WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 6th Semester Examination, 2021

FNTACOR14T-FOOD AND NUTRITION (CC14)

RESEARCH METHODOLOGY AND BIOSTATISTICS

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.

Answer any *four* questions from the following 10×4 = 40

1. Explain any *five* of the following terms with suitable examples: 2×5 = 10
   (a) Variable
   (b) Parameter
   (c) Statistics
   (d) Frequency distribution
   (e) Cumulative frequency
   (f) Mode.

2. What do you mean by interpretation? Explain its importance. Write a brief account on techniques of interpretation. 2+4+4

3. Write short notes on any two techniques of graphical representation of data. 5+5

4. Compute the arithmetic mean and median for the sample of birth weights (g) of live-born infants born at a private hospital. 5+5
   3265, 3260, 3245, 3484, 4146, 3323, 3649, 3200, 3031, 2069, 2581, 2841, 3609, 2838, 3541, 2759, 3248, 3314, 3101, 2834.

5. What are the different steps that you should follow while preparing a report? Briefly explain the significance of report writing. 5+5

6. Compute the standard deviation of two samples of cholesterol measurements on a given person using the Autoanalyzer and Microenzymatic measurement methods. Comment on your result. 4+4+2

   Autoanalyzer method (mg/dL): 177, 193, 195, 209, 226
   Microenzymatic method (mg/dL): 192, 197, 200, 202, 209

Turn Over

7. What do you mean by variance and standard deviation? Briefly explain about the properties of standard deviation. What is frequency polygon?   2+2+4+2

8. Differentiate between the following: 5+5

    (a) Qualitative and Quantitative data

    (b) Histogram and Column diagram.

9. Present the data in a frequency distribution table with tally marking. Calculate the cumulative frequency. Draw a histogram based on the data set.   3+2+5

Body weight (kg)	51-53	54-56	57-59	60-62	63-65	66-68	69-71
Frequencies	4	7	12	25	13	6	3

    N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

——×——