Bachelor of Business Administration 1st Semester

1128

BUSINESS STATISTICS

Paper : BBAS-102

Time Allowed : Three Hours]   **[Maximum Marks : 80**

Note :— (1) Attempt any **FOUR** questions from Section-A. Each question carries **5** marks.

(2) Attempt any **TWO** questions each from Sections B and C. Each question carries **15** marks.

SECTION—A

1. Discuss importance of time series.

2. The rank correlation coefficient between the marks obtained by 10 students in mathematics and economics are found to be 0.5. Find the sum of squares of difference of ranks.

3. A die is thrown. Let E be the event 'the number appearing is a multiple of 3' and F be the event 'the number appearing is even'. Find whether E and F are independent.

4. What is the difference between Spearman's and Karl Pearson's coefficient of correlation ?

5. The mean and variance of 8 observations are 9 and 9.25 respectively. If the size of six observations are 6, 7, 10, 12, 12 and 13, find the remaining 2 observations.

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Item	Unit	2000		2008	
		Price	Value	Quantity	Value
A	Kg	10	1500	160	1760
B	Kg	12	1080	100	1300
C	Metre	15	900	60	960
D	Pockets	9	450	40	480

12. Compute the trend values on the method of least square from the data given below :

Year	No. of Sheep (in lakhs)
1992	56
1993	55
1994	51
1995	47
1996	42
1997	38
1998	33
1999	32

13. (a) Four cards drawn from a pack of 52 playing cards. Find the probability of :

  (i) All are diamonds

  (ii) There is one card of each suit

  (iii) There are two spades and two hearts.

 (b) Pair of dice is thrown 4 times. If a doublet is considered a success, find the probability of 2 successes.

14. Explain clearly the meaning of Time Series Analysis. Indicate the importance of such analysis in business.