EduSahara™ Assignment

Name : Class Interval Table Concepts

Chapter : Statistics

Grade : SSC Grade IX

1. If some random sample data is arranged in a frequency distribution table in inclusive form with 1 - 8 as the first class, then the observation 29 falls in which class?

   (i) 26-33 (ii) 25-32 (iii) 24-31 (iv) 25.5-31.5 (v) 24.5-32.5

2. If some random sample data is arranged in a frequency distribution table in exclusive form with 3 - 11 as the first class, then the observation 31 falls in which class?

   (i) 27-35 (ii) 26-34 (iii) 27.5-34.5 (iv) 26.5-35.5 (v) 28-36

3. Given class interval 45 - 49 in exclusive form, its lower limit is

   (i) 47 (ii) 45 (iii) 44 (iv) 46 (v) 43

4. Given class interval 16 - 21 in exclusive form, its upper limit is

   (i) 18 (ii) 21 (iii) 20 (iv) 24 (v) 22

5. Given class interval 24 - 30 in exclusive form, its class size is

   (i) 3 (ii) 5 (iii) 8 (iv) 6 (v) 7

6. Given class interval 35 - 40 in exclusive form, its class mark is

   (i) $\frac{73}{2}$ (ii) $\frac{149}{4}$ (iii) $\frac{77}{2}$ (iv) $\frac{75}{2}$ (v) 38

7. Given class interval 31 - 35 in exclusive form, its mid value is

   (i) 33 (ii) 34 (iii) 32 (iv) 31 (v) 36

8. If the upper and lower limit of class interval are 50 and 47 respectively, then the class interval is

   (i) 46.5-50 (ii) 47-50 (iii) 47.5-49.5 (iv) 46.5-50.5 (v) 47-50.5

9. If the lower and upper limit of class interval are 30 and 37 respectively, then the class interval is

   (i) 29.5-37.5 (ii) 30.5-36.5 (iii) 30-37 (iv) 30-37.5 (v) 29.5-37

10. The class boundaries of 12 - 17 which is in exclusive form are

    (i) 11.5-17 (ii) 11.5-17.5 (iii) 12-17.5 (iv) 12.5-16.5 (v) 12-17

11. The class boundaries of 43 - 48 which is in inclusive form are

    (i) 42-49 (ii) 43-48 (iii) 42.5-48.5 (iv) 42-48.5 (v) 42.5-49

12. Convert the exclusive form of the class interval 18.5 - 23.5 to inclusive form

    (i) 19-23 (ii) 18.5-23.5 (iii) 19-23.5 (iv) 18.5-23 (v) 19.5-22.5

13. Convert the inclusive form of the class interval 47 - 51 to exclusive form

    (i) 46.5-51.5 (ii) 46-51.5 (iii) 46-52 (iv) 46.5-52 (v) 47-51

14. Convert the discontinuous form of the class interval 20 - 26 to continuous form

(i) 19.5-27 (ii) 19-26.5 (iii) 20-26 (iv) 19.5-26.5 (v) 19-27

15. Convert the continuous form of the class interval 42.5 - 45.5 to discontinuous form

(i) 43-45 (ii) 43.5-44.5 (iii) 42.5-45 (iv) 43-45.5 (v) 42.5-45.5

16. The class size used in the below table is

Class-Interval	24 - 32	33 - 41	42 - 50	51 - 59	60 - 68
Frequency	20	4	21	2	10

(i) 12 (ii) 7 (iii) 9 (iv) 10 (v) 8

17. The class size used in the below table is

Class-Interval	16 - 22	22 - 28	28 - 34	34 - 40	40 - 46
Frequency	4	20	29	1	6

(i) 5 (ii) 8 (iii) 7 (iv) 3 (v) 6

18. Which of the following are true?

a) The true lower limit of the inclusive form class interval 30 - 40 is 30.
b) The true lower limit of the exclusive form class interval 30 - 40 is 30.
c) The difference between the true upper limit and true lower limit is called the class mark.
d) Each numerical figure in a data set is called an observation.
e) The number of times a particular observation occurs is called its frequency.

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

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

a) 19.5 - 27.5 , 27.5 - 35.5 , 35.5 - 43.5...
b) 44 - 51 , 52 - 59 , 60 - 67,...
c) 20 - 27 , 28 - 35 , 36 - 43,...
d) 41 - 48 , 48 - 55 , 55 - 62...
e) 20 - 27 , 27 - 34 , 34 - 41,...

