EduSahara™ Assignment

Name : Class Interval Table Concepts

Chapter : Frequency Distribution Tables and Graphs

Grade : SSC Grade VIII

1. Given class interval 22 - 24 in exclusive form, its lower limit is

   (i) 20 (ii) 22 (iii) 24 (iv) 23 (v) 21

2. Given class interval 21 - 23 in exclusive form, its upper limit is

   (i) 23 (ii) 26 (iii) 20 (iv) 24 (v) 22

3. Given class interval 20 - 26 in exclusive form, its class size is

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

4. Given class interval 42 - 44 in exclusive form, its class mark is

   (i) 46 (ii) 43 (iii) 44 (iv) 42 (v) 40

5. Given class interval 45 - 48 in exclusive form, its mid value is

   (i) $\frac{91}{2}$ (ii) 47 (iii) $\frac{93}{2}$ (iv) $\frac{185}{4}$ (v) $\frac{95}{2}$

6. If the upper and lower limit of class interval are 38 and 36 respectively, then the class interval is

   (i) 35.5-38.5 (ii) 36-38.5 (iii) 36.5-37.5 (iv) 35.5-38 (v) 36-38

7. If the lower and upper limit of class interval are 21 and 31 respectively, then the class interval is

   (i) 21-31 (ii) 20.5-31.5 (iii) 20.5-31 (iv) 21-31.5 (v) 21.5-30.5

8. The class boundaries of 18 - 26 which is in exclusive form are

   (i) 18.5-25.5 (ii) 17.5-26.5 (iii) 18-26.5 (iv) 17.5-26 (v) 18-26

9. The class boundaries of 16 - 18 which is in inclusive form are

   (i) 15.5-18.5 (ii) 16-18 (iii) 15-19 (iv) 15.5-19 (v) 15-18.5

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

Class-Interval	Frequency
12 - 18	x
19 - 25	11
26 - 32	16
33 - 39	11
40 - 46	16

(i) 11.5-19 (ii) 11-18.5 (iii) 11-19 (iv) 12-18 (v) 11.5-18.5

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

Class-Interval	Frequency
38 - 44	x
44 - 50	21
50 - 56	10
56 - 62	21
62 - 68	16

(i) 38-44 (ii) 38-44.5 (iii) 37.5-44 (iv) 37.5-44.5 (v) 38.5-43.5

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

Class-Interval	Frequency
23 - 32	x
33 - 42	12
43 - 52	15
53 - 62	14
63 - 72	1

(i) 24 (ii) 21 (iii) 23 (iv) 26 (v) 22

13. The class size used in the below table is

Class-Interval	18 - 24	25 - 31	32 - 38	39 - 45	46 - 52
Frequency	12	13	19	14	29

(i) 5 (ii) 6 (iii) 8 (iv) 7 (v) 9

14. The class size used in the below table is

Class-Interval	37 - 45	45 - 53	53 - 61	61 - 69	69 - 77
Frequency	27	25	22	10	18

(i) 7 (ii) 6 (iii) 8 (iv) 9 (v) 11

15. Which of the following are true?

a) Each numerical figure in a data set is called an observation.
b) The true lower limit of the inclusive form class interval 50 - 60 is 50.
c) The true lower limit of the exclusive form class interval 50 - 60 is 50.
d) The difference between the true upper limit and true lower limit is called the class mark.
e) The number of times a particular observation occurs is called its frequency.

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

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

a) 13 - 20 , 20 - 27 , 27 - 34,...
b) 13 - 20 , 21 - 28 , 29 - 36,...
c) 37 - 44 , 45 - 52 , 53 - 60,...
d) 34 - 41 , 41 - 48 , 48 - 55...
e) 12.5 - 20.5 , 20.5 - 28.5 , 28.5 - 36.5...

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

17. In inclusive form representation, the observation 43 falls in which class?

(i) 33-43 (ii) 44-53 (iii) 32-42 (iv) 28-38 (v) 23-33

18. In exclusive form representation, the observation 39 falls in which class?

(i) 49-59 (ii) 44-54 (iii) 34-39 (iv) 39-49 (v) 29-39

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

Class-Interval	Frequency
2 - 12	22
13 - 23	20
24 - 34	24
35 - 45	x
46 - 56	28

(i) 42 (ii) 41 (iii) 37 (iv) 39 (v) 40

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

Class-Interval	Frequency
7 - 12	3
12 - 17	11
17 - 22	x
22 - 27	13
27 - 32	28

(i) $\frac{39}{2}$ (ii) $\frac{37}{2}$ (iii) $\frac{77}{4}$ (iv) 20 (v) $\frac{41}{2}$

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

Class-Interval	Frequency
1 - 11	17
12 - 22	6
23 - 33	x
34 - 44	21
45 - 55	30

(i) 28 (ii) 29 (iii) 30 (iv) 26 (v) 27

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

Class-Interval	Frequency
15 - 25	7
25 - 35	14
35 - 45	27
45 - 55	x
55 - 65	11

(i) 51 (ii) 52 (iii) 49 (iv) 47 (v) 50

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

Class-Interval	Frequency
24 - 29	15
30 - 35	10
36 - 41	21
42 - 47	x
48 - 53	26

(i) 42-47 (ii) 41-48 (iii) 41.5-48 (iv) 41.5-47.5 (v) 41-47.5

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

Class-Interval	Frequency
14 - 20	22
20 - 26	x
26 - 32	9
32 - 38	17
38 - 44	5

(i) 19.5-26 (ii) 20.5-25.5 (iii) 20-26 (iv) 19.5-26.5 (v) 20-26.5

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

Class-Interval	Frequency
25 - 33	3
33 - 41	30
41 - 49	20
49 - 57	x
57 - 65	14

(i) 59 (ii) 58 (iii) 56 (iv) 57 (v) 54

26. If the sample data with range 50 has to be divided into 6 class intervals, then the length of the class is

(i) 12 (ii) 10 (iii) 8 (iv) 9 (v) 6

27. If the length of the class is 9, then the number of class intervals needed to represent data with range 50 is

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

28. The number of classes of class size 7 required to represent the given random sample in exclusive form
1 1 4 5 6 6 7 7 7 9 12 16 16 17 17 18 20 21 23 26 27 28 29 30 31 31 33 36 41 41 43 44 45

