STATISTICS

MODE

MODE

Q.1 The mode of the following series is 36. Find the missing frequency f in it.

| Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 |
|-----------|------|-------|-------|-------|-------|-------|-------|
| Frequency | 8 | 10 | f | 16 | 12 | 6 | 7 |

Q.2 The marks is science of 80 students of class X are given below : Find the mode of the marks obtained by the students in science.

| Class | 0-10 | 10- | 20- | 30- | 40- | 50- | 60- | 70- | 80- | 90- |
|------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| interval : | | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| Frequency | 3 | 5 | 16 | 12 | 13 | 20 | 5 | 4 | 1 | 1 |

Q.3 Find the mode of following distribution :

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

CLASS 10

Q.4 Find the mean, mode and median of the following data : [CBSE - 2008]

| Classes | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 |
|-----------|------|-------|-------|-------|-------|-------|-------|
| Frequency | 5 | 10 | 18 | 30 | 20 | 12 | 5 |

Q.5 Find the mode for the following data :

| Age | Frequency |
|-------|-----------|
| 0–6 | 6 |
| 6–12 | 11 |
| 12–18 | 25 |
| 18–24 | 35 |
| 24–30 | 18 |
| 30-36 | 12 |
| 36–42 | 6 |

Q.6 Find the mode for the following distribution

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

CLASS 10

| | Q.7 | Calculate the mode for the following dat | ta concerning to the students of X cla |
|--|-----|--|--|
|--|-----|--|--|

| Marks | No. of students |
|-------|-----------------|
| 20–29 | 5 |
| 30–39 | 12 |
| 40–49 | 15 |
| 50–59 | 20 |
| 60–69 | 18 |
| 70–79 | 10 |
| 80-89 | 6 |
| 90–99 | 4 |

Q.8 Find the mode of the following data in each case:

(i) 14, 25, 14, 28, 18, 17, 18, 14, 23, 22, 14, 18

(ii) 7, 9, 12, 7, 12, 13, 15, 7, 12, 7, 25, 18, 7

Q.9 Find the mode of the following series :

| Wages (Rs.) | No. of persons |
|-------------|----------------|
| 0 - 25 | 10 |
| 25 - 50 | 30 |
| 50 - 75 | 40 |
| 75 - 100 | 25 |
| 100 - 125 | 20 |
| 125 – above | 15 |

CLASS 10

Q.10 Compute the mode of the following distribution

| х | f |
|---------|----|
| 0-5 | 20 |
| 5 - 10 | 24 |
| 10 - 15 | 32 |
| 15-20 | 28 |
| 20-25 | 20 |
| 25 - 30 | 16 |
| 30 - 35 | 17 |
| 35-40 | 10 |
| 40-45 | 18 |
| | |

ANSWER

- **1.** f = 10
- **2.** 53.17
- **3.** 46.67
- **4.** Mean = 35.6, Median = 35.67 and mode = 35.45
- **5.** 20.22
- **6.** 46.67
- **7.** 57.14
- **8.** (i) 14 (ii) 7
- **9.** †.60
- **10.** 13.33