Name: Statistics Miscellaneous

Chapter : Statistics

Grade : CBSE Grade X

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- 1. Given class interval 49 51 in exclusive form, its class mark is
 - (i) 49 (ii) 50 (iii) 53 (iv) 51 (v) 47
- 2. Given class interval 45 55 in exclusive form, its mid value is
 - (i) 49 (ii) 53 (iii) 51 (iv) 50 (v) 48
- 3. If the upper and lower limit of class interval are 44 and 38 respectively, then the class interval is
 - (i) 38-44.5 (ii) 37.5-44 (iii) 37.5-44.5 (iv) 38.5-43.5 (v) 38-44
- 4. If the lower and upper limit of class interval are 36 and 43 respectively, then the class interval is
 - (i) 36-43 (ii) 36.5-42.5 (iii) 36-43.5 (iv) 35.5-43 (v) 35.5-43.5
- 5. The class boundaries of 22 32 which is in exclusive form are
 - (i) 22-32.5 (ii) 22.5-31.5 (iii) 21.5-32 (iv) 22-32 (v) 21.5-32.5
- 6. The class boundaries of 22 24 which is in inclusive form are
 - (i) 21-24.5 (ii) 21.5-24.5 (iii) 22-24 (iv) 21-25 (v) 21.5-25
- 7. Convert the exclusive form of the class interval 48.5 58.5 to inclusive form
 - (i) 49-58 (ii) 48.5-58 (iii) 49-58.5 (iv) 49.5-57.5 (v) 48.5-58.5
- 8. Convert the inclusive form of the class interval 26 31 to exclusive form
 - (i) 26-31 (ii) 25-32 (iii) 25-31.5 (iv) 25.5-31.5 (v) 25.5-32
- 9. Convert the discontinuous form of the class interval 23 32 to continuous form
 - (i) 22-33 (ii) 22.5-33 (iii) 22-32.5 (iv) 22.5-32.5 (v) 23-32
- 10. Convert the continuous form of the class interval 18.5 23.5 to discontinuous form
 - (i) 18.5-23.5 (ii) 19.5-22.5 (iii) 19-23 (iv) 19-23.5 (v) 18.5-23

The class size used in the below table is

11.	Class-Interval	17 - 22	23 - 28	29 - 34	35 - 40	41 - 46	47 - 52	53 - 58	59 - 64
	Frequency	19	12	10	12	23	29	22	6

- (i) 6 (ii) 4 (iii) 5 (iv) 7 (v) 8
- 12. The class size used in the below table is

Class-Interval	22 - 32	32 - 42	42 - 52	52 - 62	62 - 72	72 - 82
Frequency	15	22	9	21	1	6

(i) 9 (ii) 10 (iii) 7 (iv) 11 (v) 13

- 13. Which of the following are true?
 - a) The number of times a particular observation occurs is called its frequency.
 - b) The difference between the true upper limit and true lower limit is called the class mark.
 - c) The true lower limit of the exclusive form class interval 30 40 is 30.
 - d) Each numerical figure in a data set is called an observation.
 - e) The true lower limit of the inclusive form class interval 30 40 is 30.
 - (i) {e,c} (ii) {a,c,d} (iii) {b,e,d} (iv) {b,a} (v) {b,a,c}
- 14. Which of the following class intervals are in inclusive form?
 - a) 24.5 33.5 , 33.5 42.5 , 42.5 51.5...
 - b) 25 33 , 33 41 , 41 49,...
 - c) 49 57 , 57 65 , 65 73...
 - d) 52 60 , 61 69 , 70 78,...
 - e) 25 33 , 34 42 , 43 51,...
 - (i) {b,e} (ii) {a,d} (iii) {c,a,d} (iv) {b,e,d} (v) {d,e}

The class mark of the class with frequency x is

	Class-Interval	Frequency
	20 - 30	23
5.	31 - 41	4
	42 - 52	Х
	53 - 63	20
	64 - 74	26

1

(i) 48 (ii) 49 (iii) 45 (iv) 47 (v) 46

The class mark of the class with frequency x is

	Class-Interval	Frequency
	10 - 15	18
16.	15 - 20	25
	20 - 25	Х
	25 - 30	17
	30 - 35	27

