



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 :

5×4=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
B	24.3
C	19.5
D	34.9
E	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 :

10×2=20

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

5+5

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

8. Draw a histogram from the following data :

10

Name of the student	Percentage of marks
A	89
B	48
C	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 : 5×4=20

1. Discuss the functions and requirements of food packaging. 5
2. Write short notes on any *two* of the following packaging materials : 2½+2½
  - (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+3
4. Describe the package design employed for fresh horticultural produce. 5
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 : 10×2=20

7. Describe briefly the principle of
  - (i) Modified atmosphere packaging systems
  - (ii) Fill and Sealing machine (FFS). 5+5
8. Discuss the aseptic packaging system. What are the environmental concerns of recycling and disposal of plastic waste? 5+5
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

OR

Paper : DSE 4 - T

**Bakery-Technology and Mushroom Culture**

**Group-A**

Answer any *four* of the following questions : 5×4=20

1. Write the role of yeast in bakery science. 5
2. Describe in brief the characteristics of icings in cake industry. 5
3. What do you mean by crackers? Write in brief the principle steps involved in cookies preparation. 1+4
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*. 5
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 : 10×2=20

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
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OR

Paper : DSE 4 - T

(Sea food and Dairy Technology)

Group-A

Answer any *four* of the following questions : 5×4=20

1. Write different salting methods of fish preservation. 5
2. Discuss about the air blast freezing system of fish. 5
3. Describe nutritive value of smoked fish. 5
4. What is alkaline phosphatase test? Write the significance of it. 2+3
5. Write down the purpose of homogenization and pasteurization of milk. 5
6. What is anti oxidation of fat? How do you prevent it ?

Group-B

Answer any *two* of the following questions : 10×2=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
  9. Write flow chart for shrikhand and ice cream making. 5+5
  10. Draw a flow chart for preparation of dahi. Write different uses of casein. 5+5
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