2020

PHYSIOLOGY — HONOURS

Paper : DSE-A-1

(Biostatistics)

Full Marks : 50

The figures in the margin indicate full marks.

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

Group - A

1. Answer **any five** questions : 2×5

    (a) When is median used instead of mean of a set of data?

    (b) What is statistical parameter?

    (c) What is random sampling?

    (d) When would you draw horizontal bar diagram?

    (e) Standard deviation is :

        (i) square root of the sum of squares.

        (ii) square root of the mean of squared deviations of the scores from the mean.

        (iii) square root of the mean squares.

    (f) What does P_{50} indicate in statistics?

    (g) Name the variable which cannot be expressed in numerical scores.

    (h) Write the formula used to graphically represent a pie diagram.

Group - B

2. Answer **any two** questions :

    (a) Write a short note on utility and misuse of statistics. 5

    (b) Describe the basic properties of Normal distribution. 5

    (c) How do you calculate product moment correlation from two data sets? 5

    (d) Mention the significance of degrees of freedom. What is critical 't' score? 3+2

Please Turn Over

Group - C

Answer *any three* questions.

3. (a) "Student's t distribution is mesokurtic"– Justify with reasons whether the statement is true or false.

 (b) State the differences between paired t test and unpaired t test.

 (c) When would you compute z score and why? 3+5+2

4. (a) What is distribution-free statistics?

 (b) Briefly describe the procedure of chi-square test. 2+8

5. Write short notes : 5+5

 (a) Errors of inference

 (b) One tail and Two tail 't' test.

6. Describe a method of representing frequency distribution of a continuous variable. 10

7. (a) What is meant by variance?

 (b) Discuss the principle of its analysis in one-way method. 2+8

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