C 62716 (Pages : 3) Name...................................

Reg. No...................................

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2014

(UG—CCSS)

Complementary Course—Psychology

PS 2C 02—PSYCHOLOGICAL STATISTICS

Time : Three Hours   Maximum : 30 Weightage

I. Objective Type Questions :

Choose the correct answer. Answer *all* questions. Each question carries a weightage of ¼.

1   Harmonic mean is :

   (a) Mathematical average.   (b) Positional average.

   (c) Harmonic value.   (d) Discrete value.

2   Which is used to test the reliability of an average ?

   (a) Median.   (b) Mode.

   (c) Dispersion.   (d) Mean.

3   $\dfrac{1-6 \in D^2}{n(n^2-1)}$. In this formula 'D' indicates :

   (a) Rank.   (b) Difference between ranks.

   (c) Dispersion.   (d) Range.

4   Pearsonian coefficient of correlation is denoted by the symbol :

   (a) R.   (b) CCR.

   (c) CR.   (d) *r*.

Fill in the blanks :

5   ——————— measures the maximum variation in the values of a series.

   (a) Mean.   (b) Standard Deviation.

   (c) Range.   (d) Variance.

6   Skewness means ———————.

   (a) Lack of symmetry.   (b) Linear value.

   (c) Curve.   (d) Graph.

Turn over

7 The function of a population value is known as —————.

   (a) Parameter.   (b) Statistic.

   (c) Sample.   (d) Survey.

8 Rejecting a null hypothesis when it is true is —————— error.

   (a) Standard error.   (b) Sampling error.

   (c) Type I error.   (d) Type II error.

Answer in a single word :

9 Which is single significant figure that sums up the characteristics of a group of figures.

10 Algebraic sum of the deviations of a set of numbers from their mean is —————.

11 The square root of the means of squares of deviation of all values of a series from their mean is —————.

12 The number of independent observations which is obtained by subtracting the number of constraints from the total number of observations is —————.

(12 × ¼ = 3 weightage)

II. Short Answer Type Questions. Answer *all* questions. Each question carries a weightage of 1.

13 Types of skewness.

14 What are statistical units ?

15 What is Kurtosis ?

16 What are the mathematical properties of median ?

17 What is Range ?

18 What is variance ?

19 What is statistical inference ?

20 What is Quartile Deviation ?

21 What is a statistical average ?

(9 × 1 = 9 weightage)

III. Short Essay Questions. Answer any *five* questions. Each question carries a weightage of 2.

22 Compare mean and mode.

23 What is standard deviation ?

24 What is a Scatter diagram ?

25 What are the desirable properties of a good measure of variation ?

26 Compare multiple and partial correlation.

27 Properties of a good average.

28 Rank Correlation.

(5 × 2 = 10 weightage)

IV. Essay Type Questions. Answer any *two* questions. Each question carries a weightage of 4.

29 What are the uses and importance of measures of Central tendency and measures of dispersion ?

30 Find the median for the following data :

Mark	...	7.5 – 12.5	12.5–17.5	17.5 – 22.5	22.5. –27.5	27.5 – 32.5	32.5–37.5
Frequency	...	8	12	10	9	4	3

31 Calculate the variance for the following data :

Age	...	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80	80 – 90
No. of members	...	3	61	132	152	140	51	2

(2 × 4 = 8 weightage)