

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION MAY 2026
(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	Minimum value in class limit is called (a) Primary limit (b) Upper limit (c) Lower limit (d) Secondary limit	K1	CO1
	2	Histograms are under (a) One-dimensional (b) Two-dimensional (c) Graphs (d) Pictogram	K2	CO1
2	3	Sum of values of data is divided by total number of values is used to calculate (a) Arithmetic mean (b) Weighted average mean (c) Geometric mean (d) Harmonic mean	K1	CO2
	4	Median, Mode and Percentiles are all considered as measures of (a) Mathematical average (b) Population average (c) Sample Average (d) Averages of position	K2	CO2
3	5	The range of simple correlation coefficient is (a) 0 to ∞ (b) -∞ to ∞ (c) 0 to 1 (d) -1 to 1	K1	CO3
	6	If X=12,40,85,120 and Y=25,40,59,100, then the correlation is (a) Negative (b) Positive (c) Linear (d) Non Linear	K2	CO3
4	7	The probability of impossible event is (a) Zero (b) One (c) Two (d) Infinity	K1	CO4
	8	If P(A) = 0.90 and P(B)=0.80, where P(A) and P(B) are independent, then P(AUB)= (a) 0.90 (b) 0.8 (c) 0.98 (d) 0.75	K2	CO4
5	9	What excel function is used to calculate the standard deviation of a dataset? (a) STDEV (b) STDEVP (c) SDTVAR (d) STD	K1	CO5
	10	What excel function is used to calculate the correlation of a dataset? (a) CORRE (b) CORREL (c) CORR (d) CORRELATION	K2	CO5

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.	Explain the need of statistics in business.	K3	CO													
	(OR)																
	11.b.	Construct histogram for the following data															
		<table><tr><td>Daily Wage (000)</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><td>70-80</td></tr><tr><td>No of Workers</td><td>7</td><td>15</td><td>20</td><td>35</td><td>22</td><td>13</td><td>8</td></tr></table>			Daily Wage (000)	10-20	20-30	30-40	40-50	50-60	60-70	70-80	No of Workers	7	15	20	35
Daily Wage (000)		10-20	20-30	30-40	40-50	50-60	60-70	70-80									
No of Workers	7	15	20	35	22	13	8										

2	12.a.	Explain the merits and demerits of mean, median and mode.							K3	CO2		
	(OR)											
	12.b.	Apply standard deviation and coefficient of variation for the given data										
		Marks	0-10	10-20	20-30	30-40	40-50	50-60				
		No. of Students	5	10	25	30	20	10				
3	13.a.	Distinguish between correlation and regression.							K4	CO3		
	(OR)											
	13.b.	Rankings of 10 trainees at the beginning (X) and at the end (Y) of a certain course are given bellow. Examine the rank correlation coefficient.										
		X	1	3	4	5	6	2	8	7	10	9
		Y	3	7	2	8	5	10	9	6	4	1
4	14.a.	A bag contains 8 white and 4 red balls. Five balls are drawn at random. What is the probability that 2 of them are red and 3 white?							K4	CO4		
	(OR)											
	14.b.	Two cards are drawn at random from a well-shuffled pack of 52 cards. What is the probability that (i) Both are aces (ii) Both are red										
5	15.a.	Explain the procedure for finding measures of dispersion by using MS Excel.							K5	CO5		
	(OR)											
	15.b.	Explain the procedure for finding correlation analysis by using MS Excel.										

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	Explain the methods of collecting primary and secondary data.	K4	CO1																		
2	17	Analyze mean, median and mode for the following data. <table><tr><td>Wage Per item (Rs)</td><td>12</td><td>15</td><td>20</td><td>25</td><td>30</td><td>40</td><td>50</td></tr><tr><td>No of Items</td><td>10</td><td>25</td><td>40</td><td>70</td><td>32</td><td>13</td><td>10</td></tr></table>	Wage Per item (Rs)	12	15	20	25	30	40	50	No of Items	10	25	40	70	32	13	10	K4	CO2		
Wage Per item (Rs)	12	15	20	25	30	40	50															
No of Items	10	25	40	70	32	13	10															
3	18	Examine the equations of lines of regression between the rainfall and production of the following data. <table><tr><td>Rainfall (cms)</td><td>32</td><td>35</td><td>31</td><td>38</td><td>27</td><td>42</td><td>57</td><td>21</td></tr><tr><td>Production (million tons)</td><td>52</td><td>67</td><td>53</td><td>47</td><td>41</td><td>55</td><td>63</td><td>72</td></tr></table>	Rainfall (cms)	32	35	31	38	27	42	57	21	Production (million tons)	52	67	53	47	41	55	63	72	K4	CO3
Rainfall (cms)	32	35	31	38	27	42	57	21														
Production (million tons)	52	67	53	47	41	55	63	72														
4	19	A bag contains 7 red, 12 white and 4 green balls. 3 balls are drawn one after another. Find the probability that all are white if the draws are (i) with replacement (ii) without replacement.	K5	CO4																		
5	20	Explain the procedure of descriptive statistics using data analysis toolpak in MS Excel.	K5	CO5																		

Z-Z-Z

END