Subject : Business Statistics-II

Day : Tuesday   **S.D.E.** ‖‖‖‖‖‖‖‖‖‖‖ Time : 10.00 AM TO 1.00 PM
Date : 06/12/2016   **33215** Max Marks : 80   Total Pages : 2

N.B.:
1) Attempt **ANY FIVE** questions from Section – I and **ANY TWO** questions from Section – II.
2) Answers to both the sections should be written in **SAME** answer book.
3) Figures to the right indicate **FULL** marks.

SECTION - I

Q.1 If P(A) = 0.50, P(B) = 0.65 and P(A $\cup$ B)= 0.70. Find   **[10]**
  a) P(A $\cap$ B)′
  b) P(A′ $\cap$ B′) if A and B are independent.

Q.2 Find Spearman's rank correlation coefficient from the following data: **[10]**

Marks in subject X	42	72	79	40	35	79	82	43	60	72
Marks in subject Y	63	49	80	49	60	39	36	82	72	48

Q.3 Three are 6 books of Business Statistics, 7 books of Management and 3 books of Law. These books are to be arranged on a shelf. In how many ways, can these books be arranged so that: **[10]**
  a) all two books of management are always together?
  b) no two books of law are together?

Q.4 Explain Poisson distribution along with its applications.   **[10]**

Q.5 Fit a regression line Y = a + bX by the method of least squares to the following sample information: **[10]**

Income X in Rs. '000	40	41	42	43	44	45	46	47	48	49
Expenditure Y in Rs. '000	36	28	39	30	35	34	42	49	39	48

Q.6 Write short notes on **ANY TWO** of the following: **[10]**
  a) Normal distribution and its mean
  b) Chi-square test
  c) Sampling estimation

P.T.O.