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 3 - 10 as the first class, then the observation 26 falls in which class?

   (i) 19.5-25.5 (ii) 20-27 (iii) 18-25 (iv) 18.5-26.5 (v) 19-26

2. If some random sample data is arranged in a frequency distribution table in exclusive form with 2 - 11 as the first class, then the observation 26 falls in which class?

   (i) 20-29 (ii) 19-28 (iii) 21-30 (iv) 20.5-28.5 (v) 19.5-29.5

3. Given class interval 21 - 25 in exclusive form, its lower limit is

   (i) 20 (ii) 21 (iii) 22 (iv) 23 (v) 19

4. Given class interval 46 - 55 in exclusive form, its upper limit is

   (i) 53 (ii) 57 (iii) 56 (iv) 55 (v) 54

5. Given class interval 44 - 50 in exclusive form, its class size is

   (i) 5 (ii) 9 (iii) 4 (iv) 6 (v) 7

6. Given class interval 17 - 27 in exclusive form, its class mark is

   (i) 23 (ii) 22 (iii) 20 (iv) 21 (v) 25

7. Given class interval 24 - 30 in exclusive form, its mid value is

   (i) 25 (ii) 27 (iii) 26 (iv) 30 (v) 28

8. If the upper and lower limit of class interval are 35 and 27 respectively, then the class interval is

   (i) 27-35 (ii) 26.5-35 (iii) 27.5-34.5 (iv) 27-35.5 (v) 26.5-35.5

9. If the lower and upper limit of class interval are 49 and 51 respectively, then the class interval is

   (i) 48.5-51.5 (ii) 49-51 (iii) 49.5-50.5 (iv) 48.5-51 (v) 49-51.5

10. The class boundaries of 10 - 19 which is in exclusive form are

    (i) 10-19 (ii) 9.5-19.5 (iii) 10-19.5 (iv) 10.5-18.5 (v) 9.5-19

11. The class boundaries of 22 - 26 which is in inclusive form are

    (i) 21.5-26.5 (ii) 21-26.5 (iii) 21.5-27 (iv) 21-27 (v) 22-26

12. Convert the exclusive form of the class interval 31.5 - 34.5 to inclusive form

    (i) 32-34 (ii) 31.5-34 (iii) 32.5-33.5 (iv) 32-34.5 (v) 31.5-34.5

13. Convert the inclusive form of the class interval 29 - 39 to exclusive form

    (i) 28-40 (ii) 28.5-39.5 (iii) 28.5-40 (iv) 29-39 (v) 28-39.5

14. Convert the discontinuous form of the class interval 18 - 28 to continuous form

(i) 17-28.5 (ii) 18-28 (iii) 17-29 (iv) 17.5-28.5 (v) 17.5-29

15. Convert the continuous form of the class interval 33.5 - 36.5 to discontinuous form

(i) 33.5-36.5 (ii) 34-36.5 (iii) 34.5-35.5 (iv) 33.5-36 (v) 34-36

16. The class size used in the below table is

Class-Interval	36 - 45	46 - 55	56 - 65	66 - 75	76 - 85	86 - 95
Frequency	24	16	27	14	3	24

(i) 13 (ii) 11 (iii) 9 (iv) 10 (v) 8

17. The class size used in the below table is

Class-Interval	21 - 29	29 - 37	37 - 45	45 - 53
Frequency	18	30	21	24

(i) 5 (ii) 9 (iii) 7 (iv) 8 (v) 11

18. Which of the following are true?

a) The difference between the true upper limit and true lower limit is called the class mark.
b) The number of times a particular observation occurs is called its frequency.
c) The true lower limit of the exclusive form class interval 10 - 20 is 10.
d) Each numerical figure in a data set is called an observation.
e) The true lower limit of the inclusive form class interval 10 - 20 is 10.

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

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

a) 25 - 30 , 30 - 35 , 35 - 40,...
b) 25 - 30 , 31 - 36 , 37 - 42,...
c) 40 - 45 , 45 - 50 , 50 - 55...
d) 24.5 - 30.5 , 30.5 - 36.5 , 36.5 - 42.5...
e) 43 - 48 , 49 - 54 , 55 - 60,...