(i) $\frac{89}{4}$ (ii) $\frac{45}{2}$ (iii) 23 (iv) $\frac{47}{2}$ (v) $\frac{43}{2}$

The mid value of the class with frequency x is

	Class-Interval	Frequency
	15 - 20	9
17.	21 - 26	16
	27 - 32	Х
	33 - 38	26
	39 - 44	26

(i) $\frac{59}{2}$ (ii) $\frac{61}{2}$ (iii) $\frac{57}{2}$ (iv) $\frac{117}{4}$ (v) 30

The mid value of the class with frequency x is

	Class-Interval	Frequency
	1 - 11	30
18.	11 - 21	17
	21 - 31	Х
	31 - 41	17
	41 - 51	11

(i) 28 (ii) 23 (iii) 25 (iv) 26 (v) 27

The class boundaries of the class with frequency \boldsymbol{x} is

	Class-Interval	Frequency
	35 - 41	26
19.	42 - 48	Х
	49 - 55	13
	56 - 62	13
	63 - 69	29

(i) 41.5-49 (ii) 42-48 (iii) 41-48.5 (iv) 41.5-48.5 (v) 41-49

The class boundaries of the class with frequency x is

	Class-Interval	Frequency
	42 - 47	10
20.	47 - 52	12
	52 - 57	х
	57 - 62	1
	62 - 67	15

(i) 52.5-56.5 (ii) 52-57 (iii) 52-57.5 (iv) 51.5-57.5 (v) 51.5-57

The true lower limit and true upper limit of the class with frequency x is

	Class-Interval	Frequency
	25 - 30	2
21.	31 - 36	8
	37 - 42	Х
	43 - 48	9
	49 - 54	2

(i) 36-42.5 (ii) 37-42 (iii) 36.5-42.5 (iv) 36.5-43 (v) 36-43

The true lower limit and true upper limit of the class with frequency \boldsymbol{x} is

	Class-Interval	Frequency
	20 - 25	2
22.	25 - 30	10
	30 - 35	14
	35 - 40	18
	40 - 45	Х

(i) 40-45.5 (ii) 39.5-45.5 (iii) 40-45 (iv) 40.5-44.5 (v) 39.5-45

The lower limit of the class with frequency x is

	Class-Interval	Frequency
	47 - 54	Х
23.	55 - 62	28
	63 - 70	27
	71 - 78	11
	79 - 86	21

(i) 49 (ii) 48 (iii) 47 (iv) 46 (v) 45

The upper limit of the class with frequency \boldsymbol{x} is

	Class-Interval	Frequency
	21 - 28	14
24.	28 - 35	13
	35 - 42	Х
	42 - 49	16
	49 - 56	20

(i) 45 (ii) 43 (iii) 39 (iv) 42 (v) 41

Given class interval table, find the sum of frequencies.

25.	Class-Interval	11 - 21	22 - 32	33 - 43	44 - 54	55 - 65
	Frequency	9	3	6	18	18

(i) 51 (ii) 56 (iii) 55 (iv) 54 (v) 53

Given class interval table, find the sum of frequencies.

26.	Class-Interval	22 - 30	30 - 38	38 - 46	46 - 54	54 - 62	62 - 70
	Frequency	3	19	11	19	11	5

(i) 65 (ii) 68 (iii) 69 (iv) 71 (v) 67

27. Which of the following are continuous variables?

- a) Weights of persons in a group.
- b) Number of members in a family.
- c) Number of workers in a factory.
- d) Wages of workers in a factory.
- e) Heights of children in a class.
- (i) {c,d} (ii) {b,a} (iii) {b,a,d} (iv) {b,c,e} (v) {a,d,e}

28. Which of the following are discontinuous variables?

- a) Number of members in a family.
- b) Weights of persons in a group.
- c) Number of workers in a factory.
- d) Heights of children in a class.
- e) Wages of workers in a factory.
- (i) {a,c} (ii) {d,c,a} (iii) {d,c} (iv) {b,a} (v) {e,b,a}

Given table in inclusive form, convert it into exclusive form.

