

**UNIT-10****Statistics in Education****Part–A****I. One mark questions to be answered in a sentence**

1. Write the etymological meaning of the term 'statistics'. (K)
2. For which purpose statistics was used by Romans during 435 BC? (K)
3. For which purpose John Grant of London used statistics during 17<sup>th</sup> century? (K)
4. Who is called as the father of statistics? (K)
5. Who is known as the father of statistics in modern India? (K)
6. What is statistics? (K)
7. Define statistics. (K)
8. What is educational statistics? (K)
9. Mention the Latin word from which statistics is originated. (K)
10. Name the Italian word from which statistics is originated. (K)
11. Name the German word from which statistics is originated. (K)
12. What is classification of data? (K)
13. Write any one objectives of classification of data? (K)
14. What is the range of data? (K)
15. Write the formula of calculating range. (U)
16. If highest score is 65, lowest score is 20 calculate its range. (A)
17. What do you understand by the size of the class interval? (K)
18. Write the formula to find out number of class interval. (U)
19. What is inclusive class? (K)
20. What is exclusive class? (K)
21. What is tabulation of data? (K)
22. Write any one objectives of tabulation. (K)
23. Name any one type of graphical representation. (K)
24. What is bar graph? (K)
25. What is histogram? (K)
26. What is frequency polygon? (K)
27. What are measures of central tendencies? (K)
28. What is arithmetic mean? (K)
29. What is median? (K)
30. What is mode? (K)
31. Find the mode – 2 4 3 5 6 4 5 4 3. (A)

**Part - B****II. Two mark questions to be answered in 2 - 3 sentences each**

32. Write the concept of statistics. (U)
33. Write any two importances of statistics. (U)
34. Write any two importances of statistics in education. (U)
35. Write the concept of educational statistics. (U)
36. What is classification of data? Write one objective of it. (U)
37. Write any two objectives of classification of data. (U)
38. What is range of data? Write the formula for its calculation? (U)
39. If highest score is 65, lowest score is 40 in a given data, find its range using the formula. (A)
40. Find out range for the following data. 10, 15, 20, 12, 14, 25, 30. (A)

41. Calculate mean for the following data (A)  
10, 15, 20, 25, 30, 35, 40
42. If the range is 25, width of a class interval is 5 then calculate number of class intervals. (A)
43. Write two types of class intervals. (K)
44. What is tabulation of a data? Write any one objective of it. (U)
45. Write any two objectives of tabulation of data. (U)
46. Mention any two uses of graphical representation. (U)
47. Name any two types of graphs. (K)
48. Mention any two measures of central tendency. (K)
49. Calculate mean for the given data. (A)  
4, 8, 2, 7, 6, 5, 3, 4, 6,
50. Calculate mean for the following raw score. (A)  
25, 10, 17, 23, 15
51. Mention any two types of calculating mean for the classified data. (U)
52. Write any two characteristics of mean. (U)
53. Mention any two advantages of mean. (U)
54. Mention two disadvantages of mean. (U)
55. Calculate median for the data given (A)  
2, 5, 9, 8, 17, 12, 14
56. Calculate median for the following data (A)  
20, 28, 30, 24, 25, 23, 21, 26
57. What is median? Write the formula for calculating median for raw score. (U)
58. Write any two characteristics of median. (U)
59. Mention any two advantages of median. (U)
60. Mention any two disadvantages of median. (U)
61. What is mode? Find mode in a given raw score? (U)  
2, 2, 3, 4, 3, 4, 3
62. Name two types of mode in grouped data. (U)
63. Write two characteristics of mode. (U)
64. Write any two advantages of mode. (U)
65. Write any two disadvantages of mode. (U)

### Part – C

#### III. Five mark questions to be answered in not more than a page each

66. What is the concept of statistics? Write its importance. (U)
67. What is the concept of educational statistics? Write its importance. (U)
68. Explain briefly the steps of frequency distribution table and construct frequency distribution table for the given data. (S)  
48 52 47 40 64 56 62 65 62 63  
56 58 56 57 59 62 43 56 51 56
69. Prepare frequency distribution table in inclusive class with the size of the class interval 5. (S)  
10 15 20 24 26 5 11 12 14 10 7 8 9 13 20
70. Prepare frequency distribution table in exclusive class. (S)  
10 15 20 24 26 5 11 12 14 10  
7 8 5 13 20

71. Prepare frequency distribution table taking the width of the class 5 and write the steps. (S)

20 22 24 25 28 30 35  
21 27 31 35 40 42 38  
40 15 17 18 20 41 40

72. What is tabulation of data? Explain briefly its parts. (U)

73. Explain briefly the types of graphical representation and write the advantages. (U)

74. Prepare bar graph for the following table. (S)

| Year | Result of PUC –II |
|------|-------------------|
| 2010 | 60%               |
| 2011 | 65%               |
| 2012 | 70%               |
| 2013 | 80%               |
| 2014 | 85%               |
| 2015 | 90%               |

75. Prepare bar graph for the following table. (S)

| Subjects  | Marks |
|-----------|-------|
| Kannada   | 90    |
| English   | 45    |
| History   | 85    |
| Sociology | 75    |
| Education | 95    |

