

- Note: 1. All Questions are compulsory  
2. Figures to right indicate full

Q1 A) Fill in the blanks

(5)

- Quantile divides distribution into \_\_\_\_\_ equal parts.  
a. Four                      b. Six                      c. None of above
- For a statistical experiment every possible out come is called \_\_\_\_\_  
a. Sample                      b. Sample point                      c. Space
- In the problem of decision making all possible situations are \_\_\_\_\_  
a. Sometime known                      b. Never known                      c. Rarely
- If  $r = 1$  the correction is \_\_\_\_\_ perfect  
a. Positive                      b. Negative                      c. Positive perfect
- Standard deviation denote with \_\_\_\_\_  
a. 6                      b. n                      c. None of these

B) Match the following

(5)

- | A                   | B                          |
|---------------------|----------------------------|
| 1. Average          | a. Symmetrical bell shaped |
| 2. Sample Size      | b. $3N/4$                  |
| 3. Vital Statistics | c. $\sum fx / \sum f$      |
| 4. Q                | d. n                       |
| 5. Normal Curve     | e. Census method           |

C) State True or False

(5)

- Coefficient of correction cannot be negative
- Range is not based on all observation
- Scatter diagram can give the degree of relationship between two variable
- For a movement distribution, the mean lies between the mode and median
- In index number the base year is always zero

A) Draw less than curve for the following

(8)

Bursting Pressure in Kgs	No of bags
5-10	2
10-15	9
15-20	29
20-25	54
25-30	11
30-35	5



B) Calculate arithmetic mean & mode for the following

Savings in Rs	No of employee
500-1000	80
1000-1500	120
1500-2000	100
2000-2500	50
2500-3000	50

OR

C) Calculate quartile deviation & its

Fees in Rs	No of Groups
2000-2500	4
2500-3000	6
3000-3500	12
3500-4000	15
4000-4500	8
4500-5000	7

Q.3 A) Draw histogram for following distribution

Weekly Wages in Rs	No of Workers
40-45	5
45-50	9
50-55	15
55-60	13
60-65	11
65-70	12
70-75	5

B) Find mean deviation from mode for the following data.

Expenditure in Rs '1000'	No of families
0-20	14
20-30	23
30-40	27
40-50	21
50-60	15

OR

C) Find rank correlation for the following

Rank I	Rank II
1	5
2	4
3	3
4	2
5	1

D) Find trend values using three yearly moving average for the following



Year	Production in (Million Tonnes)
1966	30
1967	33
1968	28
1969	35
1970	38
1971	40
1972	44
1973	47
1974	46
1975	52
1976	55

OR

4 A) Find Fisher's index number for the following information

(8)

Commodity	1996		1997	
	Price	Qty	Price	Qty
A	2	74	3	82
B	5	125	4	140
C	7	40	6	52

B) A room has 3 lamps from a collection of 10 light bulbs of which 6 are not good a person select 3 at random and put them in the sockets what is probability that he will have light from all 3 lamps

(7)

5 Write short notes on (Any 3)

(15)

1. Limitation of Index number
2. Merits & Demerits of mean
3. Functions of statistics
4. Statistical method VS Experimental Method
5. Merits & Demerits of mean deviation