

STATISTICS

Long question
 # any one
 # (1) Calculate median from the following frequency distribution :-

CI	0-10	10-20	20-30	30-40	40-50	50-60	60-70
f	5	12	15	20	10	6	4

$$\frac{5030 - 2 = 5028}{100} = 50.28$$

Q2

(2) What is correlation? State the types of correlation?

Short questions

(1) Calculate mean from following data — (2)
5, 10, 6, 4, 3, 2

(2) Calculate Rank correlation from following data — (3)

I Judge	6	4	3	1	2	7	9	8	10	5
II Judge	4	1	6	7	5	8	10	9	3	2

* MCQ →

(i) Mean will be (11, 12, 13) —

(a) 11 (b) 12 (c) 13 (d) None of these

(ii) Median will be —

8, 10, 12, 13, 15, 17, 20

(a) 13 (b) 15 (c) 12 (d) 20

(iii) What is formula of Rank — Range —

(a) $Q_2 - Q_1$ (b) $Q_3 - Q_1$ (c) $Q_1 - Q_3$ (d) None of these

(iv) Karl Pearson's correlation —

(a) $r = \frac{\sum xy}{\sqrt{\sum x^2 \cdot \sum y^2}}$ (b) $r = \frac{6 \sum xy}{\sqrt{\sum x \cdot \sum y}}$ (c) $r = \frac{(\sum xy)^2}{\sum x^2}$ (d) None of these

(v) Rank correlation formula —

(a) $r = \frac{1 + 6 \sum d^2}{N^2 - N}$ (b) $r = \frac{1 - 6 \sum d^2}{N^3 - N}$ (c) $r = \frac{1 + 6 \sum d^2}{N^2 - N}$

(d) $r = \frac{1 - 6 \sum d^2}{N^3 - N}$