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 - 10 as the first class, then the observation 20 falls in which class?

   (i) 12-21 (ii) 11.5-19.5 (iii) 10-19 (iv) 10.5-20.5 (v) 11-20

2. If some random sample data is arranged in a frequency distribution table in exclusive form with 4 - 11 as the first class, then the observation 25 falls in which class?

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

3. Given class interval 24 - 30 in exclusive form, its lower limit is

   (i) 25 (ii) 23 (iii) 24 (iv) 26 (v) 21

4. Given class interval 32 - 41 in exclusive form, its upper limit is

   (i) 42 (ii) 43 (iii) 41 (iv) 39 (v) 40

5. Given class interval 17 - 21 in exclusive form, its class size is

   (i) 1 (ii) 7 (iii) 5 (iv) 3 (v) 4

6. Given class interval 47 - 54 in exclusive form, its class mark is

   (i) $\frac{103}{2}$ (ii) $\frac{99}{2}$ (iii) 51 (iv) $\frac{101}{2}$ (v) $\frac{201}{4}$

7. Given class interval 39 - 47 in exclusive form, its mid value is

   (i) 44 (ii) 42 (iii) 46 (iv) 41 (v) 43

8. If the upper and lower limit of class interval are 59 and 50 respectively, then the class interval is

   (i) 50-59.5 (ii) 49.5-59.5 (iii) 50-59 (iv) 50.5-58.5 (v) 49.5-59

9. If the lower and upper limit of class interval are 21 and 28 respectively, then the class interval is

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

10. The class boundaries of 26 - 35 which is in exclusive form are

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

11. The class boundaries of 14 - 24 which is in inclusive form are

    (i) 13-24.5 (ii) 13.5-25 (iii) 14-24 (iv) 13-25 (v) 13.5-24.5

12. Convert the exclusive form of the class interval 35.5 - 46.5 to inclusive form

    (i) 36-46 (ii) 35.5-46 (iii) 36-46.5 (iv) 36.5-45.5 (v) 35.5-46.5

13. Convert the inclusive form of the class interval 23 - 33 to exclusive form

    (i) 22-34 (ii) 22.5-33.5 (iii) 23-33 (iv) 22-33.5 (v) 22.5-34

14. Convert the discontinuous form of the class interval 15 - 23 to continuous form

(i) 14-23.5 (ii) 14.5-24 (iii) 15-23 (iv) 14-24 (v) 14.5-23.5

15. Convert the continuous form of the class interval 18.5 - 28.5 to discontinuous form

(i) 18.5-28 (ii) 19-28 (iii) 19-28.5 (iv) 19.5-27.5 (v) 18.5-28.5

16. The class size used in the below table is

| **Class-Interval** | 29 - 39 | 40 - 50 | 51 - 61 | 62 - 72 | 73 - 83 |
|---|---|---|---|---|---|
| **Frequency** | 3 | 10 | 12 | 27 | 12 |

(i) 11 (ii) 12 (iii) 14 (iv) 9 (v) 10

17. The class size used in the below table is

| **Class-Interval** | 40 - 47 | 47 - 54 | 54 - 61 | 61 - 68 | 68 - 75 | 75 - 82 |
|---|---|---|---|---|---|---|
| **Frequency** | 5 | 8 | 2 | 7 | 13 | 8 |

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

18. Which of the following are true?

a) The true lower limit of the inclusive form class interval 20 - 30 is 20.
b) The difference between the true upper limit and true lower limit is called the class mark.
c) The number of times a particular observation occurs is called its frequency.
d) Each numerical figure in a data set is called an observation.
e) The true lower limit of the exclusive form class interval 20 - 30 is 20.

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

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

a) 14 - 24 , 24 - 34 , 34 - 44,...
b) 14 - 24 , 25 - 35 , 36 - 46,...
c) 44 - 54 , 54 - 64 , 64 - 74...
d) 47 - 57 , 58 - 68 , 69 - 79,...
e) 13.5 - 24.5 , 24.5 - 35.5 , 35.5 - 46.5...

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

20. In inclusive form representation, the observation 36 falls in which class?

(i) 21-31 (ii) 26-36 (iii) 25-35 (iv) 16-26 (v) 37-46

21. In exclusive form representation, the observation 41 falls in which class?

(i) 36-41 (ii) 31-41 (iii) 41-51 (iv) 46-56 (v) 51-61

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

| **Class-Interval** | **Frequency** |
|---|---|
| 20 - 30 | 7 |
| 31 - 41 | 17 |
| 42 - 52 | x |
| 53 - 63 | 18 |
| 64 - 74 | 27 |

(i) 46 (ii) 50 (iii) 44 (iv) 48 (v) 47

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

| Class-Interval | Frequency |
|---|---|
| 16 - 26 | 15 |
| 26 - 36 | x |
| 36 - 46 | 18 |
| 46 - 56 | 9 |
| 56 - 66 | 9 |

