



Q.1. Answers the following short questions: (6x5=30)

1. Define Geometric Mean, Harmonic Mean, Standard Deviation and Mean Deviation.

2. Find AM, GM, HM.

Classes	50 – 55	56 – 61	62 – 67	68 – 73	74 – 79	80 – 85
<i>f</i>	4	14	24	19	8	1

3. Find Mean Deviation and Standard Deviation.

Classes	5 – 14	15 – 24	25 – 34	35 – 44	45 – 54
<i>f</i>	7	8	20	10	5

4. A man tossed two fair dice, what is the probability?

- The sum of dice will be 7.
- The sum is greater than 6.
- Two dice had the same outcome.

5. Calculate Pearson Co-efficient of Correlation.

<i>X</i>	1	2	3	4	5
<i>f</i>	2	5	3	8	7

6. Find the Co-efficient of rank Correlation.

<i>X</i>	1	2	3	4	5	6	7	8	9	10
<i>Y</i>	2	4	3	1	7	5	8	10	6	9

Q.2. Answers the following questions. (3x10=30)

- Define Quartiles
 - Find its Median, Mode, Quartiles, 8th Decile.

Marks	30 – 39	40 – 49	50 – 59	60 – 69	70 – 79	80 – 89	90 – 99
No. of Students	8	87	190	304	211	85	20

2. Find the values of \hat{Y} and show that $\sum(Y - \hat{Y}) = 0$

<i>X</i>	5	6	8	10	12	13	15	16	17
<i>Y</i>	16	19	23	28	36	41	44	45	50

Also compute the standard error of estimate.

3. Using the Co-efficient of variation, determine whether or not there is greater variation among the prices of certain. Similar Commodities given, than among the life in hours under test.

Price in Rupees:	8	13	18	23	30
Life in Hours:	130	150	180	250	345