EduSahara™ Assignment

Name : Class Interval Table Concepts

Chapter : Frequency Distribution Tables and Graphs

Grade : SSC Grade VIII

1. Given class interval 18 - 20 in exclusive form, its lower limit is

   (i) 18 (ii) 17 (iii) 16 (iv) 20 (v) 19

2. Given class interval 33 - 39 in exclusive form, its upper limit is

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

3. Given class interval 50 - 60 in exclusive form, its class size is

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

4. Given class interval 30 - 35 in exclusive form, its class mark is

   (i) $\frac{129}{4}$ (ii) $\frac{65}{2}$ (iii) $\frac{63}{2}$ (iv) $\frac{67}{2}$ (v) 33

5. Given class interval 40 - 50 in exclusive form, its mid value is

   (i) 48 (ii) 45 (iii) 43 (iv) 46 (v) 44

6. If the upper and lower limit of class interval are 46 and 38 respectively, then the class interval is

   (i) 37.5-46 (ii) 38-46 (iii) 38-46.5 (iv) 37.5-46.5 (v) 38.5-45.5

7. If the lower and upper limit of class interval are 32 and 36 respectively, then the class interval is

   (i) 31.5-36.5 (ii) 32-36.5 (iii) 32-36 (iv) 31.5-36 (v) 32.5-35.5

8. The class boundaries of 45 - 51 which is in exclusive form are

   (i) 44.5-51.5 (ii) 45-51 (iii) 45-51.5 (iv) 45.5-50.5 (v) 44.5-51

9. The class boundaries of 41 - 44 which is in inclusive form are

   (i) 40-45 (ii) 40.5-44.5 (iii) 40.5-45 (iv) 41-44 (v) 40-44.5

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

Class-Interval	Frequency
20 - 26	8
27 - 33	27
34 - 40	1
41 - 47	x
48 - 54	22

   (i) 40-47.5 (ii) 41-47 (iii) 40-48 (iv) 40.5-48 (v) 40.5-47.5

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

Class-Interval	Frequency
21 - 29	10
29 - 37	2
37 - 45	20
45 - 53	x
53 - 61	25

(i) 45-53.5 (ii) 44.5-53 (iii) 45-53 (iv) 44.5-53.5 (v) 45.5-52.5

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

Class-Interval	Frequency
39 - 46	x
47 - 54	12
55 - 62	12
63 - 70	20
71 - 78	16

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

13. The class size used in the below table is

Class-Interval	12 - 21	22 - 31	32 - 41	42 - 51	52 - 61	62 - 71	72 - 81
Frequency	12	4	13	8	5	7	22

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

14. The class size used in the below table is

Class-Interval	44 - 51	51 - 58	58 - 65	65 - 72	72 - 79
Frequency	20	29	2	20	21

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

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 40 - 50 is 40.
c) The difference between the true upper limit and true lower limit is called the class mark.
d) The true lower limit of the exclusive form class interval 40 - 50 is 40.
e) The number of times a particular observation occurs is called its frequency.

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

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

a) 9.5 - 16.5 , 16.5 - 23.5 , 23.5 - 30.5...
b) 28 - 34 , 34 - 40 , 40 - 46...
c) 10 - 16 , 17 - 23 , 24 - 30,...
d) 31 - 37 , 38 - 44 , 45 - 51,...
e) 10 - 16 , 16 - 22 , 22 - 28,...

