NIZER- I (2013 Course) : WINTER - 2016

Subject : Statistical Techniques

Day : Thursday
Date : 15/12/2016

S.D.E. 33295

Time : 10.00 AM TO 1.00 PM
Max Marks : 70 Total Pages : 2

N.B.:

1) Attempt **ANY THREE** questions from Section – I and attempt **ANY TWO** questions from Section - II.
2) Answers to both the questions should be written in the **SAME** answer book.
3) Use of non programmable **CALCULATOR** is allowed.
4) Figures to the right indicate **FULL** marks.
5) Graph papers and statistical tables will be provided if required.

SECTION - I

Q.1 a) Explain the need for the classification of the data. What are the guidelines for data classification? **[07]**

b) Construct the 'less than' and 'more than' ogive using the following data in respect to the weights of the players: **[07]**

Weight in kgs	40 – 45	45 – 50	50 – 55	55 – 60	60 – 65	65 – 70	70 – 75
No. of Players	2	14	24	12	8	4	2

Using the graph find the approximate value of the median.

Q.2 Compute the median and mode for the following data in respect of the voting patterns: **[14]**

Percentage Voting	50 – 60	60 – 70	70 – 80	80 – 90	90 – 100
No. of booths	8	22	13	7	2

Q.3 a) Compute the Arithmetic Mean and Mode for the following **[07]**
15, 20, 28, 19, 28, 16, 14.

b) Profits earned by 100 companies are given below: **[07]**

Profits Rs. Lakhs	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80	80 – 90	90 – 100
No. of companies	4	8	18	30	15	10	8	7

Find percentile P_{39} and decile D_8 for the above data.

Q.4 a) Given the following information: **[07]**

Events	Actions		
	A_1	A_2	A_3
E_1	1800	2200	4200
E_2	1000	600	-1200

$P(E_1) = 0.4$ and $P(E_2) = 0.6$. Find expected payoffs and recommended action

P.T.O.