

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION MAY 2024
(Second Semester)

Branch – COMMERCE (BUSINESS PROCESS SERVICES)

STATISTICS FOR BUSINESS PROCESS

Time: Three Hours

Maximum: 75 Marks

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	Histogram is suitable for _____ a) Time series data b) chronological data c) both a and b d) none of a) and b)	K1	C01
	2	A frequency distribution can be a) Discrete b) Continuous c) both a and b d) none of these	K2	C01
2	3	Mean is a measure of _____ a) Dispersion b) location c) distribution d) correlation	K1	C02
	4	The median of variate values 11,7,6,9,12,15,19 is a) 9 b)12 c)15 d)11	K2	C02
3	5	The term regression was introduced by a) R.A Fisher b) Francis Galton c) Karl pearson d) none of the above	K1	C03
	6	Scatter diagram of the variate values (X,Y) gives the idea about a) Functional relationship b) regression model c) Distribution of errors d) none of the above	K2	C03
4	7	If two event the conditional probability of A given A is equal to a) 0 b)1 c)Infinite d) interdeterminate	K1	C04
	8	If $B \subset A$ the probability $P(A/B)$ is equal to a) 0 b)1 c) $P(A)/P(B)$ d) $P(B)/P(A)$	K2	C04
5	9	What Excel function is used to calculate the mean of a dataset? a) SUM b) AVERAGE c) MEAN d) MODE	K1	C05
	10	Which statistical measure in Excel is resistant to extreme values? a) Mean b) Median c) Variance d) Mode	K2	C05

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Illustrate the need of statistics in Business	K3	C01
	OR			
	11.b.	Give an detail about types of random variables		
2	12.a.	Calculate Box and Whisker Plots from the following data 85,96,76,108,85,80,100,85,70,95	K3	C02
	OR			
	12.b.	Define skewness and its types.		

Cont...

3	13.a.	Write the properties of regression	K4	C03
	OR			
	13.b.	What are the types of correlation coefficient?		
4	14.a.	Discuss about Statistical probability approach.	K4	C04
	OR			
	14.b.	State and Prove the Multiplicative theorem of probability		
5	15.a.	Explain the computing procedure of measure the mean and median	K5	C05
	OR			
	15.b.	Give a computing procedure of measure of dispersion Range and standard deviation		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO																		
1	16	Draw the cumulative frequency curve for the following distribution showing the number of marks of 59 students in statistics. <table border="1" style="margin-left: 20px;"> <tr> <td>Marks</td> <td>0-10</td> <td>10-20</td> <td>20-30</td> <td>30-40</td> <td>40-50</td> <td>50-60</td> <td>60-70</td> </tr> <tr> <td>Students</td> <td>4</td> <td>8</td> <td>11</td> <td>15</td> <td>12</td> <td>6</td> <td>3</td> </tr> </table>	Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	Students	4	8	11	15	12	6	3	K5	C01		
Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70															
Students	4	8	11	15	12	6	3															
2	17	Calculate the standard deviation for the following table giving the age distribution of 542 members of a club <table border="1" style="margin-left: 20px;"> <tr> <td>Age</td> <td>20-30</td> <td>30-40</td> <td>40-50</td> <td>50-60</td> <td>60-70</td> <td>70-80</td> <td>80-90</td> </tr> <tr> <td>No.of.members</td> <td>3</td> <td>61</td> <td>132</td> <td>153</td> <td>140</td> <td>51</td> <td>2</td> </tr> </table>	Age	20-30	30-40	40-50	50-60	60-70	70-80	80-90	No.of.members	3	61	132	153	140	51	2	K4	C02		
Age	20-30	30-40	40-50	50-60	60-70	70-80	80-90															
No.of.members	3	61	132	153	140	51	2															
3	18	Calculate the coefficient of correlation between X and Y from the following data <table border="1" style="margin-left: 20px;"> <tr> <td>X</td> <td>65</td> <td>66</td> <td>67</td> <td>67</td> <td>68</td> <td>69</td> <td>70</td> <td>72</td> </tr> <tr> <td>Y</td> <td>67</td> <td>68</td> <td>65</td> <td>68</td> <td>72</td> <td>72</td> <td>69</td> <td>71</td> </tr> </table>	X	65	66	67	67	68	69	70	72	Y	67	68	65	68	72	72	69	71	K5	C03
X	65	66	67	67	68	69	70	72														
Y	67	68	65	68	72	72	69	71														
4	19	A letter is known to have come either from TATANAGAR or from CALCUTTA. On the envelop just two consecutive letters TA are visible. What is the probability that the letter came from CALCUTTA ?	K4	CO4																		
5	20	Give a computing procedure of data analysis toolpak about descriptive statistics.	K5	C05																		

Z-Z-Z

END