any one question from the following:

 $10 \times 1 = 10$ 

- 15. Write flow diagram for fish sauce preparation. Describe processing of prawn.
- 16. Write down flow diagram for Cheddar cheese and butter 5+5 making.

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