

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2025
(Fourth Semester)
Branch – COSTUME DESIGN & FASHION

APPAREL STATISTICS

Maximum: 75 Marks

Time: Three Hours

SECTION-A (10 Marks)

Answer ALL questions
ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	The people in an area classified based on their education level is an example for ---- classification a) Quantitative b) Geographical c) Qualitative d) Geographical	K1	CO1
	2	The person appointed by the investigator for the purpose of data collection is called --- a) Respondent b) Informant c) Enumerator d) Investigator	K1	CO1
2	3	A graphical tool used to represent a continuous frequency distribution is a) Pie chart b) Bar chart c) Histogram d) Ogives	K1	CO1
	4	Which of the following measures correspond to the point of intersection of the ogives? a) Median b) First Quartile c) Second Quartile d) Both (i) and (ii)	K1	CO1
3	5	The best measure of central tendency is ---- a) Mean b) Median c) Mode d) Range	K1	CO1
	6	If the unit in which the data is expressed is cm, the unit of coefficient of variation is --- a) Sq.Cm b) cm c) metre d) No unit	K1	CO1
4	7	If the correlation coefficient between X and Y is 0.7, What is the Correlation Coefficient between X-4 and Y-4? a) 0.3 b) 0.14 c) 0.7 d) 0.28	K4	CO2
	8	The regression coefficient in a regression equation is the ----- of the regression line. a) Y-Intercept b) X-Intercept c) Slope d) ordinate	K4	CO2
5	9	What is minimized in the method of least squares? a) The difference between actual value and estimated value b) The sum of differences between actual and estimated values c) The sum of squares of the differences between actual and estimated values d) The sum of squares of actual values.	K2	CO3
	10	Which method assumes that the data has no trend? a) Method of Moving averages b) Method of Simple averages c) Graphical method d) Method of Least squares	K2	CO3

Cont...

SECTION - B (35 Marks)
Answer ALL questions
ALL questions carry EQUAL Marks

(5 × 7 = 35)

ALL questions carry EQUAL Marks

Module No.	Question No.	Question	K Level	CO																											
1	11.a.	Write the limitations of Statistics.	K1	CO1																											
		(OR)																													
	11.b.	Write the functions of Statistics.																													
2	12.a.	Explain the objectives of Classification.	K1	CO1																											
		(OR)																													
	12.b.	Construct the frequency table using exclusive class intervals of magnitude 20 for the marks of 30 students in a class. <table border="1"> <tr><td>12</td><td>23</td><td>45</td><td>34</td><td>34</td><td>56</td><td>62</td><td>96</td><td>88</td><td>32</td></tr> <tr><td>22</td><td>45</td><td>87</td><td>76</td><td>45</td><td>34</td><td>23</td><td>22</td><td>12</td><td>9</td></tr> <tr><td>13</td><td>4</td><td>35</td><td>36</td><td>67</td><td>78</td><td>79</td><td>86</td><td>92</td><td>25</td></tr> </table>			12	23	45	34	34	56	62	96	88	32	22	45	87	76	45	34	23	22	12	9	13	4	35	36	67	78	79
12	23	45	34	34	56	62	96	88	32																						
22	45	87	76	45	34	23	22	12	9																						
13	4	35	36	67	78	79	86	92	25																						
3	13.a.	Write the merits and demerits of mean.	K1	CO1																											
		(OR)																													
	13.b.	Compute the median. <table border="1"> <tr><td>Profit</td><td>122</td><td>142</td><td>134</td><td>136</td><td>125</td></tr> <tr><td>No. of days</td><td>12</td><td>15</td><td>26</td><td>30</td><td>23</td></tr> </table>			Profit	122	142	134	136	125	No. of days	12	15	26	30	23															
Profit	122	142	134	136	125																										
No. of days	12	15	26	30	23																										
4	14.a.	Write the properties of correlation coefficient.	K4	CO2																											
		(OR)																													
	14.b.	Compute the rank correlation coefficient <table border="1"> <tr><td>X</td><td>23</td><td>34</td><td>65</td><td>35</td><td>57</td><td>14</td></tr> <tr><td>Y</td><td>45</td><td>56</td><td>34</td><td>67</td><td>14</td><td>25</td></tr> </table>			X	23	34	65	35	57	14	Y	45	56	34	67	14	25													
X	23	34	65	35	57	14																									
Y	45	56	34	67	14	25																									
5	15.a.	Compute the three yearly moving averages. <table border="1"> <tr><td>Year</td><td>1998</td><td>1999</td><td>2000</td><td>2001</td><td>2002</td><td>2003</td><td>2004</td><td>2005</td><td>2006</td></tr> <tr><td>Price</td><td>16</td><td>18</td><td>23</td><td>45</td><td>47</td><td>56</td><td>45</td><td>65</td><td>76</td></tr> </table>	Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	Price	16	18	23	45	47	56	45	65	76	K2	CO3							
	Year	1998	1999	2000	2001	2002	2003	2004	2005	2006																					
	Price	16	18	23	45	47	56	45	65	76																					
	(OR)																														
15.b.	Explain the components of time series.																														

