

| | A | B | C | D | E | F | G | H |
|----|-----------|-------------|----------|--------------|---------------|----------------------|------|----|
| 1 | Q.No.1(b) | | | | | | | |
| 2 | | Values | 20 | 30 | 40 | 50 | 60 | 70 |
| 3 | | Frequency | 8 | 12 | 20 | 10 | 6 | 4 |
| 4 | | | | | | | | |
| 5 | | solution | | | | | | |
| 6 | | | | | | | | |
| 7 | | x | f | cf | f*abs(x-mean) | f*x^2 | f*x | |
| 8 | | 20 | 8 | 8 | 168 | 3200 | 160 | |
| 9 | | 30 | 12 | 20 | 132 | 10800 | 360 | |
| 10 | | 40 | 20 | 40 | 20 | 32000 | 800 | |
| 11 | | 50 | 10 | 50 | 90 | 25000 | 500 | |
| 12 | | 60 | 6 | 56 | 114 | 21600 | 360 | |
| 13 | | 70 | 4 | 60 | 116 | 19600 | 280 | |
| 14 | | | 60 | | 640 | 112200 | 2460 | |
| 15 | | | | | | | | |
| 16 | | Measure | Position | Formula | Value | Formula | | |
| 17 | | Mean | | | 41 | =SUMPRODUCT(G14/C14) | | |
| 18 | | Median | 30.5 | =(C14+1)/2 | 40 | =B10 | | |
| 19 | | Mode | 20 | =MAX(C8:C13) | 40 | =B10 | | |
| 20 | | Largest | | | 70 | =MAX(B8:B13) | | |
| 21 | | Smallest | | | 20 | =MIN(B8:B13) | | |
| 22 | | Range | | | 50 | =E20-E21 | | |
| 23 | | Coeff.Range | | | 0.555555556 | E22/(E20+E21) | | |
| 24 | | Q1 | 15.25 | =(C14+1)/4 | 30 | =B9 | | |
| 25 | | Q3 | 45.75 | =C24*3 | 50 | =B11 | | |
| 26 | | IQR | | | 20 | =E25-E24 | | |
| 27 | | QD | | | 10 | =E26/2 | | |
| 28 | | Coef QD | | | 0.25 | =E26/(E24+E25) | | |
| 29 | | MD | | | 10.66666667 | =E14/C14 | | |
| 30 | | SD | | | 13.74772708 | =SQRT(F14/C14-E17^2) | | |
| 31 | | Coef of SD | | | 0.335 | =E30/E17 | | |
| 32 | | CV | | | 33.5% | =E30/E17 | | |
| 33 | | Variance | | | 189 | =E30^2 | | |