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 2 - 11 as the first class, then the observation 26 falls in which class?

   (i) 21-30 (ii) 21.5-31.5 (iii) 22.5-30.5 (iv) 22-31 (v) 23-32

2. 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) 19-28 (ii) 20-29 (iii) 18.5-28.5 (iv) 19.5-27.5 (v) 18-27

3. Given class interval 36 - 38 in exclusive form, its lower limit is

   (i) 36 (ii) 33 (iii) 37 (iv) 35 (v) 39

4. Given class interval 24 - 34 in exclusive form, its upper limit is

   (i) 33 (ii) 32 (iii) 35 (iv) 37 (v) 34

5. Given class interval 25 - 32 in exclusive form, its class size is

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

6. Given class interval 16 - 24 in exclusive form, its class mark is

   (i) 20 (ii) 21 (iii) 17 (iv) 19 (v) 23

7. Given class interval 31 - 41 in exclusive form, its mid value is

   (i) 38 (ii) 37 (iii) 36 (iv) 35 (v) 34

8. If the upper and lower limit of class interval are 37 and 33 respectively, then the class interval is

   (i) 32.5-37 (ii) 32.5-37.5 (iii) 33.5-36.5 (iv) 33-37 (v) 33-37.5

9. If the lower and upper limit of class interval are 27 and 36 respectively, then the class interval is

   (i) 27-36 (ii) 26.5-36.5 (iii) 26.5-36 (iv) 27-36.5 (v) 27.5-35.5

10. The class boundaries of 15 - 21 which is in exclusive form are

    (i) 14.5-21.5 (ii) 14.5-21 (iii) 15-21 (iv) 15-21.5 (v) 15.5-20.5

11. The class boundaries of 22 - 32 which is in inclusive form are

    (i) 21.5-32.5 (ii) 21-32.5 (iii) 21.5-33 (iv) 21-33 (v) 22-32

12. Convert the exclusive form of the class interval 37.5 - 46.5 to inclusive form

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

13. Convert the inclusive form of the class interval 13 - 17 to exclusive form

    (i) 12.5-18 (ii) 12-17.5 (iii) 13-17 (iv) 12.5-17.5 (v) 12-18

14. Convert the discontinuous form of the class interval 21 - 24 to continuous form

(i) 20.5-25 (ii) 21-24 (iii) 20-24.5 (iv) 20.5-24.5 (v) 20-25

15. Convert the continuous form of the class interval 9.5 - 17.5 to discontinuous form

(i) 9.5-17.5 (ii) 10.5-16.5 (iii) 10-17.5 (iv) 9.5-17 (v) 10-17

16. The class size used in the below table is

Class-Interval	46 - 52	53 - 59	60 - 66	67 - 73	74 - 80	81 - 87	88 - 94
Frequency	28	1	27	9	1	15	30

(i) 6 (ii) 7 (iii) 8 (iv) 10 (v) 4

17. The class size used in the below table is

Class-Interval	40 - 46	46 - 52	52 - 58	58 - 64	64 - 70
Frequency	11	9	26	14	27

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

18. Which of the following are true?

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

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

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

a) 52 - 61 , 62 - 71 , 72 - 81,...
b) 21.5 - 31.5 , 31.5 - 41.5 , 41.5 - 51.5...
c) 22 - 31 , 31 - 40 , 40 - 49,...
d) 22 - 31 , 32 - 41 , 42 - 51,...
e) 49 - 58 , 58 - 67 , 67 - 76...

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

20. In inclusive form representation, the observation 46 falls in which class?

(i) 26-36 (ii) 47-56 (iii) 36-46 (iv) 35-45 (v) 31-41

21. In exclusive form representation, the observation 14 falls in which class?

(i) 14-24 (ii) 19-29 (iii) 9-14 (iv) 4-14 (v) 24-34

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

Class-Interval	**Frequency**
16 - 21	15
22 - 27	10
28 - 33	25
34 - 39	4
40 - 45	x