SECTION - C (30 Marks)
Answer ANY THREE questions
ALL questions carry EQUAL Marks

(3 × 10 = 30)

ALL questions carry EQUAL Marks

Module No.	Question No.	Question	K Level	CO																										
1	16	Explain Mailed questionnaire method and schedules sent through enumerators.	K1	CO1																										
2	17	Locate the mode graphically. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Values</td> <td>0-2</td> <td>2-4</td> <td>4-6</td> <td>6-8</td> <td>8-10</td> </tr> <tr> <td>No. Of values</td> <td>10</td> <td>18</td> <td>30</td> <td>18</td> <td>10</td> </tr> </table>	Values	0-2	2-4	4-6	6-8	8-10	No. Of values	10	18	30	18	10	K1	CO1														
Values	0-2	2-4	4-6	6-8	8-10																									
No. Of values	10	18	30	18	10																									
3	18	From the following quantity of a product sold in two cities on various days of a wee. identify the city in which the prices are stable. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Day</td> <td>Mon</td> <td>Tue</td> <td>Wed</td> <td>Thu</td> <td>Fri</td> <td>Sat</td> </tr> <tr> <td>City A</td> <td>498</td> <td>500</td> <td>505</td> <td>504</td> <td>502</td> <td>509</td> </tr> <tr> <td>City B</td> <td>500</td> <td>505</td> <td>502</td> <td>498</td> <td>496</td> <td>505</td> </tr> </table>	Day	Mon	Tue	Wed	Thu	Fri	Sat	City A	498	500	505	504	502	509	City B	500	505	502	498	496	505	K1	CO1					
Day	Mon	Tue	Wed	Thu	Fri	Sat																								
City A	498	500	505	504	502	509																								
City B	500	505	502	498	496	505																								
4	19	Estimate Y when X=20 and also estimate X when Y=10 using regression equations. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>X</td> <td>10</td> <td>12</td> <td>13</td> <td>12</td> <td>16</td> <td>15</td> </tr> <tr> <td>Y</td> <td>40</td> <td>38</td> <td>43</td> <td>45</td> <td>37</td> <td>43</td> </tr> </table>	X	10	12	13	12	16	15	Y	40	38	43	45	37	43	K4	CO2												
X	10	12	13	12	16	15																								
Y	40	38	43	45	37	43																								
5	20	Calculate the four yearly moving averages. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Year</td> <td>1991</td> <td>1992</td> <td>1993</td> <td>1994</td> <td>1995</td> <td>1996</td> <td>1997</td> <td>1998</td> <td>1999</td> <td>2000</td> <td>2001</td> <td>2002</td> </tr> <tr> <td>Production</td> <td>37.4</td> <td>31.1</td> <td>38.7</td> <td>39.5</td> <td>47.9</td> <td>42.6</td> <td>48.4</td> <td>64.6</td> <td>58.4</td> <td>38.6</td> <td>51.4</td> <td>84.4</td> </tr> </table>	Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Production	37.4	31.1	38.7	39.5	47.9	42.6	48.4	64.6	58.4	38.6	51.4	84.4	K2	CO3
Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002																		
Production	37.4	31.1	38.7	39.5	47.9	42.6	48.4	64.6	58.4	38.6	51.4	84.4																		

777
END

Z-Z-Z

END