(i) 4 (ii) 6 (iii) 8 (iv) 7 (v) 9

29. If some random sample data is arranged in a frequency distribution table in inclusive form with 1 - 7 as the first class, then the observation 17 falls in which class?

(i) 15.5-20.5 (ii) 16-22 (iii) 14.5-21.5 (iv) 14-20 (v) 15-21

30. If some random sample data is arranged in a frequency distribution table in exclusive form with 1 - 10 as the first class, then the observation 24 falls in which class?

(i) 19.5-27.5 (ii) 20-29 (iii) 19-28 (iv) 18-27 (v) 18.5-28.5

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

Class-Interval	44 - 52	52 - 60	60 - 68	68 - 76	76 - 84
Frequency	22	27	17	12	11

(i) 86 (ii) 91 (iii) 90 (iv) 88 (v) 89

32. Which of the following are continuous variables?

a) Weights of persons in a group.
b) Number of members in a family.
c) Wages of workers in a factory.
d) Heights of children in a class.
e) Number of workers in a factory.

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

33. Which of the following are discontinuous variables?

a) Number of workers in a factory.
b) Heights of children in a class.
c) Number of members in a family.
d) Wages of workers in a factory.
e) Weights of persons in a group.

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

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

a) 13.5 - 23.5 , 23.5 - 33.5 , 33.5 - 43.5...
b) 14 - 23 , 24 - 33 , 34 - 43,...
c) 44 - 53 , 54 - 63 , 64 - 73,...
d) 14 - 23 , 23 - 32 , 32 - 41,...
e) 41 - 50 , 50 - 59 , 59 - 68...

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

35. If the sum of the following frequency distribution is 33 , find the value of 'x'.

Value	Frequency
4	7
5	4
6	1
7	2
8	x
9	4
10	1
11	2
13	3
14	4
15	1

(i) 2 (ii) 3 (iii) 5 (iv) 7 (v) 4

36. If the sum of the following frequency distribution is 53 , find the value of 'x'.

Class-Interval	Frequency
20 - 28	9
29 - 37	6
38 - 46	9
47 - 55	8
56 - 64	x
65 - 73	2
74 - 82	8
83 - 91	8

(i) 4 (ii) 5 (iii) 0 (iv) 2 (v) 3

37. Which of the following are continuous variables?

a) Marks obtained by student in a particular subject
b) Weights of persons in a group
c) Rainfall at a place over a month
d) Number of players in a team
e) Number of workers in a factory

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

38. Which of the following are discrete variables?

a) Marks obtained by student in a particular subject
b) Number of players in a team
c) Wages of workers in a factory
d) Temperature at a place over a month
e) Rainfall at a place over a month

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

39. Convert the exclusive form of the class interval 34.5 - 40.5 to inclusive form

(i) 35-40.5 (ii) 34.5-40.5 (iii) 35.5-39.5 (iv) 35-40 (v) 34.5-40

40. Convert the inclusive form of the class interval 11 - 15 to exclusive form

(i) 10-16 (ii) 10-15.5 (iii) 10.5-16 (iv) 11-15 (v) 10.5-15.5

41. Convert the discontinuous form of the class interval 21 - 29 to continuous form

(i) 20-29.5 (ii) 20.5-30 (iii) 21-29 (iv) 20.5-29.5 (v) 20-30

42. Convert the continuous form of the class interval 28.5 - 34.5 to discontinuous form

(i) 29-34.5 (ii) 29.5-33.5 (iii) 28.5-34.5 (iv) 28.5-34 (v) 29-34

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

Class-Interval	18 - 26	27 - 35	36 - 44	45 - 53	54 - 62	63 - 71
Frequency	43	35	36	45	22	35

(i)

Class-Interval	18 - 26	26 - 34	34 - 42	42 - 50	50 - 58	58 - 66
Frequency	50	44	15	12	39	39

(ii)

Class-Interval	17.5 - 26	26.5 - 35	35.5 - 44	44.5 - 53	53.5 - 62	62.5 - 71
Frequency	43	35	36	45	22	35

(iii)

Class-Interval	18.5 - 26.5	27.5 - 35.5	36.5 - 44.5	45.5 - 53.5	54.5 - 62.5	63.5 - 71.5
Frequency	43	35	36	45	22	35

(iv)

Class-Interval	17.5 - 25.5	26.5 - 34.5	35.5 - 43.5	44.5 - 52.5	53.5 - 61.5	62.5 - 70.5
Frequency	43	35	36	45	22	35

(v)

Class-Interval	17.5 - 26.5	26.5 - 35.5	35.5 - 44.5	44.5 - 53.5	53.5 - 62.5	62.5 - 71.5
Frequency	43	35	36	45	22	35

Assignment Key

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