## Food Science and Nutrition (P.G.) [CBCS]

# M.Sc. Second Semester End Examination-2024 (Regular & Supplementary Paper) PAPER-MFSN 201

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks.

Candidates are required to give their answers in their own words as

far as practicable.

Illustrate the answers wherever necessary.

#### Group A

- 1. Answer any five questions of the following: 2x5=10
- a. Define finite and infinite population with examples.
- b. Differentiate between frequency distribution and contingency tables.
- c. Why statistics is more important in your subject?
- d. What do you mean by random sampling.
- e. Write down the full form of BLAST and FASTA.
- f. Differentiate between PROM and EPROM.
- g. What do you mean by language professor?
- h Write down the difference between web browser and search engine.

#### Group B

#### 2. Answer any four questions of the following: 4x5= 20

a. Compute the median and Skwness of the following body weights[kg] score

Class	51-	54-	57-	60-	63-	66-	69-
intervals	53	56	59	62	65	68	71
Frequencies	5	10	14	28	15	8	3

- b. Write the different types of variables with examples on the basis of properties and experiment.
- c. Explain about different computer memories with merits and demerits.
- d. Write short notes on DDBJ and NCBI.
- e. What are the reasons for preferring ANOVA with different types.
- f. Compute Spearman Correlation of coefficient of the following body weight (Kg) & body length (cm) of the babies.

Sl no of Babies	1	2	3	4	5
body length (cm)	50	80	90	80	70
body weight (Kg)	5.6	9.0	9.0	6.5	4.0

### Group C

3. Answer any one question of the following: 1x10=10

a. What are the importance of chi-square and why this test is non-parametric? Find out whether or not significance association between smoker and cancer, when 02 people are suffering cancer out of 24 are smokers, where as out of 10 non-smokers 01 is suffering from cancer with using the selected critical chi-square value as given below.

(3)

Critical  $X_{0.02(3)}^2 = 9.84 \ X_{0.02(2)}^2 = 7.82 \ X_{0.02(1)}^2 = 5.41 \ 3+2+5$ 

b. Write the various interfaces and applications of SPSS. Write the different steps in BLAST alignment. State the steps adopted to draw bar diagram in MS-Excel.