29. Class-Interval 13 - 22 23 - 32 33 - 42 43 - 52 53 - 62

					00 0-
Frequency	32	14	21	35	33
Class Inter	n. 1 1 2	22 22	21 21	40 40	40 40

(i)	Class-Interval	13 - 22	22 - 31	31 - 40	40 - 49	49 - 58
(1)	Frequency	48	18	26	35	49

/ii\	Class-Interval	12.5 - 22	22.5 - 32	32.5 - 42	42.5 - 52	52.5 - 62
(11)	Frequency	32	14	21	35	33

(iii)	Class-Interval	12.5 - 22.5	22.5 - 32.5	32.5 - 42.5	42.5 - 52.5	52.5 - 62.5
(111)	Frequency	32	14	21	35	33

(iv)	Class-Interval	13.5 - 22.5	23.5 - 32.5	33.5 - 42.5	43.5 - 52.5	53.5 - 62.5
(17)	Frequency	32	14	21	35	33

(),()	Class-Interval	12.5 - 21.5	22.5 - 31.5	32.5 - 41.5	42.5 - 51.5	52.5 - 61.5
(V)	Frequency	32	14	21	35	33

30. Which of the following class intervals are in exclusive form?

- a) 51 58 , 59 66 , 67 74,...
- b) 26.5 34.5 , 34.5 42.5 , 42.5 50.5...
- c) 48 55 , 55 62 , 62 69...
- d) 27 34 , 34 41 , 41 48,...
- e) 27 34 , 35 42 , 43 50,...
- (i) {a,b,c} (ii) {a,b} (iii) {e,c} (iv) {b,c,d} (v) {a,e,d}

If the sum of the following frequency distribution is ${\bf 35}$,

find the value of 'x'.

Value	Frequency
3	2
4	Х
5	6
6	4
7	5
8	1
9	5
10	6
11	1

31.

- (i) 6 (ii) 2 (iii) 4 (iv) 5 (v) 8
- 32. Emperical relation between Mean, Median and Mode is
 - (i) Mode = 3Median 2Mean (ii) Mode = 3Median + 2Mean (iii) Mode = 2Median 3Mean
 - (iv) Mode = 3Median 3Mean
- 33. Find the Mode when Median is 45.9 and Mean is 1.9.
 - (i) 133.9 (ii) 131.9 (iii) 134.9 (iv) 135.9 (v) 132.9
- 34. Find the Mode when Median is 90 and Mean is 50.
 - (i) 171 (ii) 168 (iii) 169 (iv) 172 (v) 170

35.	The mean and median of a uni-modal grouped data are 80.3 and 77.9 respectively. Find the mode of the data. (i) 83.1 (ii) 85.1 (iii) 84.1 (iv) 86.1 (v) 87.1
36.	The mean and median of a uni-modal grouped data are 90 and 26 respectively. Find the mode of the data. (i) 219 (ii) 218 (iii) 220 (iv) 217 (v) 216
37.	Which of the following are continuous variables? a) Number of members in a family b) Wages of workers in a factory c) Number of workers in a factory d) Rainfall at a place over a month e) Population of cities (i) {c,d,b} (ii) {b,d} (iii) {e,a,b} (iv) {a,b} (v) {c,d}
38.	Which of the following are discrete variables? a) Number of workers in a factory b) Number of members in a family c) Temperature at a place over a month d) Wages of workers in a factory e) Rainfall at a place over a month (i) {d,b,a} (ii) {d,b} (iii) {e,c,a} (iv) {a,b} (v) {c,a}

Assignment Key							
1) (ii)	2) (iv)	3) (v)	4) (i)	5) (iv)	6) (ii)		
7) (i)	8) (iv)	9) (iv)	10) (iii)	11) (i)	12) (ii)		
13) (ii)	14) (v)	15) (iv)	16) (ii)	17) (i)	18) (iv)		
19) (iv)	20) (ii)	21) (iii)	22) (iii)	23) (iii)	24) (iv)		
25) (iv)	26) (ii)	27) (v)	28) (i)	29) (iii)	30) (iv)		
31) (iv)	32) (i)	33) (i)	34) (v)	35) (ii)	36) (ii)		
37) (ii)	38) (iv)						

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