76. Prepare bar graph for the following table. (S)

| Food grains | percentage |
|-------------|------------|
| groundnut   | 30         |
| horse gram  | 25         |
| wheat       | 20         |
| rice        | 25         |
| Jawar       | 30         |
|             |            |

77. Prepare histogram for the following frequency distribution table. (S)

| Class intervals | Frequency |
|-----------------|-----------|
| 10-20           | 2         |
| 20-30           | 4         |
| 30-40           | 6         |
| 40-50           | 10        |
| 50-60           | 12        |
| 60-70           | 8         |
| 70-80           | 6         |
| 80-90           | 4         |
| 90-100          | 2         |

78. Prepare frequency polygon for the following frequency distribution table. (S)

| C.I   | f  |
|-------|----|
| 5-9   | 0  |
| 10-14 | 5  |
| 15-19 | 6  |
| 20-24 | 9  |
| 25-29 | 8  |
| 30-34 | 10 |
| 35-39 | 15 |
| 40-44 | 12 |
| 45-49 | 10 |
| 50-54 | 8  |
| 55-59 | 6  |
| 60-64 | 0  |

79. Calculate mean for the following frequency distribution. (A)

| Class interval | Frequency |
|----------------|-----------|
| 25-29          | 2         |
| 20-24          | 3         |
| 15-19          | 6         |
| 10-14          | 5         |
| 05-09          | 4         |
| N =20          |           |

80. Calculate mean for the following data. (A)

| C I   | f |
|-------|---|
| 25-29 | 2 |
| 20-24 | 3 |
| 15-19 | 6 |
| 10-14 | 5 |
| 05-09 | 4 |
| N =20 |   |

81. Calculate mean for the following table by using long method. (A)

| C I    | f |
|--------|---|
| 25-30  | 2 |
| 20-25  | 3 |
| 15-20  | 6 |
| 10-15  | 5 |
| 05-10  | 4 |
| N = 20 |   |

82. Calculate mean for following frequency distribution table by using short method. (A)

| C. I   | f |
|--------|---|
| 25-30  | 2 |
| 20-25  | 3 |
| 15-20  | 6 |
| 10-15  | 5 |
| 05-10  | 4 |
| N = 20 |   |

83. Find out median for the following frequency distribution table. (A)

| C. I    | f  |
|---------|----|
| 50-59   | 10 |
| 40-49   | 20 |
| 30-39   | 30 |
| 20-29   | 25 |
| 10-19   | 10 |
| 0-10    | 5  |
| N = 100 |    |

84. Calculate median for the following table. (A)

| C. I    | f  |
|---------|----|
| 50-60   | 10 |
| 40-50   | 20 |
| 30-40   | 30 |
| 20-30   | 25 |
| 10-20   | 10 |
| 0-10    | 5  |
| N = 100 |    |

85. Calculate median for the following table. (A)

| C. I   | f |
|--------|---|
| 50-54  | 2 |
| 45-49  | 2 |
| 40-44  | 5 |
| 35-39  | 6 |
| 30-34  | 4 |
| 25-29  | 3 |
| 20-24  | 2 |
| N = 24 |   |

86. Calculate crude mode for the following table. (A)

| C. I   | f |
|--------|---|
| 45-49  | 2 |
| 40-44  | 3 |
| 35-39  | 6 |
| 30-34  | 4 |
| 25-29  | 3 |
| 20-24  | 2 |
| N = 20 |   |

87. Calculate mode for the following data by using short method. (A)

| C. I   | f |
|--------|---|
| 25-29  | 2 |
| 20-24  | 2 |
| 15-19  | 5 |
| 10-14  | 4 |
| 05-09  | 2 |
| 0-04   | 3 |
| N = 18 |   |

88. Calculate mode for the following table by using short method. (A)

| C. I   | f |
|--------|---|
| 25-30  | 2 |
| 20-25  | 2 |
| 15-20  | 5 |
| 10-15  | 4 |
| 5-10   | 2 |
| 0-5    | 3 |
| N = 18 |   |

**Part D**

**IV. Ten mark questions to be answered in not more than two pages each**

89. Calculate mean median and mode for the following table. (A)

| C. I   | f |
|--------|---|
| 50-54  | 2 |
| 45-49  | 2 |
| 40-44  | 5 |
| 35-39  | 6 |
| 30-34  | 4 |
| 25-29  | 3 |
| 20-24  | 2 |
| N = 24 |   |

90. Find out measures of central tendencies for the following table. (A)

| C. I  | f |
|-------|---|
| 50-55 | 2 |
| 45-50 | 2 |
| 40-45 | 5 |
| 35-40 | 6 |
| 30-35 | 4 |
| 25-30 | 3 |
| 20-25 | 2 |
| N=24  |   |

91. Calculate mean median and mode for the following distribution table. (A)

| C. I   | f  |
|--------|----|
| 90-100 | 2  |
| 80-90  | 4  |
| 70-80  | 6  |
| 60-70  | 8  |
| 50-60  | 12 |
| 40-50  | 10 |
| 30-40  | 6  |
| 20-30  | 4  |
| 10-20  | 2  |
| N = 54 |    |