Roll No. | | | | | | | | | |

COER University

END SEMESTER EXAMINATION, EVEN SEM 2022-23 (BACK PAPER)

Time : 3 hours
Program Name : BBA, B.COM.(CFA)
Course Name : Business Statistics

Total Marks : 100
Semester : II
Course Code : SOS106

Note: All questions are compulsory. No student is allowed to leave the examination hall before the completion of the time.

Q. No 1	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Define Bar graph and Histogram with example.	CO 1	1
(b)	Write short notes on Frequency Curve & Ogive.	CO 1	1
(c)	Define inclusive and exclusive table.	CO 1	1
(d)	Distinguish between Individual series and discrete series.	CO 1	4
(e)	Distinguish between Less than and more than frequency table with suitable example.	CO 1	4

Q. No 2	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Define the sources of primary & secondary data.	CO 2	1
(b)	Define the mean, median and mode.	CO 2	1
(c)	Distinguish between geometric mean & harmonic mean.	CO 2	4
(d)	Find median of the following data : Wages (in Rs) :60-70 50-60 40-50 30-40 20-30 Number of workers :7 21 11 6 5	CO 2	2
(e)	Find the D_6 for the following data: 11, 25, 20, 15, 24, 28, 19, 21.	CO 2	3

Q. No 3	Attempt Any Four Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Define skewness and types of skewness.	CO 3	1
(b)	Define quartile deviation and coefficient of quartile deviation with example.	CO 3	1
(c)	Define standard deviation and coefficient of standard deviation.	CO 3	1
(d)	Compute standard deviation about median for the following data :	CO 3	3
(e)	ComputeKarl Pearson's Coefficient of Skewness from the table given below :	CO 3	3

Size	6	7	8	9	10	11	12
frequency	3	6	9	13	8	5	4

x	10	20	30	40	50	60
y	15	32	51	78	97	109

Q. No 4	Attempt Any Two Parts. Each Question Carries 10 Marks.	CO	BL
(a)	Define Karl Pearson's coefficient of correlation. Interpret r, when r = 1, -1 and 0.	CO 4	1
(b)	What is a scatter diagram? How is it useful in the study of Correlation?	CO 4	2
(c)	Calculate the coefficient of correlation between x & y series from the following data : $\Sigma(x-\bar{x})^2 = 136$, $\Sigma(y^2-\bar{y}) = 138$, $\Sigma(x-\bar{x})(y-\bar{y}) = 122$.	CO 4	3

Q. No 5	Attempt Any Two Parts. Each Question Carries 10 Marks.	CO	BL
(a)	Discuss addition and multiplication law of probability.	CO 5	3
(b)	Find the probability that a leap year has 52 Sundays.	CO 5	2
(c)	Define the following terms: i. Equally likely events ii. Mutually exclusive events iii. Independent & dependent events	CO 5	1

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