

## বিদ্যাসাগর বিশ্ববিদ্যালয় VIDYASAGAR UNIVERSITY

## **Question Paper**

### **B.Sc.** Honours Examinations 2022

(Under CBCS Pattern)
Semester - VI

**Subject: NUTRITION** 

Paper: DSE 4 - T

Full Marks: 40
Time: 2 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

# Methods of Epidemiological Data Analysis Group-A

Answer any four of the following questions:

 $5 \times 4 = 20$ 

- 1. Write down the differences between cohort study and case control study.
- 2. How do you avoid biasness during your sampling framing of experimental design?

3. Calculate mean and median from the following data:

Name of the area	Child population (%)
A	62
В	24.3
С	19.5
D	34.9
Е	16.9
F	26.1
G	45

- 4. Write down the differences between parametric and non parametric tests with example.
- 5. Write down the significance of skewness and kurtosis in epidemiological data analysis.
- 6. Write down the equation of maternal mortality and infant mortality.

Group-B

Answer any *two* of the following questions:  $10 \times 2 = 20$ 

7. What do you mean by SD and SE? Calculate SD from the following data: 5+5

Zone	Agricultural yield (%)
A	91
В	64.3
С	29.5
D	49
E	76.5
F	58.4
G	73

10

8. Draw a histogram from the following data:

Name of the student	Percentage of marks
A	89
В	48
С	98.2
D	85

9. What do you mean by One way ANOVA? Write the assumption of ANOVA. 5+5

10. What is null and alternative hypothesis? Write down the differences between rates, ratio and porportion with example. 5+5

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#### OR

#### Paper: DSE 4 - T

**Food Packaging** Group-A Answer any *four* of the following questions:  $5 \times 4 = 20$ 1. Discuss the functions and requirements of food packaging. 5  $2\frac{1}{2} + 2\frac{1}{2}$ 2. Write short notes on any two of the following packaging materials: (a) Paper and paper-based materials (b) Plastics (c) Metals: Tinplate, tinning process 3. What are edible packaging materials? Give two examples of edible packaging materials. 2+34. Describe the package design employed for fresh horticultural produce. 5 What is the importance of FSSAI packaging and labeling regulation in India? 5 6. Discuss the importance of evaluating transport worthiness of filled packages. 5 Group-B Answer any two of the following questions:  $10 \times 2 = 20$ 7. Describe briefly the principle of (i) Modified atmosphere packaging systems (ii) Fill and Sealing machine (FFS). 5+58. Discuss the aseptic packaging system. What are the environmental concerns of recycling and disposal of plastic waste? 9. Write down the importance of conducting shelf-life studies and different types of packaging. 10 10. Explain briefly any five testing procedures employed for testing food packaging materials. 10

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#### OR

#### Paper: DSE 4 - T

#### **Bakery-Technology and Mushroom Culture**

#### Group-A

Answer any *four* of the following questions:  $5\times4=20$ 1. Write the role of yeast in bakery science. 5

- 2. Describe in brief the characteristics of icings in cake industry.
- 3. What do you mean by crackers? Write in brief the principle steps involved in cookies preparation.
- 4. What do you mean by modified bakery products? Write a short note on breakfast cereals. 2+3
- 5. Describe the characteristics and morphological features of *Volvariella volvacea* and *Pleurotus citrinopileatus*.
- 6. Enumerate the life cycle of mushroom with proper diagram. State the types of edible mushrooms found in India with examples. 3+2

#### **Group-B**

Answer any *two* of the following questions:  $10\times2=20$ 

5

- 7. State in brief the Indian scenario of bakery industry. How do you characterize the quality bakery products? 5+5
- 8. Describe briefly the functions of different leavening agents used in bread preparation. What do you mean by gluten free bakery products? 8+2
- 9. How do you identify a poisonous mushroom? Write in short the nutritional and medicinal value of edible mushroom. 3+7
- 10. State the demerits of faults arises in bread production and mention their corrective measures.

  5+5

## ORPaper: DSE 4 - T (Sea food and Dairy Technology) Group-A Answer any four of the following questions: $5 \times 4 = 20$ Write different salting methods of fish preservation. 5 Discuss about the air blast freezing system of fish. 5 Describe nutritive value of smoked fish. What is alkaline phosphatase test? Write the significance of it. 2+35 5. Write down the purpose of homogenization and pasteurization of milk. 6. What is anti oxidation of fat? How do you prevent it? **Group-B** Answer any two of the following questions: $10 \times 2 = 20$ 7. Describe fish protein concentrate and fish protein hydrolysis. 5+5 8. Write flow diagram for fish sauce preparation. Describe processing of prawn. 5+5

10. Draw a flow chart for preparation of dahi. Write different uses of casein.

5+5

5+5

9. Write flow chart for shrikhand and ice cream making.