# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

## **BCom DEGREE EXAMINATION DECEMBER 2017**

(First Semester)

## Branch - COMMERCE (BUSINESS ANALYTICS)

#### STATISTICS FOR BUSINESS ANALYTICS

Time: Three Hours Maximum: 75 Marks

#### **SECTION-A 120 Marks!**

Answer **ALL** questions

ALL questions carry' EQUAL marks  $(10 \times 2 = 20)$ 

- 1 Define statistics.
- 2 What are the two sources of collecting data?
- What is meant by classification?
- 4 What are the different types of probability sampling?
- 5 Define pie diagram.
- 6 What are the different types of diagrams?
- What is the median of 6, 9, 21, 5, 7, -2, 0, 32, 9?
- 8 Write any two measures of dispersion.
- 9 Define Skewness.
- Write Bowley's coefficient of Skewness formula.

## **SECTION - B (25 Marks!**

Answer **ALL** Questions

ALL Questions Carry EQUAL Marks  $(5 \times 5 = 25)$ 

11 a Brief explain the various uses of statistics.

OR

- b List out the limitations of statistics.
- 12 a What are the differences between classification and tabulation?

OR

- b Write short note on judgement sampling.
- 13 a Population of India in five censal years are given below: Represent this by simple bar diagram:

Year: 1951 1961 1971 1981 1991 Population (in Crores): 36 44 55 68 84 OR

- b Distinguish between graphs and diagrams.
- 14 a Calculate the median from the following data:

Marks: 10-25 25-40 40-55 55-70 70-85 85-100 Frequency: 6 20 44 26 3 1

- b From the data given below, calculate standard deviation 40, 50, 60, 70, 80, 90, 100.
- 15 a Calculate Karl Pearson's coefficient of Skewness for the following data. 25, 15,23,40, 27,25,23,25,20.

OR

## **SECTION - C (30 Marks)**

Answer any **THREE** Questions **ALL** Questions Carry **EQUAL** Marks (3x10 = 30)

- Explain the various methods collecting primary data.
- What is meant by tabulation? Explain the different parts of a table.
- 18 Draw a Elistogram and frequency polygon for the following data:

  Class interval: 0-10 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 Frequency: 4 6 7 14 16 14 8 16 5
- Weekly wages of a labourer are given below
  Calculate Quartile Deviation and Coefficient of Quartile Deviation:
  Weekly wages (in Rs.): 100 200 400 500 600
  No. of weeks: 5 8 21 12 6
- 20 Calculate coefficient of skewness by Karl Pearson's method:
  Profit (Rs. Lakhs): 10-20 20-30 30-40 40-50 50-60
  No. of Companies: 18 20 30 22 10

**Z-Z-Z** END