

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022
(Fourth Semester)

Branch – COSTUME DESIGN & FASHION

APPAREL STATISTICS

Time: Three Hours.

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

1. _____ is one which is collected by the investigator himself for the purpose of a specific inquiry or study.
(i) Secondary data (ii) Primary data
(iii) Statistical data (iv) Published data
2. In a grouped data the number of classes preferred are:
(i) minimum possible (ii) adequate
(iii) maximum possible (iv) any arbitrarily chosen number
3. Pie-chart represents the components of a factor by
(i) percentages (ii) angles
(iii) sectors (iv) circles
4. Pictograms are suitable for the data in
(i) counts (ii) intervals
(iii) fraction (iv) none of the above
5. The median of the various values 48,35,36,40,42,54,58,60 is
(i) 40 (ii) 41 (iii) 44 (iv) 45
6. Mode is that value in a frequency distribution which possesses
(i) minimum frequency (ii) maximum frequency
(iii) frequency one (iv) none
7. Which one of the following methods is not used for measuring seasonal variation?
(i) Ratio to trend (ii) Least squares
(iii) Ratio to moving averages (iv) Link relatives
8. Semi-averages method divides the given dataset into ___ parts.
(i) Two (ii) Three (iii) Four (iv) Five
9. C-charts are based on the
(i) Normal distribution (ii) Poisson distribution
(iii) Binomial distribution (iv) Erlang distribution
10. A customer service hotline has received an average of 7 complaints a day for the last 25 days. what type of control chart should be used to monitor this hotline?
(i) \bar{x} -chart (ii) C-chart (iii) np-chart (iv) R-chart

SECTION - B (35 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 7 = 35)

- 11 a. Bring out the methods of collecting the primary data.
OR
- b. Explain the functions of Statistics.

Cont...

12 a Summarize shortly about the Ogives of data.

OR

b Outline the objectives of tabulation. *of data*

13 a Calculate the coefficient of variation from the following data

40 41 45 49 50 51 55 59 60 60

OR

b Find mean and median for the following data

47 50 59 65 68 53 71 74 65 68

14 a The sales of a commodity in tones varied from January 2007 to December 2007 in the following manner.

280 300 280 280 270 240
230 230 220 200 210 200

sketch a trend line by the method of semi-averages.

OR

b Narrate the components of time series.

15 a During the inspection of equal length of cable, the following are the number of defects observed 2,3,4,0,5,6,7,4,3,2. Draw the control chart for number of defects and comment whether the process is under control or not.

OR

b The following figure give the number defective in 20 samples, containing 2000 items.
425,430,216,341,225,32,280,306,337,305,356,402,315,126,409,193,280,389. Calculate the values for control line and limits for p charts.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

16 Analyze the procedure to draft the Questionnaire.

17 Discuss the types of classification of data.

18 Estimate the mean, median and mode for the following data.

C.I	0-20	20-40	40-60	60-80	80-100
F	8	12	30	20	10

19 Production of rice in a district during the last 10 years is given below

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Production	112000	12300	10600	13400	13800	14500	11600	14300	13600	15400

Using three yearly moving average point out the trend in the production of rice in districts.

20 The number of customers complaints received daily by an organization is given below:

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Complaints	2	3	0	1	9	2	0	0	4	2	0	7	0	2	4

Does it mean that the number f complaints is under SQC? Established a control scheme for the future.

Z-Z-Z

END