# Statistics Assignment

Calculate the value of mode for the following frequency distribution :

| Class | 1–4 | 5–8 | 9–12 | 13–16 | 17–20 | 21–24 | 25–28 | 29–32 | 33–36 | 37–40 |
|-------|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|
| Frequency | 2 | 5 | 8 | 9 | 12 | 14 | 12 | 15 | 11 | 13 |

Solution :

The grades 4, 5, 6, 7, 8, 9 are given to 100 students. Find the average grade of that class.

| Grade | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|
| No. of Students | 10 | 12 | 20 | 24 | 30 | 4 |

8. Compute the median for the following frequency distribution. Also calculate $Q_1$, $Q_3$ and $P_{72}$.

| CI | Less than 20 | Less than 30 | Less than 40 | Less than 50 | Less than 60 | Less than 70 | Less than 80 | Less than 90 | Less than 100 |
|---|---|---|---|---|---|---|---|---|---|
| F | 0 | 4 | 16 | 30 | 46 | 66 | 82 | 92 | 100 |

Solution :

. Calculate the mode for the following frequency distribution.

| Class | 0–10 | 10–20 | 20–30 | 30–40 | 40–50 | 50–60 | 60–70 | 70–80 |
|-------|------|-------|-------|-------|-------|-------|-------|-------|
| Frequency | 5 | 8 | 7 | 12 | 28 | 20 | 10 | 10 |

lution :

**Example : 11**

Find the mean deviation from the mean for the following data :

| C. I | 0–10 | 10–20 | 20–30 | 30–40 | 40–50 | 50–60 | 60–70 |
|------|------|-------|-------|-------|-------|-------|-------|
| $f$ | 8 | 12 | 10 | 8 | 3 | 2 | 7 |

Solution :

**Example : 14**

Calculate the standard deviation, variance and coefficient of variation for the following data :

| Marks | 2 | 5 | 6 | 7 | 9 |
|---|---|---|---|---|---|
| No. of Students | 2 | 3 | 8 | 5 | 2 |

Solution :