PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BCom DEGREE EXAMINATION MAY 2024
(First Semester)

Branch – COMMERCE (BUSINESS ANALYTICS)

STATISTICS FOR BUSINESS ANALYTICS

Time: Three Hours   Maximum: 75 Marks

SECTION-A (10 Marks)
Answer ALL questions

ALL questions carry EQUAL marks   (10 × 1 = 10)

1. For the mid-values given below, 25, 34, 43, 53, 61, 70 The first class of the distribution is:
    (a) 24.5-34.5   (b) 25-34   (c) 20-30   (d) 20.5-29.5

2. If the lower and upper limits of a class are 10 and 40 respectively, the mid-points of the class is:
    (a) 25.0   (b) 12.5   (c) 150   (d) 30.0

3. In a bar diagram, the bars are:
    (a) horizontal   (b) vertical   (c) slanting   (d) none of the above

4. Histogram is suitable for:
    (a) time series data   (b) chronological distribution
    (c) none of (a) or (b)   (d) both (a) and (b)

5. When we have the number of court cases of different categories and information about number of cases settled, the information can be better portrayed through:
    (a) sliding bar diagram   (b) histogram
    (c) paired bar diagram   (d) column chart

6. A function of variates for estimating a parameter is called:
    (a) an estimate   (b) an estimator   (c) a frame   (d) a statistic

7. Extreme value have no effect on:
    (a) average   (b) median   (c) geometric mean   (d) harmonic mean

8. Geometric mean of two numbers 1/16 : and 4/25 is:
    (a) 1/10   (b) 1/100   (c) 10 28   (d) 1009.

9. For comparison of two different series, the best measure of dispersion is:
    (a) range   (b) mean deviation
    (c) standard deviation   (d) none of the above

10. Which measure of dispersion ensures lowest degree of reliability?
    (a) range   (b) mean deviation
    (c) quartile deviation   (d) standard deviation

SECTION - B (35 Marks)
Answer ALL questions

ALL questions carry EQUAL Marks   (5 × 7 = 35)

11 (a)   What are the requisites of a standard table?

OR

   (b)   Write the main purposes of tabulation.

12 (a). Draw Histogram to the data below.

Daily Income	10–12	12–14	14–16	16–18	18–20
Number of persons:	12	14	18	12	16

OR

   (b)   Give the names of diagrams which are two-dimensional. Also explain any one of them.

13 (a)   Distinguish between complete enumeration and sampling study.
OR
   (b)   Explain sampling error.

14 (a)   Find Geometric mean to the data below.

X	10–15	15–20	20-25	25-30	30-35	35-40
f	12	14	18	12	16	10

OR
   (b)   Define Harmonic mean and give its merits.

15 (a)   Find Mean deviation to the data below.
          23, 23, 26, 34, 17, 26, 23, 14, 32, 25
OR
   (b)   Distinguish between skewness and kurtosis.

SECTION -C (30 Marks)
Answer ANY THREE questions
ALL questions carry EQUAL Marks   (3 × 10 = 30)

16   Explain the parts of a good table.

17   Draw Histogram, frequency polygon and frequency curve to the data below.

Sales	1-5	6-10	11-15	16-20	21-25	26-30	31-35
No. of days	1	2	9	14	12	7	3

18   Explain various non-probability sampling methods.

19   Find mean, median and mode to the data below.

Daily Income (in Rs):	10–12	12–14	14–16	16–18	18–20	20-22	22-24
Number of workers:	2	4	8	16	10	5	2

20   Find Bowley's coefficient of skewness to the data below.

sales	1-5	6-10	11-15	16-20	21-25
No. of days	11	12	23	21	10

Z-Z-Z   END