1. Mode is the

(a) middle most frequent value

(b) least frequent value

(c) maximum frequent value

(d) none of these

Answer: (c) maximum frequent value

2. In a data, if l = 40, h = 15, f_1=7, f_0=3, f_2=6, then the mode is

(a) 52

(b) 62

(c) 72

(d) none of these

Answer: (a) 52

3. While computing mean of a grouped data, we assume that the frequencies are

(a) centered at the lower limits of the classes

(b) centered at the upper limits of the classes

(c) centered at the class marks of the classes

(d) evenly distributed over all the classes

Answer: (c) centered at the class marks of the classes

4. The mode of 4, 5, 6, 8, 5, 4, 8, 5, 6, x, 8 is 8. The value of 'x' is

(a) 4

(b) 5

(c) 6

(d) 8

Answer: (d) 8

5. The wickets taken by a bowler in 10 cricket matches are 2, 6, 4, 5, 0, 3, 1, 3, 2, 3. The mode of the data is

(a) 1

(b) 2

(c) 3

(d) 4

Answer: (c) 3

6. Construction of a cumulative frequency table is useful in determining the

(a) mean

(b) median

(c) mode

(d) all of the above

Answer: (b) median

7. Mean of 100 items is 49. It was discovered that three items which should have been 60, 70, 80 were wrongly read as 40, 20, 50 respectively. The correct mean is

(a) 48

(b) 49

(c) 50

(d) 60

Answer: (c) 50

8. Which of the following can not be determined graphically?

(a) Mean

(b) Median

(c) Mode

(d) None of these

Answer: (a) Mean

9. Mean of 100 items is 49. It was discovered that three items which should have been 60, 70, 80 were wrongly read as 40, 20, 50 respectively. The correct mean is

(a) 48

(b) 49

(c) 50

(d) 60

Answer: (c) 50

10. The age of 18 students of a class is reported below. Their modal age is 10, 17, 14, 10, 11, 12, 12, 13, 17, 13, 14, 14, 15, 16, 17, 15, 17, 16

(a) 22 years

(b) 17 years

(c) 14 years

(d) 16 years

Answer: (b) 17 years

11. For the following frequency distribution:

Class	Frequency
0 - 5	2
5 - 10	7
10 - 15	18
15 - 20	10
20 - 25	8
25 - 30	5

If the mode and the median are 12.9 and 14.44 respectively, then the mean is

(a) 15.2

(b) 13

(c) 16

(d) 17

Answer: (a) 15.2

12. While computing mean of grouped data, we assume that the frequencies are

(a) evenly distributed over all the classes

(b) centred at the classmarks of the classes

(c) centred at the upper limits of the classes

(d) centred at the lower limits of the classes

Answer: (b) centred at the classmarks of the classes

13. For a symmetrical distribution, which is correct

(a) Mean > Mode > Median

(b) Mode = Mean+ Median/2

(c) Mean < Mode < Median

(d) Mean = Median = Mode

Answer: (d) Mean = Median = Mode

14. The mean and the median of a distribution are 45.9 and 46 respectively. The mode will be

(a) 45

(b) 47

(c) 48

(d) 46.2

Answer: (d) 46.2

15. Which of the following is true –

(a) Mode = 3Median + 2Mean

(b) Median = Mode +3/2[Mean – Median]

(c) Mean = Mode + 3/2[Median – Mode]

(d) Median = Mode + 3/2[Median + Mode]

Answer: (c) Mean = Mode + 3/2[Median – Mode]

16. The measure of central tendency which is given by the x-coordinate of the point of intersection of the 'more than' ogive and 'less than' ogive is –

(a) Mean

(b) Median

(c) Mode

(d) None of these

Answer: (b) Median

17. In the given data if n = 230, l = 40, cf = 76, h = 10, f = 65, then its median is

(a) 40

(b) 46

(c) 47

(d) 48

Answer: (b) 46

18. The median of first 10 prime numbers is

(a) 11

(b) 12

(c) 13

(d) none of these

Answer: (b) 12

19. The mean of the first 10 multiples of 6 is

(a) 3.3

(b) 33

(c) 34

(d) none of these

Answer: (b) 33

20. The marks obtained by 9 students in Mathematics are 59, 46, 30, 23, 27, 44, 52, 40 and 29. The median of the data is

(a) 30

(b) 35

(c) 29

(d) 40

Answer: (d) 40

21. Which of the following is true?

(a) Mode = 2Median – Mean

(b) Mode = 3Median + 2Mean

(c) Mode = 3Median – 2Mean

(d) None of these

Answer: (c) Mode = 3Median – 2Mean

22. The mean of the first 10 natural numbers is

(a) 5

(b) 6

(c) 4.5

(d) 5.5

Answer: (d) 5.5

1. One of the methods for determining mode is
(a) Mode = 2 Median -3 Mean
(b) Mode = 3 Median – 2 Mean
(c) Mode = 2 Mean – 3 Median
(d) Mode = 3 Mean – 2 Median

