

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2017
(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 (10x2 = 20)

- 1 Define statistics.
- 2 What do you mean by questionnaire?
- 3 Define classification.
- 4 State the significances of diagrammatic representation.
- 5 Calculate Arithmetic mean of the given data
40, 20, 50, 70, 90, 60, 80, 50, 30, 10.
- 6 • Write down the formula for quartile deviation and co-efficient of quartile deviation.
- 7 Define SQC.
- 8 Write down 3-sigma control limits for Range Chart.
- 9 State the components of time series.
- 10 Define seasonal variation.

SECTION - B (5 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5x5 = 25)

- 11 a Briefly explain the limitations of statistics.

OR

- b Briefly explain the secondary data and different methods of collecting secondary data.

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- 12 a Briefly explain the tabulation with its types give examples.

OR

- b Draw Histogram for the given data.

Cl:	100-110	110-120	120-130	130-140	140-150	150-160	160-170
f:	11	28	36	49	33	20	8

- 13 a Calculate Geometric Mean for the given data

Cl:	0-10	10-20	20-30	30-40	40-50
f:	8	12	18	8	6

OR

- b Calculate Mean Deviation about Median

Cl:	10-20	20-30	30-40	40-50	50-60	60-70	70-80
f:	4	6	10	20	10	6	4

- 14 a Briefly explain the uses of SQC.

OR

- b Briefly explain the construction of X - chart.

15 a Briefly explain time series with its uses.

OR

b , Calculate 3 year moving average for the given data

Year:	2000	2001	2002	2003	2004	2005	2006	2007	2008
Production:	17.2	17.3	17.7	18.9	19.2	19.3	18.1	20.2	25.3
					2009	2010	2011	2012	
					24.9	23.2	24.3	- 25.2	

SECTION ^ C (30 Marks)

Answer any THREE Questions

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

16 Explain primary data and also explain different methods of collecting primary data.

17 Draw pie diagram for the given data '

Item of expenditure:	Food	Rent	Cloth	Education	Fuel	Misc.
Expensive in Rs.:	6000	4000	3000	4000	1000	2000

18 From the data given below, state which of the two series is more variable.

A:	46	42.	M	40	43	41	45
B:	40	. 38	36	35	39	37	' 41

19 i) Briefly explain the construction of P chart and

ii) The following data give the number of defective in 20 sample containing 2000 items 425, 430, 216, 314, 225, 322, 280, 306, 337, 305, 356, 402, 216, 264, 126, 409, 193; 280, 389, 326. Construct a p- chart.

20 Apply the method of least square to obtain the trend values from the following data and show that $\sum (y - y_c) = 0$ -

Year:	2011	2012 *	2013	2014	2015
Sales (in lakh .tonnes):	100	120	110	140	80

Also predict the sales for the year 2017/

Z-Z-Z

END