Subject : Computer Oriented Statistical Methods

Day : Monday   **S.D.E.** ‖‖‖‖‖‖‖‖   Time : 02.00 PM TO 05.00 PM
Date : 19/12/2016   **33280**   Max Marks : 80   Total Pages : 2

N.B.:

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

SECTION - I

Q.1   What do you mean by Statistics? Explain the applications and limitations of Statistics in various fields.   **[10]**

Q.2   Given the following data regarding number of defectives in a production lot. Prepare ungrouped frequency distribution. Hence find cumulative frequencies.   **[10]**

4	5	3	0	2	1	3	0	3	2	1	4	0
1	5	2	0	1	2	1	0	1	0	0	0	1
2	0	1	2	3	5	0	1	2	0	1	2	3
0	5	4	0	1	3	2	0	2	2	1	0	0
0	2	3	0	4	1	3	0	1	2	0	4	0

Q.3   The incomplete frequency distribution is given below: **[10]**

Class	$10-20$	$20-30$	$30-40$	$40-50$	$50-60$	$60-70$	$70-80$	Total
Frequency	12	30	x	65	y	25	18	229

Find missing frequencies if the median value of the data is 46.

Q.4   The equations of two lines of regression are: **[10]**
$4y - 9x = 15$, $25x - 6y = 7$
Hence obtain:
  a)   Means of x and y.
  b)   Correlation coefficient between x and y.

Q.5   The mean and standard deviation of 100 observations are 40 and 51 respectively. It was later on observed that an observation 40 was misread as 50. Calculate correct mean and standard deviation.   **[10]**

Q.6   Find median graphically using ogive curves.   **[10]**

Marks	$0-20$	$20-40$	$40-60$	$60-80$	$80-100$
No. of students	2	18	42	28	5

P.T.O.