EduSahara™ Assignment

Name : Class Interval Table Concepts

Chapter : Graphical Representation of Statistical Data

Grade : ICSE Grade X

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1. Given class interval 13 - 23 in exclusive form, its lower limit is

   (i) 10 (ii) 14 (iii) 12 (iv) 15 (v) 13

2. Given class interval 42 - 44 in exclusive form, its upper limit is

   (i) 45 (ii) 42 (iii) 44 (iv) 46 (v) 43

3. Given class interval 23 - 29 in exclusive form, its class size is

   (i) 4 (ii) 8 (iii) 6 (iv) 5 (v) 7

4. Given class interval 25 - 35 in exclusive form, its class mark is

   (i) 32 (ii) 29 (iii) 30 (iv) 31 (v) 27

5. Given class interval 44 - 46 in exclusive form, its mid value is

   (i) 46 (ii) 45 (iii) 42 (iv) 44 (v) 48

6. If the upper and lower limit of class interval are 43 and 41 respectively, then the class interval is

   (i) 41.5-42.5 (ii) 40.5-43.5 (iii) 41-43.5 (iv) 41-43 (v) 40.5-43

7. If the lower and upper limit of class interval are 16 and 24 respectively, then the class interval is

   (i) 15.5-24 (ii) 15.5-24.5 (iii) 16.5-23.5 (iv) 16-24 (v) 16-24.5

8. The class boundaries of 23 - 28 which is in exclusive form are

   (i) 22.5-28 (ii) 22.5-28.5 (iii) 23.5-27.5 (iv) 23-28 (v) 23-28.5

9. The class boundaries of 15 - 25 which is in inclusive form are

   (i) 14-26 (ii) 14.5-25.5 (iii) 15-25 (iv) 14.5-26 (v) 14-25.5

10. Convert the exclusive form of the class interval 25.5 - 36.5 to inclusive form

    (i) 26.5-35.5 (ii) 26-36 (iii) 26-36.5 (iv) 25.5-36 (v) 25.5-36.5

11. Convert the inclusive form of the class interval 19 - 25 to exclusive form

    (i) 18-25.5 (ii) 18.5-25.5 (iii) 18-26 (iv) 19-25 (v) 18.5-26

12. Convert the discontinuous form of the class interval 23 - 31 to continuous form

    (i) 22.5-32 (ii) 23-31 (iii) 22.5-31.5 (iv) 22-31.5 (v) 22-32

13. Convert the continuous form of the class interval 39.5 - 45.5 to discontinuous form

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

14. The class size used in the below table is

Class-Interval	13 - 23	24 - 34	35 - 45	46 - 56	57 - 67	68 - 78	79 - 89	90 - 100
Frequency	30	1	21	1	9	16	14	23

(i) 12 (ii) 8 (iii) 11 (iv) 14 (v) 10

15. The class size used in the below table is

Class-Interval	23 - 31	31 - 39	39 - 47	47 - 55	55 - 63	63 - 71	71 - 79	79 - 87
Frequency	7	19	13	7	8	30	10	22

(i) 10 (ii) 9 (iii) 7 (iv) 8 (v) 5

16. Which of the following are true?

a) The difference between the true upper limit and true lower limit is called the class mark.
b) Each numerical figure in a data set is called an observation.
c) The true lower limit of the exclusive form class interval 20 - 30 is 20.
d) The number of times a particular observation occurs is called its frequency.
e) The true lower limit of the inclusive form class interval 20 - 30 is 20.

(i) {b,c,d} (ii) {a,b,c} (iii) {a,b} (iv) {e,c} (v) {a,e,d}

17. Which of the following class intervals are in inclusive form?

a) 12 - 18 , 18 - 24 , 24 - 30,...
b) 11.5 - 18.5 , 18.5 - 25.5 , 25.5 - 32.5...
c) 12 - 18 , 19 - 25 , 26 - 32,...
d) 30 - 36 , 36 - 42 , 42 - 48...
e) 33 - 39 , 40 - 46 , 47 - 53,...

