

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION DECEMBER 2023
(First Semester)

Branch – COMMERCE (BUSINESS ANALYTICS)

STATISTICS FOR BUSINESS ANALYTICS

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	Numerical data presented in descriptive form are called: (a) classified presentation (b) tabular presentation (c) graphical presentation (d) textual presentation	K1	CO1
	2	Whether classification is done first or tabulation? (a) Classification follows tabulation. (b) Classification precedes tabulation. (c) Both are done simultaneously. (d) No criterion.	K2	CO1
2	3	In a column chart, the base line is: (a) horizontal (b) vertical (c) at an angle of 45° (d) false base line	K1	CO2
	4	Histogram is suitable for: (a) time series data (b) chronological distribution (c) none of (a) or (b) (d) both (a) and (b)	K2	CO2
3	5	The errors in a survey other than sampling errors are called (a) formula errors (b) planning error (c) non-sampling error (d) none of the above	K1	CO3
	6	An estimator can possess (a) a fixed value (b) any value (c) both (a) and (b) (d) neither (a) nor (b)	K2	CO3
4	7	Harmonic mean is better than other means if the data are for: (a) speed or rates (b) heights or lengths (c) binary values like 0 and 1 (d) ratios or proportions	K1	CO4
	8	The correct relationship between A.M., G.M. and H.M. is: (a) A.M.=G.M.=H.M. (b) G.M.>= A.M.>= H.M. (c) H.M.>= G.M.>= A.M. (d) A.M.>= G.M.>= H.M.	K2	CO4
5	9	Which one of the given measures of dispersion is considered best? (a) standard deviation (b) range (c) variance (d) coefficient of variation	K1	CO5
	10	Which measure of dispersion ensures highest degree of reliability? (a) range (b) mean deviation (c) quartile deviation (d) standard deviation	K2	CO5

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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.	Classify the types of Classification.	K3	CO1
	(OR)			
	11.b.	Describe the objectives of tabulation of data.		
2	12.a.	Discuss the advantages of diagrammatic representation of data.	K2	CO2
	(OR)			
	12.b.	Explain the types of Bar diagrams.		
3	13.a.	Explain in brief the objective of sampling.	K2	CO3
	(OR)			
	13.b.	Explain the sampling unit and sampling frame.		
4	14.a.	Explain the limitations of an average in general.	K2	CO4
	(OR)			
	14.b.	Discuss the geometric mean and give its merits.		
5	15.a.	Analyze the following data by using quartile deviation. 23, 23, 26, 34, 17, 26, 23, 14, 32, 25	K4	CO5
	(OR)			
	15.b.	Analyze the following data by applying Skewness. 25, 15, 23, 40, 27, 25, 23, 25, 20		

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	Briefly write the qualities of a good table.	K2	CO1								
2	17	Explain various one- dimensional diagrams.	K2	CO2								
3	18	Write short note on. (i) Simple random sampling (ii) Stratified random sampling (iii) Systematic sampling	K2	CO3								
4	19	Analyze mean, median and mode from the following data	K4	CO4								
		<table border="1"> <tr> <td>Daily Income (in Rs):</td> <td>100-120</td> <td>120-140</td> <td>140-160</td> <td>160-180</td> <td>180-200</td> </tr> <tr> <td>Number of workers:</td> <td>12</td> <td>14</td> <td>8</td> <td>6</td> <td>10</td> </tr> </table>			Daily Income (in Rs):	100-120	120-140	140-160	160-180	180-200	Number of workers:	12
Daily Income (in Rs):	100-120	120-140	140-160	160-180	180-200							
Number of workers:	12	14	8	6	10							
5	20	Analyze the data by using Karl Pearsons coefficient of skewness from the following data.	K4	CO5								
		<table border="1"> <tr> <td>sales</td> <td>1-5</td> <td>6-10</td> <td>11-15</td> <td>16-20</td> </tr> <tr> <td>No. of days</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table>			sales	1-5	6-10	11-15	16-20	No. of days	1	2
sales	1-5	6-10	11-15	16-20								
No. of days	1	2	3	4								