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

20. In inclusive form representation, the observation 54 falls in which class?

(i) 34-44 (ii) 39-49 (iii) 55-64 (iv) 43-53 (v) 44-54

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

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

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

Class-Interval	**Frequency**
16 - 21	9
22 - 27	3
28 - 33	x
34 - 39	28
40 - 45	7

(i) $\frac{121}{4}$ (ii) 31 (iii) $\frac{61}{2}$ (iv) $\frac{59}{2}$ (v) $\frac{63}{2}$

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

Class-Interval	Frequency
9 - 14	8
14 - 19	14
19 - 24	7
24 - 29	x
29 - 34	16

(i) 27 (ii) $\frac{105}{4}$ (iii) $\frac{53}{2}$ (iv) $\frac{51}{2}$ (v) $\frac{55}{2}$

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

Class-Interval	Frequency
6 - 11	7
12 - 17	x
18 - 23	14
24 - 29	15
30 - 35	6

(i) $\frac{57}{4}$ (ii) $\frac{29}{2}$ (iii) $\frac{27}{2}$ (iv) 15 (v) $\frac{31}{2}$

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

Class-Interval	Frequency
14 - 19	26
19 - 24	27
24 - 29	x
29 - 34	3
34 - 39	3

(i) $\frac{51}{2}$ (ii) $\frac{55}{2}$ (iii) $\frac{105}{4}$ (iv) 27 (v) $\frac{53}{2}$

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

Class-Interval	Frequency
19 - 27	20
28 - 36	12
37 - 45	8
46 - 54	x
55 - 63	4

(i) 46-54 (ii) 45-55 (iii) 45.5-54.5 (iv) 45.5-55 (v) 45-54.5

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

Class-Interval	Frequency
41 - 49	28
49 - 57	x
57 - 65	18
65 - 73	23
73 - 81	11

(i) 49-57.5 (ii) 49-57 (iii) 48.5-57 (iv) 48.5-57.5 (v) 49.5-56.5

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

Class-Interval	Frequency
34 - 40	22
41 - 47	13
48 - 54	10
55 - 61	17
62 - 68	x

(i) 61.5-68.5 (ii) 62-68 (iii) 61.5-69 (iv) 61-69 (v) 61-68.5

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

Class-Interval	Frequency
19 - 27	26
27 - 35	19
35 - 43	21
43 - 51	x
51 - 59	2

(i) 43-51.5 (ii) 42.5-51 (iii) 42.5-51.5 (iv) 43.5-50.5 (v) 43-51

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

Class-Interval	Frequency
45 - 52	x
53 - 60	30
61 - 68	29
69 - 76	27
77 - 84	13

(i) 44 (ii) 47 (iii) 42 (iv) 45 (v) 46

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

Class-Interval	Frequency
49 - 58	x
58 - 67	5
67 - 76	7
76 - 85	3
85 - 94	18

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

32. If the sample data with range 60 has to be divided into 7 class intervals, then the length of the class is

(i) 9 (ii) 11 (iii) 8 (iv) 6 (v) 10

33. If the length of the class is 12, then the number of class intervals needed to represent data with range 70 is

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

34. The number of classes of class size 6 required to represent the given random sample in exclusive form
2 3 5 9 9 13 16 18 20 20 21 23 28 33 33 35 38 40 44 46 49 50

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

35. Which of the following are continuous variables?

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

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

36. Which of the following are discontinuous variables?

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

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

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

a) 54 - 64 , 65 - 75 , 76 - 86,...
b) 51 - 61 , 61 - 71 , 71 - 81...
c) 21 - 31 , 32 - 42 , 43 - 53,...
d) 21 - 31 , 31 - 41 , 41 - 51,...
e) 20.5 - 31.5 , 31.5 - 42.5 , 42.5 - 53.5...

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

38. The class marks of a frequency distribution are 20 , 31 , 42 , 53 .
Find the class size and class intervals in inclusive form

(i) 11;15-25,26-36,37-47,48-58 (ii) 11;14-24,25-35,36-46,47-57 (iii) 10;15-25,25-35,35-45,45-55

(iv) 11;16-26,27-37,38-48,49-59 (v) 11;14-25,25-36,36-47,47-58

39. The class marks of a frequency distribution are 27 , 35 , 43 , 51 .
Find the class size and class intervals in exclusive form

(i) 8;22-30,30-38,38-46,46-54 (ii) 9;23-31,32-40,41-49,50-58 (iii) 8;24-32,32-40,40-48,48-56

(iv) 10;22-31,32-41,42-51,52-61 (v) 8;23-31,31-39,39-47,47-55

40. Which of the following are continuous variables?

a) Wages of workers in a factory
b) Number of members in a family
c) Heights of children in a class
d) Number of workers in a factory
e) Population of cities

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

41. Which of the following are discrete variables?

a) Temperature at a place over a month
b) Weights of persons in a group
c) Number of members in a family
d) Number of workers in a factory
e) Rainfall at a place over a month

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

Assignment Key

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