

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Fourth Semester)

Branch - **COSTUME DESIGN & FASHION**

APPAREL STATISTICS

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 Define statistics.
- 2 What is primary data?
- 3 State any two advantages of diagrammatic representation.
- 4 What is Bar diagram?
- 5 Define median.
- 6 What is Co-efficient of variation?
- 7 What is control charts?
- 8 State the control limits of x and R charts.
- 9 What are various components of time series?
- 10 Define trend.

SECTION - B (25 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Write down the limitations of Statistics.
OR
b Distinguish between primary data and secondary data.
- 12 a What do you understand by tabulation? What are the objectives of tabulation of data?
OR
b Explain in brief a Pie-diagram with suitable example.
- 13 a Find the mean and median from the following data:

X :	2	4	6	8	10
F :	5	8	13	10	6

 OR
 b The marks obtained by 10 students in a semester examination in apparel statistics are as follows:
70, 65, 68, 70, 75, 73, 80, 70, 83 and 86.
Compute i) range, and ii) variance.
- 14 a What do you understand by SQL? Discuss briefly its importance in industry.
OR
b Discuss the role of control charts in-manufacturing processes.
- 15 a What is time series? Mention the importance of time series.
OR
b From the following data calculate the four year moving average and determine the trend values.

Year :	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Value:	50	36.5	43	44.5	38.9	38.1	32.6	41.7	41.1	33.8

SECTION - C (30 Marks)

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

- 16 Explain the methods of collecting primary data.
- 17 Draw the less than and more than O gives from the data given below.
- | | | | | | | | | | |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Class : | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
| Frequency : | 6 | 8 | 12 | 18 | 25 | 16 | 8 | 5 | 2 |

Calculate the Co-efficient of variation for the following data:

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of. Students :	12	18	35	42	50	45	20	8

- 19 Discuss the theoretical basis of P and C Charts.
- 20 Fit a straight line trend by the method of least squares to the following data. Also estimate the earning for the year 2015.
- | | | | | | | | | | |
|-----------------------|---|-------|------|------|------|------|------|------|------|
| Year | : | 200*1 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Earnings (Rs. lakh) : | | 38 | 40 | 65 | 72 | 69 | 60 | 87 | 95 |

Z-Z-Z

END