2. Mode is the
(a) middle most frequent value
(b) least frequent value
(c) maximum frequent value
(d) none of these

3. The algebraic sum of the deviations of a frequency distribution from its mean is always,
(a) greater than zero
(b) less than zero
(c) zero
(d) a non-zero number

MCQ Questions for Class 10 Maths Statistics Question 4. While computing mean of grouped data, we assume that the frequencies are
(a) centred at the upper limits of the classes
(b) centred at the lower limits of the classes
(c) centred at the classmarks of the classes
(d) evenly distributed over all the classes
5. Construction of a cumulative frequency table is useful in determining the
(a) mean

(b) median
(c) mode
(d) none of these

---

6. Which of the following can not be determined graphically?
(a) Mean
(b) Median
(c) Mode
(d) None of these

---

7. The absccissa of the point of intersection of the less than type and of the more than type cumulative frequency curves of a grouped data gives its
(a) Mean
(b) Median
(c) Mode
(d) None of these

---

8. For the following distribution

C.I.	0-10	10-20	20-30	30-40	40-50
f	20	30	24	40	18

the sum of lower limits of the modal class and the median class is
(a) 20
(b) 30
(c) 40
(d) 50

9. For the following distribution

C.I.	0-5	6-11	12-17	18-23	24-29
f	26	20	30	16	22

the upper limit of the median class is
(a) 18.5
(b) 18
(c) 17.5
(d) 17

10. For the following distribution

Marks	No. of students
Less than 20	4
Less than 40	12
Less than 60	25

Less than 80	56
Less than 100	74
Less than 120	80

the modal class is
(a) 20 – 40
(b) 40 – 60
(c) 60 – 80
(d) 80 -100

---

11. For the following distribution

Monthly Expenditure (?)	No. of families
Expenditure les than ? 10,000	15
Expenditure les than ? 13,000	31
Expenditure les than ? 16,000	50

Expenditure les than ? 19,000	67
Expenditure les than ?22,000	85
Expenditure les than ?25,000	100

The number of families having expenditure range (in ?) 16,000 – 19,000 is
(a) 15
(b) 16
(c) 17
(d) 19

---

12. In the given data:

C.I.	f
65-85	4
85 – 105	5
105 – 125	13

125 – 145	20
145 – 165	14
165 – 185	7
185 – 205	4

the difference of the upper limit of the median class and the lower limit of the modal class is
(a) 38
(b) 20
(c) 19
(d) 0

---

13. For the following distribution

Cl	0-5	5-10	10-15	15-20	20-25
f	10	15	12	20	9

the difference of the upper limit of the median class and the lower limit of the modal class is
(a) 0
(b) 5
(c) 10
(d) -5

14. For the following distribution

Marks	0-10	10-20	20-30	30-40	40-50
No. of students	3	9	13	10	5

the number of students who got marks less than 30 is
(a) 13
(b) 25
(c) 10
(d) 12

---

15. For the following distribution

Marks obtained	No. of students
More than or equal to 0	63
More than or equal to 10	58
More than or equal to 20	55
More than or equal to 30	51

More than or equal to 40	48
More than or equal to 50	42

the frequency of the class 20-30 is
(a) 35
(b) 4
(c) 48
(d) 51

---

16. The times, in seconds, taken by 150 atheletes to run a 100 m hurdle race are tabulated below:

C.I.	f
13.8-14	3
14 – 14.2	4
14.2 – 14.4	6
14.4 – 14.6	69

14.6 – 14.8	48
14.8-15	20

The number of atheletes who completed the race in less than 14.6 seconds is
(a) 13
(b) 69
(c) 82
(d) 130

---

17. d_i is the deviation of x_i from assumed mean a. If mean = $x + \frac{\sum f_i d_i}{\sum f_i}$, then x is
(a) class size '
(b) number of observations
(c) assumed mean
(d) none of these