(i) 29 (ii) 32 (iii) 33 (iv) 31 (v) 30

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

| Class-Interval | Frequency |
|---|---|
| 8 - 18 | 27 |
| 19 - 29 | 27 |
| 30 - 40 | 7 |
| 41 - 51 | x |
| 52 - 62 | 14 |

(i) 46 (ii) 44 (iii) 45 (iv) 47 (v) 48

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

| Class-Interval | Frequency |
|---|---|
| 11 - 21 | 28 |
| 21 - 31 | 9 |
| 31 - 41 | x |
| 41 - 51 | 1 |
| 51 - 61 | 23 |

(i) 37 (ii) 34 (iii) 39 (iv) 35 (v) 36

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

| Class-Interval | Frequency |
|---|---|
| 36 - 42 | 21 |
| 43 - 49 | 11 |
| 50 - 56 | x |
| 57 - 63 | 30 |
| 64 - 70 | 20 |

(i) 50-56 (ii) 49-56.5 (iii) 49-57 (iv) 49.5-56.5 (v) 49.5-57

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

| Class-Interval | Frequency |
|---|---|
| 14 - 20 | 19 |
| 20 - 26 | x |
| 26 - 32 | 5 |
| 32 - 38 | 1 |
| 38 - 44 | 27 |

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

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

| Class-Interval | Frequency |
|---|---|
| 19 - 24 | 26 |
| 25 - 30 | 28 |
| 31 - 36 | 19 |
| 37 - 42 | 8 |
| 43 - 48 | x |

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

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

| Class-Interval | Frequency |
|---|---|
| 28 - 36 | 28 |
| 36 - 44 | 29 |
| 44 - 52 | 13 |
| 52 - 60 | 9 |
| 60 - 68 | x |

(i) 60-68 (ii) 60-68.5 (iii) 59.5-68.5 (iv) 59.5-68 (v) 60.5-67.5

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

| Class-Interval | Frequency |
|---|---|
| 40 - 46 | 7 |
| 47 - 53 | x |
| 54 - 60 | 18 |
| 61 - 67 | 18 |
| 68 - 74 | 17 |

(i) 44 (ii) 47 (iii) 48 (iv) 49 (v) 46

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

| Class-Interval | Frequency |
|---|---|
| 15 - 24 | 9 |
| 24 - 33 | 17 |
| 33 - 42 | 25 |
| 42 - 51 | 26 |
| 51 - 60 | x |

(i) 60 (ii) 57 (iii) 61 (iv) 62 (v) 59

32. If the sample data with range 40 has to be divided into 7 class intervals, then the length of the class is

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

33. If the length of the class is 10, then the number of class intervals needed to represent data with range 50 is

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

34. The number of classes of class size 4 required to represent the given random sample in exclusive form
2 5 10 11 12 14 15 16 16 16 19 20 20 23 25 27 28 28 29 30 31 31 33 38 39 40 42 42 45 46

(i) 13 (ii) 11 (iii) 12 (iv) 14 (v) 10

35. 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) Weights of persons in a group.

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

36. Which of the following are discontinuous variables?

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

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

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

a) 26 - 31 , 32 - 37 , 38 - 43,...
b) 44 - 49 , 50 - 55 , 56 - 61,...
c) 41 - 46 , 46 - 51 , 51 - 56...
d) 25.5 - 31.5 , 31.5 - 37.5 , 37.5 - 43.5...
e) 26 - 31 , 31 - 36 , 36 - 41,...

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

38. The class marks of a frequency distribution are 29.5 , 37.5 , 45.5 , 53.5 .
Find the class size and class intervals in inclusive form

(i) 8;25-32,33-40,41-48,49-56 (ii) 8;27-34,35-42,43-50,51-58 (iii) 8;25-33,33-41,41-49,49-57

(iv) 8;26-33,34-41,42-49,50-57 (v) 7;26-33,33-40,40-47,47-54

39. The class marks of a frequency distribution are 25 , 33 , 41 , 49 .
Find the class size and class intervals in exclusive form

(i) 9;21-29,30-38,39-47,48-56 (ii) 10;20-29,30-39,40-49,50-59 (iii) 8;22-30,30-38,38-46,46-54

(iv) 8;20-28,28-36,36-44,44-52 (v) 8;21-29,29-37,37-45,45-53

40. Which of the following are continuous variables?

a) Number of workers in a factory
b) Wages of workers in a factory
c) Marks obtained by student in a particular subject
d) Heights of children in a class
e) Number of players in a team

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

41. Which of the following are discrete variables?

a) Number of workers in a factory
b) Number of players in a team
c) Heights of children in a class
d) Wages of workers in a factory
e) Weights of persons in a group

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

## Assignment Key

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