

**PSG COLLEGE OF ARTS & SCIENCE**  
(AUTONOMOUS)  
**BCom DEGREE EXAMINATION MAY 2019**  
(First Semester)  
Branch - **COMMERCE (BUSINESS ANALYTICS)**  
**STATISTICS FOR BUSINESS ANALYSIS**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**Answer **ALL** questions**ALL** questions carry **EQUAL** marks (10x2 = 20)

- 1 Define statistics.
- 2 What is primary data?
- 3 State the different types of classification of data.
- 4 What is sampling?
- 5 What are the various types of statistical diagrams?
- 6 What is Histogram?
- 7 Define Median.
- 8 State the various measures of dispersion.
- 9 Define skew ness.
- 10 State the Bow ley's co-efficient of skew ness.

**SECTION - B (25 Marks)**Answer **ALL** Questions**ALL** Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a State the limitations of statistics.  
OR  
b What is secondary data? State the sources of secondary data.
- 12 a What are the objectives of classification of data?  
OR  
b What is simple random sampling? State it's advantages.
- 13 a The marks obtained by 30 students out of 10 are:  
4, 10, 5, 6, 2, 4, 7, 3, 2, 1, 5, 6, 7, 9, 1, 9, 8, 2, 4, 5, 6, 3, 2, 9, 8, 5, 4, 4, 0,  
3.  
Array the data and form the frequency distribution.

OR

- b Write a note on i) Frequency polygon and ii) Ogives.
- 14 a Calculate Mean deviation from mean for the following data.

X	10	15	20	25	30
F	2	4	6	8	5

OR

- b Calculate the standard deviation.

Class:	10-15	15-20	20-25	25-30	30-35	35-40
Frequency:	2	8	20	35	20	15

Find the Pearson's co-efficient of skewness for the given data:						
Annual sales (in'000 Rs.)	0-20	20-40	40-60	60-80	80-100	100-120
Number of items	20	50	59	30	25	16

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Explain the various methods of collecting primary data.
- 17 Explain i) Stratified random sampling and  
ii) Systematic sampling
- 18 Construct a Histogram and a frequency polygon for the following data:

Out put (Units per worker)	500-509	510-519   520-529	530-539	540-549	550-559   560-569
No. of workers:		Ns i 23	37	47	26 1 16

Calculate Mean, Median and Mode for the following data.

Class	4-8	8-12	12-16	16-20	20-24	24-28	28-32 !
Frequency	2	6	10		8	3	i !

- 20 Calculate Bow ley's co-efficient of skew ness:

Class	1-5	6-10	11-15	16-20	21-25	26-30	31-35
Frequency	20	27	29	38	48	53	70

**Z-Z-Z**

END