---

18. Mean of 100 items is 49. It was discovered that three items which should have been 60, 70, 80 were wrongly read as 40, 20, 50 respectively. The correct mean is
(a) 48
(b) 49
(c) 50
(d) 60

---

19. Choose the correct answer from the given four options : In the formula
$$\bar{x} = a + \frac{\sum f_i d_i}{\sum f_i}$$
for finding the mean of grouped data d_i s are deviation from a of [NCERT Exemplar Problems]
(a) lower limits of the classes
(b) upper limits of the classes

(c) mid points of the classes
(d) frequencies of the class marks

20. While computing mean of grouped data, we assume that the frequencies are [NCERT Exemplar Problems]
(a) evenly distributed over all the classes
(b) centred at the classmarks of the classes
(c) centred at the upper limits of the classes
(d) centred at the lower limits of the classes

21. A car travels from city A to city B, 120 km apart at an average speed of 50 km/h. It then makes a return trip at an average speed of 60 km/h. It covers another 120 km distance at an average speed of 40 km/h. The average speed over the entire 360 km will be

(a) $\dfrac{50+60+40}{3}$ km/h

(b) $\left(\dfrac{3}{\dfrac{1}{50}+\dfrac{1}{60}+\dfrac{1}{40}}\right)$ km/h

(c) $\dfrac{300}{50+60+40}$ km/h

(d) none of these

22. Mean of n numbers $x_1, x_2, \ldots x_n$ is m. If x_n is replaced by x, then new mean is

(a) $m - x_n + x$

(b) $\dfrac{nm - x_n + x}{n}$

(c) $\dfrac{(n-1)m + x}{n}$

(d) $\dfrac{m - x_n + x}{n}$

23. In the formula $\bar{x} = a + h\left(\dfrac{\sum f_i u_i}{\sum f_i}\right)$ finding the mean of grouped frequency distribution, $u_i =$
[NCERT Exemplar Problems]

(a) $\dfrac{x_i + a}{h}$ 　　　　　(b) $h(x_i - a)$

(c) $\dfrac{x_i - a}{h}$ 　　　　　(d) $\dfrac{a - x_i}{h}$

24. The abscissa of the point of intersection of the less than type and of the more than type cumulative frequency curves of a grouped data gives its [NCERT Exemplar Problems]
(a) mean
(b) median
(c) mode
(d) all the three above

25. For the following distribution:

Marks	Number of Students
Below 10	3
Below 20	12
Below 30	27
Below 40	57

Below 50	75
Below 60	80

the modal class is
(a) 10 – 20
(b) 20 – 30
(c) 30 – 40
(d) 50 – 60

---

26. The times, in seconds, taken by 150 atheletes to run a 110 m hurdle race are tabulated below:

Class	Frequency
13.8 – 14.0	2
14.0 – 14.2	4
14.2 – 14.4	5
14.4 – 14.6	71

14.6 – 14.8	48
14.8 – 15.0	20

The number of atheletes who completed the race in less then 14.6 seconds is:

(a) 11
(b) 71
(c) 82
(d) 130

---

27. Mode is the value of the variable which has:
(a) maximum frequency
(b) minimum frequency
(c) mean frequency
(d) middle most frequency [CBSE 2012]

---

28. Mode and mean of a data are 12k and 15A. Median of the data is
(a) 12k
(b) 14k
(c) 15k
(d) 16k

---

29. If mean = (3 median – mode) . k, then the value of k is
(a) 1
(b) 2
(C) 12
(d) 32

30. The median of set of 9 distinct observations is 20.5. If each of the largest 4 observations of the set is increased by 2, then the median of the new set
(a) is increased by 2
(b) is decreased by 2
(c) is two times of the original number
(d) Remains the same as that of the original set.

31. The median from the table is

Value	Frequency
7	2
8	1
9	4
10	5
11	6
12	1

13	3

(a) 11
(b) 10
(c) 12
(d) 11.5

---

32. The relationship between mean, median and mode for a moderately skewed distribution is
(a) mode = median – 2 mean
(b) mode = 3 median – 2 mean
(c) mode = 2 median – 3 mean
(d) mode = median – mean

---

33. The abscissa of the point of intersection
of both types (less than & more than) of cumulative frequency curves help in finding
(a) mean
(b) median
(c) mode
(d) None of these

34. Cumulative frequency curve is also called
(a) histogram
(b) ogive
(c) bar graph
(d) median