PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2019
(Fourth Semester)

Branch – **COSTUME DESIGN AND 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   State the functions of Statistics.
2   What is questionnaire?
3   What is meant by tabulation?
4   Define Ogives.
5   What do you understand by dispersion?
6   State the relative measures of dispersion.
7   What are the various types of control charts?
8   State the assumptions of modified control charts.
9   What is time series? Give an example.
10   What is meant by seasonal average?

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

11 a   State the scope of Statistics.

OR

   b   Give briefly the characteristics of a good questionnaire.

12 a   What are the different parts of a table? Prepare a blank table to show the
        distribution of population according to age, gender and marital status.

OR

   b   Construct a continuous frequency distribution table from the following data :
        6 28 24 33 50 19 5 38 37 25 30 29 42 32 37 37 18 12
        13 9 18 27 50 32 47 48 29 30 27 41.

13 a   Find the median of the following frequency distribution :

Daily wages (in Rs.) :	5	10	15	20	25	30
Number of Persons :	7	12	37	25	22	11

OR

   b   Find the mean deviation about mean for the following data :

Value (X) :	10	11	12	13	14
Frequency (f) :	3	12	18	12	3

14 a   What is control charts? Explain the basic principles underlying the control charts.

OR

   b   How do you calculate control limits for a C-chart? State the assumptions
        and approximations involved in the calculations.

15 a   Fit a trend line in the following data by the method of semi-averages :

Year :	2001	2002	2003	2004	2005	2006	2007
Sales :	102	105	114	110	108	116	112

OR

b   Calculate the three yearly moving averages of the production figures given below :

Year :	2000	2001	2002	2003	2004	2005	2006	2007
Production (in tones) :	15	21	30	36	42	48	50	56

2008	2009	2010	2011	2012	2013	2014
63	70	74	82	90	95	102

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

16   Explain the various methods that are used in the collection of primary data. Also state their merits and demerits.

17   What is Pie-chart? Represent the following data by Pie-diagram :

Country	Birth rate
India	33
China	40
UK	20
New Zealand	30
Germany	16
Sweden	15

18   Calculate mean, median and mode from the data given below :

Marks :	0-10	10-20	20-30	30-40	40-50	50-60
No. of students :	8	15	22	20	10	5

19   Explain clearly the basis and working of control charts for mean and range.

20   Fit a straight line by the least square method and tabulate the trend values :

Year :	2000	2001	2002	2003	2004	2005	2006
Production ('000 tonnes) :	77	88	94	85	91	98	90

Z-Z-Z   END