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

20. In inclusive form representation, the observation 59 falls in which class?

(i) 39-49 (ii) 49-59 (iii) 60-69 (iv) 44-54 (v) 48-58

21. In exclusive form representation, the observation 17 falls in which class?

(i) 17-27 (ii) 7-17 (iii) 22-32 (iv) 27-37 (v) 12-17

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

Class-Interval	**Frequency**
16 - 21	16
22 - 27	28
28 - 33	4
34 - 39	5
40 - 45	x

(i) $\frac{83}{2}$ (ii) 43 (iii) $\frac{87}{2}$ (iv) $\frac{85}{2}$ (v) $\frac{169}{4}$

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

Class-Interval	Frequency
1 - 6	21
6 - 11	5
11 - 16	23
16 - 21	x
21 - 26	29

(i) $\frac{73}{4}$ (ii) 19 (iii) $\frac{37}{2}$ (iv) $\frac{35}{2}$ (v) $\frac{39}{2}$

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

Class-Interval	Frequency
9 - 19	30
20 - 30	10
31 - 41	5
42 - 52	15
53 - 63	x

(i) 58 (ii) 55 (iii) 60 (iv) 59 (v) 57

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

Class-Interval	Frequency
1 - 6	17
6 - 11	x
11 - 16	5
16 - 21	15
21 - 26	15

(i) $\frac{15}{2}$ (ii) $\frac{19}{2}$ (iii) 9 (iv) $\frac{33}{4}$ (v) $\frac{17}{2}$

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

Class-Interval	Frequency
18 - 25	x
26 - 33	14
34 - 41	19
42 - 49	1
50 - 57	13

(i) 17-26 (ii) 18-25 (iii) 17.5-26 (iv) 17-25.5 (v) 17.5-25.5

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

Class-Interval	Frequency
44 - 51	24
51 - 58	x
58 - 65	27
65 - 72	7
72 - 79	24

(i) 51.5-57.5 (ii) 50.5-58.5 (iii) 51-58.5 (iv) 50.5-58 (v) 51-58

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

Class-Interval	Frequency
32 - 38	8
39 - 45	4
46 - 52	10
53 - 59	x
60 - 66	9

(i) 52.5-60 (ii) 52-59.5 (iii) 52.5-59.5 (iv) 53-59 (v) 52-60

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

Class-Interval	Frequency
17 - 24	2
24 - 31	9
31 - 38	7
38 - 45	x
45 - 52	3

(i) 38-45.5 (ii) 38.5-44.5 (iii) 37.5-45 (iv) 38-45 (v) 37.5-45.5

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

Class-Interval	Frequency
11 - 16	24
17 - 22	13
23 - 28	19
29 - 34	28
35 - 40	x

(i) 37 (ii) 36 (iii) 32 (iv) 34 (v) 35

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

Class-Interval	Frequency
27 - 33	8
33 - 39	17
39 - 45	16
45 - 51	7
51 - 57	x

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

32. If the sample data with range 60 has to be divided into 9 class intervals, then the length of the class is

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

33. If the length of the class is 7, then the number of class intervals needed to represent data with range 40 is

(i) 5 (ii) 9 (iii) 3 (iv) 6 (v) 7

34. The number of classes of class size 6 required to represent the given random sample in exclusive form
1 3 4 4 5 5 5 7 7 8 9 11 13 15 17 18 18 22 22 24 26 26 28 29 33 33 34 37 37 39 40 40 40 42 42 45 45 46 47 47

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

35. Which of the following are continuous variables?

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

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

36. Which of the following are discontinuous variables?

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

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

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

a) 17.5 - 24.5 , 24.5 - 31.5 , 31.5 - 38.5...
b) 39 - 45 , 46 - 52 , 53 - 59,...
c) 18 - 24 , 25 - 31 , 32 - 38,...
d) 36 - 42 , 42 - 48 , 48 - 54...
e) 18 - 24 , 24 - 30 , 30 - 36,...

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

38. The class marks of a frequency distribution are 30.5 , 40.5 , 50.5 , 60.5 .
Find the class size and class intervals in inclusive form

(i) 10;25-35,35-45,45-55,55-65 (ii) 10;25-34,35-44,45-54,55-64 (iii) 9;26-35,35-44,44-53,53-62

(iv) 10;26-35,36-45,46-55,56-65 (v) 10;27-36,37-46,47-56,57-66

39. The class marks of a frequency distribution are 13.5 , 18.5 , 23.5 , 28.5 .
Find the class size and class intervals in exclusive form

(i) 6;11-16,17-22,23-28,29-34 (ii) 7;10-16,17-23,24-30,31-37 (iii) 5;12-17,17-22,22-27,27-32

(iv) 5;10-15,15-20,20-25,25-30 (v) 5;11-16,16-21,21-26,26-31

40. Which of the following are continuous variables?

a) Temperature at a place over a month
b) Population of cities
c) Rainfall at a place over a month
d) Number of members in a family
e) Number of workers in a factory

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

41. Which of the following are discrete variables?

a) Population of cities
b) Weights of persons in a group
c) Number of members in a family
d) Temperature at a place over a month
e) Heights of children in a class

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

Assignment Key

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