PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2019
(Third Semester)

Branch - **PSYCHOLOGY**

STATISTICS FOR PSYCHOLOGY -I

Tune: Three Hours , Maximum: 75 Marks

SECTION-A (10 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 x 1 = 10)

1 Name the term considered as a science of collecting, summarizing, analyzing and interpreting numerical facts
(i) Statistics (ii) Anthropology
(iii) Economics (iv) Mathematics

2 Which term denotes the evidence or facts describing a group or a situation?
(i) Graph (ii) Curve
(iii) Data (iv) Sampling method

3 Which of the following are the most common measures of the central tendency?
(i) Mean (ii) Median
(iii) Mode (iv) All of the above •

4 Which gets defined as the size of a variable (say a score) which occurs most frequently?
(i) Mean (ii) Mode
(iii) Median (iv) None of the above

5 • Which of the following is not a measure of variability?
(i) Range (ii) Standard deviation
(iii) Mode (iv) Quartile deviation

6 Name the term used when the relationship between two sets of scores or variables can be represented graphically by a straight line
(i) Linear correlation (ii) Graphical representation
(iii) Mean (iv) Mode

7 Identify the formula used to compute the standard error of the mean in a large sample
(i) $\dfrac{Q3-Q1}{}$ (ii) $\dfrac{Efe}{N}$

(iii) $\dfrac{}{\sqrt{N}}$ (iv) None of the above

8 Name the term used to denote the sample of 30 cases or More
(i) Small sample (ii) Population
(iii) Parameter (iv) Large sample

9 Which gets stated in the course of an experiment, so that it can be tested for possible rejection under the assumption that it is true_____ ?
(i) Alternative hypothesis (ii) Null hypothesis
(iii) Mean (iv) Standard Error

Cont...

10   State the level of significance at which if the hypothesis is rejected the chances are 99 out of 100 that hypothesis is not true and that only one chance out of 100 is true
(i) 5%   (ii) 10%
(iii) 1%   (iv) All of the above

SECTION - B (35 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 7 = 35)

11 a Narrate the need and importance of statistics in psychology.
OR
b Sketch out the meaning of statistics.

12 a Calculate the Mean, Median and Mode for the following sets of scores.
   i.   9   14   8   13   10   10   11   12   10
   ii.   20   14   12   14   19   14   18   14

OR
b Show the definition and meaning of the term percentile.

13 a Summarize the meaning and importance of measures of variability.
OR
b State the meaning and types of linear correlation.

14 a State the purpose of sampling
OR
b Summarize the concept of standard error in computing the significant value of the mean or other statistics.

15 a Narrate the need and importance of knowing the significance of the difference between two sample mean.
OR
b Outline the concept of Null Hypothesis.

SECTION - C (30 Marks)
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

16   Summarize the three main methods of organizing the data.

17   In an achievement test, 20 students of a class have scored as
below 12 20 25 15 8 32 28 35 22 44
     36 1.7 29 13 9 37 40 21 10 42
Find out the percentile rank of the score 17.

18   Enumerate the characteristics and properties of normal curve.

19   Elucidate the process of determining the significance of small sample means.

20   Elaborate on one tailed and two tailed tests of significance.

Z-Z-Z •   END