

## Class Test 1

Total Marks-30

1. Find correlation co-efficient and the regression line of y on x for the following data. 6

$x$ :     1       2       3       4       5  
 $y$ :     2       5       3       8       7

2. From the following table find the correlation co-efficient 10

$\begin{matrix} x \\ y \end{matrix}$	10-40	40-70	70-100	Total
0-30	5	20	-	25
30-60	-	28	2	30
60-90	-	32	13	45
total	5	80	15	100

3. By the method of least square find the normal equations for straight line. 7

Or

Ten participants in a contest are ranked by two judges as follows. Find rank correlation co-efficient

$x$ :     1       6       5       10       3       2       4       9       7       8  
 $y$ :     6       4       9       8       1       2       3       10       5       7

4. Calculate median, upper, lower quartile and quartile deviation from the following 7

W: 70-80    80-90    90-100    100-110    110-120    120-230    130-140    140-150  
 f:    12       18       35       42       50       45       20       8