

B.B.A. Semester - 3 (CBCS) Examination
December.-2020 [OLD COURSE]
BUSINESS STATISTICS(ELECTIVE 1)

Time: 1:30 Hours**Marks: 42****Instructions:**

1. Figure to the right indicate marks.
 2. There are five questions in the question paper.
 3. Answer any three of the following questions.
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Q.1 (A) Write short note on types of correlation. (07)

(B) Find coefficient of correlation for the following data and interpret it. (07)

X	500	600	700	800	900
Y	1000	2000	3000	4000	5000

Q.2 (A) Write short note on Regression Coefficients. (07)

(B) Obtain two regression equations and estimate the value of y and x=50. (07)

$$\bar{x}=28.02, \sigma_x=4.42, \bar{y}=4.91, \sigma_y=1.10, \text{ and } r=0.80$$

Q.3 (A) Prove that $P(A \cup B) = P(A) + P(B) - (A \cap B)$. (07)

(B) If A, B and C are mutually exclusive and exhaustive events and $3P(A) = 4P(B) = 2P(C)$, (07)

then find $P(A \cup B)$.

Q.4 (A) Properties of Mathematical Expectation or Expected Value. (07)

(B) An unbiased dice is thrown. Find the means and variance of number on the dice. (07)

Q.5 (A) State the properties and uses Poisson distribution. (07)

(B) For a Poisson variate x, $P(X=1) = 2 P(X=2)$. Find its mean, variance and S.D. (07)
