Statistics

Question 1.
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

Question 2.
The mean of the first 10 multiples of 6 is
(a) 3.3
(b) 33
(c) 34
(d) none of these

Answer: (b) 33

Question 3.
In the given data if n = 230, I = 40, cf = 76, h = 10, f = 65, then its median is
(a) 40
(b) 46
(c) 47
(d) 48

Answer: (b) 46

Question 4.
Which of the following is true –
(a) Mode = 3Median + 2Mean

(b) Median = Mode +$\frac{3}{2}$ [Mean – Median]
(c) Mean = Mode + $\frac{3}{2}$ [Median – Mode]
(d) Median = Mode + $\frac{3}{2}$ [Median + Mode]

Answer: (c) Mean = Mode + latex]\frac { 3 }{ 2 }[/latex][Median – Mode]

Question 5.
For a symmetrical distribution, which is correct
(a) Mean > Mode > Median
(b) Mode = Mean+ $\frac{Median}{2}$
(c) Mean < Mode < Median
(d) Mean = Median = Mode

Answer: (d) Mean = Median = Mode

Question 6.
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

Question 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

Question 8.
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

Question 9.
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

Question 10.
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

Question 11.
The mean of the first 10 natural numbers is
(a) 5
(b) 6

(c) 4.5
(d) 5.5

Answer: (d) 5.5

Question 12.
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

Question 13.
The median of first 10 prime numbers is
(a) 11
(b) 12
(c) 13
(d) none of these

Answer: (b) 12

Question 14.
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

Question 15.
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

Question 16.
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

Question 17.
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

Question 18.
Which of the following can not be determined graphically?
(a) Mean
(b) Median
(c) Mode
(d) None of these

Answer: (a) Mean

Question 19.
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

Question 20.
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

Question 21.
In a data, if I = 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