(i) {b,e} (ii) {b,e,c} (iii) {a,c} (iv) {d,a,c} (v) {c,e}

18. In inclusive form representation, the observation 21 falls in which class?

(i) 10-20 (ii) 22-31 (iii) 6-16 (iv) 1-11 (v) 11-21

19. In exclusive form representation, the observation 23 falls in which class?

(i) 33-43 (ii) 23-33 (iii) 13-23 (iv) 18-23 (v) 28-38

20. The class mark of the class with frequency x is

Class-Interval	**Frequency**
5 - 15	7
16 - 26	x
27 - 37	9
38 - 48	24
49 - 59	23

(i) 21 (ii) 24 (iii) 20 (iv) 22 (v) 19

21. The class mark of the class with frequency x is

Class-Interval	**Frequency**
11 - 21	12
21 - 31	25
31 - 41	x
41 - 51	15
51 - 61	6

(i) 37 (ii) 38 (iii) 33 (iv) 36 (v) 35

22. The mid value of the class with frequency x is

Class-Interval	Frequency
14 - 24	20
25 - 35	25
36 - 46	19
47 - 57	x
58 - 68	19

(i) 54 (ii) 49 (iii) 53 (iv) 52 (v) 51

23. The mid value of the class with frequency x is

Class-Interval	Frequency
11 - 21	5
21 - 31	18
31 - 41	x
41 - 51	19
51 - 61	20

(i) 36 (ii) 35 (iii) 38 (iv) 37 (v) 33

24. The class boundaries of the class with frequency x is

Class-Interval	Frequency
23 - 30	x
31 - 38	25
39 - 46	10
47 - 54	29
55 - 62	20

(i) 22-31 (ii) 23-30 (iii) 22.5-30.5 (iv) 22.5-31 (v) 22-30.5

25. The class boundaries of the class with frequency x is

Class-Interval	Frequency
34 - 40	6
40 - 46	23
46 - 52	x
52 - 58	21
58 - 64	30

(i) 46-52 (ii) 46-52.5 (iii) 45.5-52.5 (iv) 45.5-52 (v) 46.5-51.5

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

Class-Interval	Frequency
17 - 22	8
23 - 28	x
29 - 34	28
35 - 40	13
41 - 46	21

(i) 22.5-29 (ii) 23-28 (iii) 22.5-28.5 (iv) 22-29 (v) 22-28.5

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

Class-Interval	Frequency
12 - 19	23
19 - 26	20
26 - 33	x
33 - 40	27
40 - 47	25

(i) 26-33 (ii) 26.5-32.5 (iii) 26-33.5 (iv) 25.5-33.5 (v) 25.5-33

28. The lower limit of the class with frequency x is

Class-Interval	Frequency
12 - 17	19
18 - 23	x
24 - 29	5
30 - 35	8
36 - 41	16

(i) 20 (ii) 19 (iii) 17 (iv) 18 (v) 15

29. The upper limit of the class with frequency x is

Class-Interval	Frequency
23 - 31	4
31 - 39	x
39 - 47	12
47 - 55	11
55 - 63	1

(i) 38 (ii) 42 (iii) 40 (iv) 39 (v) 36

30. If the sample data with range 70 has to be divided into 4 class intervals, then the length of the class is

(i) 18 (ii) 17 (iii) 20 (iv) 19 (v) 15

31. If the length of the class is 10, then the number of class intervals needed to represent data with range 50 is

(i) 5 (ii) 6 (iii) 8 (iv) 2 (v) 4

32. If some random sample data is arranged in a frequency distribution table in inclusive form with 1 - 9 as the first class, then the observation 25 falls in which class?

(i) 20-28 (ii) 18.5-27.5 (iii) 18-26 (iv) 19.5-26.5 (v) 19-27

33. If some random sample data is arranged in a frequency distribution table in exclusive form with 1 - 11 as the first class, then the observation 30 falls in which class?