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

17. In inclusive form representation, the observation 50 falls in which class?

(i) 30-40 (ii) 51-60 (iii) 39-49 (iv) 35-45 (v) 40-50

18. In exclusive form representation, the observation 10 falls in which class?

(i) 10-20 (ii) 15-25 (iii) 5-10 (iv) 20-30 (v) 0-10

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

Class-Interval	Frequency
15 - 20	19
21 - 26	18
27 - 32	x
33 - 38	22
39 - 44	2

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

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

Class-Interval	Frequency
19 - 29	1
29 - 39	x
39 - 49	3
49 - 59	25
59 - 69	6

(i) 34 (ii) 33 (iii) 36 (iv) 35 (v) 32

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

Class-Interval	Frequency
10 - 20	19
21 - 31	28
32 - 42	x
43 - 53	22
54 - 64	15

(i) 38 (ii) 40 (iii) 34 (iv) 36 (v) 37

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

Class-Interval	Frequency
5 - 10	17
10 - 15	26
15 - 20	27
20 - 25	x
25 - 30	2

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

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

Class-Interval	Frequency
27 - 33	12
34 - 40	x
41 - 47	18
48 - 54	25
55 - 61	30

(i) 33-40.5 (ii) 33.5-41 (iii) 34-40 (iv) 33-41 (v) 33.5-40.5

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

Class-Interval	Frequency
31 - 37	x
37 - 43	26
43 - 49	11
49 - 55	16
55 - 61	15

(i) 30.5-37 (ii) 31.5-36.5 (iii) 30.5-37.5 (iv) 31-37.5 (v) 31-37

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

Class-Interval	Frequency
28 - 37	x
37 - 46	29
46 - 55	9
55 - 64	4
64 - 73	17

(i) 35 (ii) 36 (iii) 39 (iv) 37 (v) 38

26. If the sample data with range 40 has to be divided into 9 class intervals, then the length of the class is

(i) 5 (ii) 7 (iii) 3 (iv) 6 (v) 4

27. If the length of the class is 8, then the number of class intervals needed to represent data with range 30 is

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

28. The number of classes of class size 5 required to represent the given random sample in exclusive form
1 2 3 5 6 6 6 8 12 13 14 14 15 18 20 21 22 23 24 28 30 31 32 33 37 38 40 41 41 44 46 48 48 48

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

29. If some random sample data is arranged in a frequency distribution table in inclusive form with 4 - 11 as the first class, then the observation 32 falls in which class?

(i) 28-35 (ii) 27.5-35.5 (iii) 29-36 (iv) 27-34 (v) 28.5-34.5

30. If some random sample data is arranged in a frequency distribution table in exclusive form with 2 - 12 as the first class, then the observation 18 falls in which class?

(i) 12-22 (ii) 11.5-22.5 (iii) 13-23 (iv) 11-21 (v) 12.5-21.5

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

Class-Interval	21 - 30	30 - 39	39 - 48	48 - 57	57 - 66	66 - 75	75 - 84
Frequency	6	12	4	18	3	5	1

(i) 50 (ii) 51 (iii) 49 (iv) 48 (v) 47

32. Which of the following are continuous variables?

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

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

33. Which of the following are discontinuous variables?

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

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

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

a) 50 - 60 , 61 - 71 , 72 - 82,...
b) 17 - 27 , 28 - 38 , 39 - 49,...
c) 47 - 57 , 57 - 67 , 67 - 77...
d) 16.5 - 27.5 , 27.5 - 38.5 , 38.5 - 49.5...
e) 17 - 27 , 27 - 37 , 37 - 47,...

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

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

Value	Frequency
2	4
3	2
4	3
5	1
6	4
7	1
8	5
9	x
10	2
12	4
13	1
14	2
15	1

(i) 2 (ii) 1 (iii) 3 (iv) 5 (v) 4

36. If the sum of the following frequency distribution is 28 , find the value of 'x'.

Class-Interval	Frequency
10 - 19	2
20 - 29	5
30 - 39	10
40 - 49	1
50 - 59	7
60 - 69	x

(i) 0 (ii) 3 (iii) 4 (iv) 6 (v) 2

37. Which of the following are continuous variables?

a) Number of members in a family
b) Number of players in a team
c) Population of cities
d) Weights of persons in a group
e) Heights of children in a class

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

38. Which of the following are discrete variables?

a) Number of members in a family
b) Heights of children in a class
c) Wages of workers in a factory
d) Number of workers in a factory
e) Rainfall at a place over a month

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

39. Convert the exclusive form of the class interval 25.5 - 35.5 to inclusive form

(i) 26.5-34.5 (ii) 26-35 (iii) 26-35.5 (iv) 25.5-35.5 (v) 25.5-35

40. Convert the inclusive form of the class interval 33 - 37 to exclusive form

(i) 32-38 (ii) 32.5-37.5 (iii) 32-37.5 (iv) 33-37 (v) 32.5-38

41. Convert the discontinuous form of the class interval 10 - 17 to continuous form

(i) 10-17 (ii) 9.5-17.5 (iii) 9-18 (iv) 9-17.5 (v) 9.5-18

42. Convert the continuous form of the class interval 35.5 - 42.5 to discontinuous form

(i) 36-42 (ii) 36.5-41.5 (iii) 35.5-42.5 (iv) 35.5-42 (v) 36-42.5

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	17	39	28	19	39	36

(i)

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	17	39	28	19	39	36

(ii)

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	17	39	28	19	39	36

(iii)

Class-Interval	18 - 26	26 - 34	34 - 42	42 - 50	50 - 58	58 - 66
Frequency	11	34	25	28	22	14

(iv)

Class-Interval	17.5 - 26	26.5 - 35	35.5 - 44	44.5 - 53	53.5 - 62	62.5 - 71
Frequency	17	39	28	19	39	36

(v)

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	17	39	28	19	39	36

Assignment Key

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