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

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

Class-Interval	Frequency
5 - 10	30
10 - 15	x
15 - 20	10
20 - 25	13
25 - 30	2

(i) $\frac{25}{2}$ (ii) $\frac{27}{2}$ (iii) $\frac{23}{2}$ (iv) 13 (v) $\frac{49}{4}$

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

Class-Interval	Frequency
9 - 14	21
15 - 20	1
21 - 26	24
27 - 32	6
33 - 38	x

(i) $\frac{73}{2}$ (ii) $\frac{71}{2}$ (iii) $\frac{69}{2}$ (iv) $\frac{141}{4}$ (v) 36

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

Class-Interval	Frequency
17 - 22	9
22 - 27	x
27 - 32	15
32 - 37	1
37 - 42	13

(i) $\frac{47}{2}$ (ii) $\frac{49}{2}$ (iii) $\frac{97}{4}$ (iv) $\frac{51}{2}$ (v) 25

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

Class-Interval	Frequency
42 - 49	24
50 - 57	24
58 - 65	9
66 - 73	19
74 - 81	x

(i) 73-82 (ii) 73-81.5 (iii) 73.5-81.5 (iv) 73.5-82 (v) 74-81

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

Class-Interval	Frequency
14 - 21	5
21 - 28	x
28 - 35	2
35 - 42	5
42 - 49	5

(i) 20.5-28.5 (ii) 21-28 (iii) 21.5-27.5 (iv) 21-28.5 (v) 20.5-28

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

Class-Interval	Frequency
24 - 31	25
32 - 39	7
40 - 47	x
48 - 55	4
56 - 63	12

(i) 39-47.5 (ii) 39.5-48 (iii) 40-47 (iv) 39.5-47.5 (v) 39-48

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

Class-Interval	Frequency
15 - 23	x
23 - 31	30
31 - 39	21
39 - 47	5
47 - 55	23

(i) 15-23 (ii) 15-23.5 (iii) 15.5-22.5 (iv) 14.5-23.5 (v) 14.5-23

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

Class-Interval	Frequency
13 - 20	20
21 - 28	x
29 - 36	27
37 - 44	19
45 - 52	11

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

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

Class-Interval	Frequency
25 - 35	2
35 - 45	26
45 - 55	5
55 - 65	27
65 - 75	x

(i) 74 (ii) 77 (iii) 75 (iv) 73 (v) 76

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

(i) 4 (ii) 5 (iii) 2 (iv) 6 (v) 3

34. The number of classes of class size 8 required to represent the given random sample in exclusive form
1 6 6 7 8 9 10 14 14 15 15 16 17 19 23 24 26 29 29 31 33 37 37 39 39 40 40 42 46 48 50 50

(i) 5 (ii) 8 (iii) 6 (iv) 10 (v) 7

35. Which of the following are continuous variables?

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

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

36. Which of the following are discontinuous variables?

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

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

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

a) 20 - 26 , 27 - 33 , 34 - 40,...
b) 20 - 26 , 26 - 32 , 32 - 38,...
c) 19.5 - 26.5 , 26.5 - 33.5 , 33.5 - 40.5...
d) 41 - 47 , 48 - 54 , 55 - 61,...
e) 38 - 44 , 44 - 50 , 50 - 56...

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

38. The class marks of a frequency distribution are 21.5 , 31.5 , 41.5 , 51.5 .
Find the class size and class intervals in inclusive form

(i) 10;18-27,28-37,38-47,48-57 (ii) 10;16-26,26-36,36-46,46-56 (iii) 10;17-26,27-36,37-46,47-56

(iv) 9;17-26,26-35,35-44,44-53 (v) 10;16-25,26-35,36-45,46-55

39. The class marks of a frequency distribution are 28.5 , 33.5 , 38.5 , 43.5 .
Find the class size and class intervals in exclusive form

(i) 6;26-31,32-37,38-43,44-49 (ii) 5;26-31,31-36,36-41,41-46 (iii) 5;27-32,32-37,37-42,42-47

(iv) 5;25-30,30-35,35-40,40-45 (v) 7;25-31,32-38,39-45,46-52

40. Which of the following are continuous variables?

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

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

41. Which of the following are discrete variables?

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

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

Assignment Key

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