(i) 21.5-30.5 (ii) 20-30 (iii) 20.5-31.5 (iv) 21-31 (v) 22-32

34. Find the sum of frequencies for the given table

Value	14	23	28	39	42	49	64	65	70	78
Frequency	1	1	1	1	1	1	1	1	1	1

(i) 12 (ii) 8 (iii) 10 (iv) 11 (v) 9

35. Given class interval table, find the sum of frequencies.

Class-Interval	25 - 31	32 - 38	39 - 45	46 - 52	53 - 59	60 - 66
Frequency	8	2	29	11	13	4

(i) 68 (ii) 65 (iii) 67 (iv) 66 (v) 70

36. Given class interval table, find the sum of frequencies.

Class-Interval	39 - 48	48 - 57	57 - 66	66 - 75	75 - 84	84 - 93
Frequency	23	27	16	16	25	23

(i) 129 (ii) 130 (iii) 132 (iv) 131 (v) 127

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

Class-Interval	9 - 18	19 - 28	29 - 38	39 - 48	49 - 58
Frequency	47	25	33	11	18

(i)

Class-Interval	8.5 - 18	18.5 - 28	28.5 - 38	38.5 - 48	48.5 - 58
Frequency	47	25	33	11	18

(ii)

Class-Interval	8.5 - 18.5	18.5 - 28.5	28.5 - 38.5	38.5 - 48.5	48.5 - 58.5
Frequency	47	25	33	11	18

(iii)

Class-Interval	9 - 18	18 - 27	27 - 36	36 - 45	45 - 54
Frequency	19	14	39	44	11

(iv)

Class-Interval	8.5 - 17.5	18.5 - 27.5	28.5 - 37.5	38.5 - 47.5	48.5 - 57.5
Frequency	47	25	33	11	18

(v)

Class-Interval	9.5 - 18.5	19.5 - 28.5	29.5 - 38.5	39.5 - 48.5	49.5 - 58.5
Frequency	47	25	33	11	18

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

a) 28.5 - 39.5 , 39.5 - 50.5 , 50.5 - 61.5...
b) 29 - 39 , 39 - 49 , 49 - 59,...
c) 59 - 69 , 69 - 79 , 79 - 89...
d) 29 - 39 , 40 - 50 , 51 - 61,...
e) 62 - 72 , 73 - 83 , 84 - 94,...

(i) {d,a,b} (ii) {d,e,c} (iii) {d,a} (iv) {a,b,c} (v) {e,b}

39. A histogram consists of

(i) sectors (ii) rectangles (iii) triangles (iv) squares

40. The width of the rectangles in a histogram represents

(i) number of classes (ii) frequency of the class (iii) mid values of the class (iv) class interval

41. In a histogram

(i) the length and width of each rectangle are in proportion (ii) the lengths of all rectangles are equal

(iii) the width of all rectangles are equal (iv) the lengths and widths of all rectangles are equal

42. The frequency polygon is one drawn using

(i) end points of classes and frequencies

(ii) lower boundaries of classes and greater than cumulative frequencies

(iii) mid point of classes and frequencies (iv) upper boundaries of classes and cumulative frequencies

43. Less than cumulative curves are drawn using

(i) lower boundaries of classes and less than cumulative frequencies

(ii) mid values of classes and less than cumulative frequencies

(iii) lower boundaries of classes and greater than cumulative frequencies

(iv) upper boundaries of classes and less than cumulative frequencies

44. Greater than cumulative curves are drawn using

(i) upper boundaries of classes and less than cumulative frequencies

(ii) upper boundaries of classes and greater than cumulative frequencies

(iii) mid values of classes and greater than cumulative frequencies

(iv) lower boundaries of classes and greater than cumulative frequencies

Assignment Key

1) (v)	2) (iii)	3) (iii)	4) (iii)	5) (ii)	6) (iv)
7) (iv)	8) (iv)	9) (ii)	10) (ii)	11) (ii)	12) (iii)
13) (i)	14) (iii)	15) (iv)	16) (i)	17) (v)	18) (v)
19) (ii)	20) (i)	21) (iv)	22) (iv)	23) (i)	24) (iii)
25) (i)	26) (iii)	27) (i)	28) (iv)	29) (iv)	30) (i)
31) (i)	32) (v)	33) (iv)	34) (iii)	35) (iii)	36) (ii)
37) (ii)	38) (iv)	39) (ii)	40) (iv)	41) (iii)	42) (iii)
43) (iv)	44) (iv)				

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