# PSG COLLEGE OF ARTS & SCIENCE
## (AUTONOMOUS)

### BSc DEGREE EXAMINATION MAY 2019
(Second Semester)

Branch - **PSYCHOLOGY**

## PSYCHOLOGICAL STATISTICS -1

T    Three Hours                                                     Maximum: 75 Marks

### SECTION-A (10 Marks)
Answer **ALL** questions
**ALL** questions carry **EQUAL** marks          ( 1 0 x 1 = 10)

1    Science of data is known as.
(i)   Empiricism                    (ii) Measurement
(iii) Statistics                     (iv) Sample

2    The process of observation that leads to a single outcome that cannot be predicted with certainty is.
(i) Experiment                    (ii) Variable
(iii) Population                    (iv) Tabulation

3    A grouping of data into categories giving the number of observations in each category is called as.
(i) Pie chart                       (ii) Array
(iii) Frequency Distribution         (iv) BarChart

4    The distance between largest and the smallest value in a class is called as.
(i) Class Interval                  (ii) Histogram
(iii) Midpoint                      (iv) Class frequency

5    One of the following is the scale of measurement required to determine the MODE.                              *
(i) Ordinal                        (ii) Nominal
(iii) Interval                      (iv) Ratio

6    For grouped data the class with the largest number of observations is called.
(i) Modal class                    (ii) Median class
(iii) Mean class                   (iv) Weighted mean

7    The mean of the squared deviation between each observations and the mean is
(i) Range                          (ii) Skewness
(iii) Variance                     (iv) Relative Frequency

8    The difference between largest and the smallest value in a set of data is.
(i) Dispersion                     (ii) Percentile
(iii) Variance                     (iv) Range

9    For a symmetric bell shaped distribution the
(i)   Mean, Median and Mode are equal
(ii)  Mode is greater than the median and mean
(iii) Mean is greater than median and mean
(iv) None of these

The shape of the frequency with a mean of 20, a median of 18.1 and a mode of 17.0 is termed as.
(i) Symmetric                      (ii) Negatively skewed
(iii) Positively skewed            (iv) Flat

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

11  a Summarise the origin and growth of statistics.
OR
b Narrate the nature of psychological treatment.

12  a Outline the various types of classifications.
OR
b Explain the procedure of drawing Line Graph.

13  a State the basic requisites of a Good Average.
OR
b Calçulate the combined mean for the following data:

Group I        N:150        Mean: 120
Group II       N:75         Mean:126

14  a Define the term: Variance and outline its role in data analysis.
OR
b Compute third quartile for the data given in the question No. 19

15  a Bring out the details of Central Limit theorem.
OR
b Explain the process of calculation of 'Z' score with an example.

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

16      Examine the need and importance of Statistics in the field of Psychology.

17      Distinguish between the *General purpose tables and specific purpose tables with an illustration.

18      Highlight the merits and demerits of Mean, Median and Mode.

19      Compute SD for the following data.

| Cl | 45-49 | 40-44 | 35-39 | 30-34 | 25-29 | 20-24 |
|----|-------|-------|-------|-------|-------|-------|
| F  | i $^1$ | 4 ' | 7 | 10 | 5 | 3 |

20 Enumerate the characteristics and properties of Normal Distribution.

**Z-Z-Z**                         END