UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 5th Semester Examination, 2023

DSE-P1-PHYSIOLOGY

Time Allotted: 2 Hours   Full Marks: 40

The figures in the margin indicate full marks.

GROUP-A

1. Answer any *five* from the following: 1×5 = 5

   (a) What is judgement sampling?

   (b) What is dependent variable?

   (c) What is meristic variable?

   (d) What are the merits of mean?

   (e) What is univariate frequency distribution?

   (f) Write down the equation for smoothed frequency distribution.

   (g) Mention two demerits of mean.

   (h) Mention two demerits of mode.

   (i) Define coefficient of variation.

   (j) What is Z score?

GROUP-B

Answer any *three* from the following   5×3 = 15

2. Mention five properties of Median.   5

3. Discuss simple random sampling with replacement and give one example.   5

4. Explain code method for computation of mean.   5

5. Explain multiple and proportionate bar diagram with example.   5

6. Explain t-test for paired observations of matched and large single groups.   5

GROUP-C

Answer any *two* from the following $10 \times 2 = 20$

7. Calculate mean, median and standard deviation by code method from the following scores: 10

     36, 42, 26, 29, 33, 30, 23, 28, 35, 32

8. What is probability distribution? What is normal distribution curve? Explain the properties of normal distribution.   2+2+6

9. Write short notes on:

    (i)   Level of significance

    (ii)   Chi-square test of independence

    (iii)   Yate's correction

    (iv)   Non-parametric statistics.

10. Perform one tail t-test from the following scores:

     $(t_{0.05(14)} = 2.145)$

     Male Respiratory Rate   -   18, 28, 26, 16, 30, 14, 19, 21

     Female Respiratory Rate -   14, 19, 15, 30, 31, 33, 35, 29

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