Statistics MCQs-Numerical Descriptive Statistics and Sampling Part 3

41. Given a negatively skewed distribution with a median of 8 and a mode of 10. Which of the following is not a possible value for the mean?

a. 7

b. 1

c. 12

d. 5

e. 3

Answer: C

42. Which of the following data sets has the largest variance?

a. 1; 2; 3; 4; ... 100

b. 11; 12; 13; 110

c. 2; 4; 6; ... 200

d. 1001; 1002; 1003; 1100

e. all of the above have equal variance

Answer: C

43. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 34, 98, 78, 76, 55, 80, 49,91, 66. What is the sample variance for this sample?

a. 18.46

b. 19.46

c. 378.71

d. 389.21

e. 329.98

Answer: C

44. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 34, 98, 78, 76, 52, 80, 49,91, 66. What is the sample variance for this sample?

a. 19.73

b. 19.46

c. 378.71

d. 389.21

e. 329.98

Answer: D

45. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 34, 98, 78, 76, 55, 80, 49,19, 66. What is the sample variance for this sample?

a. 23.48

b. 19.46

c. 378.71

d. 551.51

e. 329.98

Answer: D

46. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 43, 98, 78, 76, 55, 80, 49,91, 66. What is the sample variance for this sample?

a. 18.46

b. 17.78

c. 316.01

d. 389.21

e. 329.98

Answer: C

47. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 34, 98, 78, 76, 55, 80, 49,91, 66. What is the range of marks for this sample?

a. 64

b. 98

c. 79

d. 55

e. 91

Answer: A

48. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 34, 98, 78, 76, 52, 80, 49,91, 66. What is the range of marks for this sample?

a. 64

b. 98

c. 79

d. 55

e. 91

Answer: A

49. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 34, 98, 78, 76, 55, 80, 49,19, 66. What is the range of marks for this sample?

a. 64

b. 98

c. 79

d. 55

e. 91

Answer: C

50. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 43, 98, 78, 76, 55, 80, 49,91, 66. What is the range of marks for this sample?

a. 64

b. 98

c. 79

d. 55

e. 91

Answer: D

51. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 34, 98, 78, 76, 55, 80, 49,91, 66. What is the coefficient of variation for this sample?

a. 0.28

b. 0.30

c. 0.38

d. 0.25

e. 0.50

Answer: A

52. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 34, 98, 78, 76, 52, 80, 49,91, 95. What is the coefficient of variation for this sample?

a. 0.28

∗ b. 0.30

c. 0.38

d. 0.25

e. 0.50

53. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 34, 98, 78, 76, 55, 80, 49,19, 66. What is the coefficient of variation for this sample?

a. 0.28

b. 0.30

c. 0.38

d. 0.25

e. 0.50

Answer: C

54. The following marks are the test 1 marks for 10 randomly selected STA100 students: 67, 43, 98, 78, 76, 55, 80, 49,91, 66. What is the coefficient of variation for this sample?

a. 0.28

b. 0.30

c. 0.38

d. 0.25

e. 0.50

Answer: D

55. The following calculations on a data set have been done for you: $\sum x = 110$, $\sum x^2 = 1235$, $n = 10$. What is the coefficient of variation?

a. 0.152

b. 0.495

c. 0.754

d. 1.047

e. 0.500

Answer: A

56. The following calculations on a data set have been done for you: $\sum x = 110$, $\sum x^2 = 1235$, $n = 12$. What is the coefficient of variation?

a. 0.152

b. 0.495

c. 0.754

d. 1.047

e. 0.500

Answer: B

57. The following calculations on a data set have been done for you: $\sum x = 110$, $\sum x^2 = 1235$, $n = 15$. What is the coefficient of variation?

a. 0.152

b. 0.495

c. 0.754

d. 1.047

e. 0.500

Answer: C

58. The following calculations on a data set have been done for you: $\sum x = 110$, $\sum x^2 = 1235$, $n = 20$. What is the coefficient of variation?

a. 0.152

b. 0.495

c. 0.754

d. 1.047

e. 0.500

Answer: D

59. Which of the following data sets has a mean of 3 and a variance of 0?

a. 3 3 3 3 3

b. 2 3 4 4 2

c. 1 3 5 1 4

d. 9 9 9 9 9

e. None of the above

Answer: A

60. The length of the box in the box and whisker plot portrays the:

a. Median

b. Upper quartile

c. Mean

d. Range

e. Interquartile range

Answer: E