Statistics MCQs – Estimation Part 3

41. Your statistics lecturer wants you to determine a confidence interval estimate for the mean test mark for the next test.In the past, the test marks have been normally distributed with a population standard deviation of 25.2. A 95% confidence interval estimate if your class has 30 students and a sample mean mark of 74.2 is:

a. 63.14 to 85.26

b. 65.18 to 83.22

c. 65.63 to 82.77

d. 64.14 to 84.26

e. 68.14 to 80.26

Answer: B

42. Your statistics lecturer wants you to determine a confidence interval estimate for the mean test mark for the next test.In the past, the test marks have been normally distributed with a population standard deviation of 30.9. A 95% confidence interval estimate if your class has 50 students and a sample mean mark of 74.2 is:

a. 63.14 to 85.26

b. 65.18 to 83.22

c. 65.63 to 82.77

d. 64.14 to 84.26

e. 68.14 to 80.26

Answer: C

43. Your statistics lecturer wants you to determine a confidence interval estimate for the mean test mark for the next test.In the past, the test marks have been normally distributed with a population standard deviation of 28.1. A 95% confidence interval estimate if your class has 30 students and a sample mean mark of 74.2 is:

a. 63.14 to 85.26

b. 65.18 to 83.22

c. 65.63 to 82.77

d. 64.14 to 84.26

e. 68.14 to 80.26

Answer: D

44. Your statistics lecturer wants you to determine a confidence interval estimate for the mean test mark for the next test.In the past, the test marks have been normally distributed with a population standard deviation of 30.9. A 95% confidence interval estimate if your class has 100 students is and a sample mean mark of 74.2:

a. 63.14 to 85.26

b. 65.18 to 83.22

c. 65.63 to 82.77

d. 64.14 to 84.26

e. 68.14 to 80.26

Answer: E

45. An economist is interested in studying the monthly incomes of consumers in a particular region. The population standard deviation of monthly income is known to be R1000. A random sample of 50 individuals resulted in an average monthly income of R15000. What is the upper end point in a 99% confidence interval for the average monthly income in this region?

a. R15364

b. R15328

c. R15347

d. R15382

e. R15332

Answer: A

46. An economist is interested in studying the monthly incomes of consumers in a particular region. The population standard deviation of monthly income is known to be R900. A random sample of 50 individuals resulted in an average monthly income of R15000. What is the upper end point in a 99% confidence interval for the average monthly income in this region?

a. R15364

b. R15328

c. R15347

d. R15382

e. R15332

Answer: B

47. An economist is interested in studying the monthly incomes of consumers in a particular region. The population standard deviation of monthly income is known to be R1000. A random sample of 55 individuals resulted in an average monthly income of R15000. What is

the upper end point in a 99% confidence interval for the average monthly income in this region?

a. R15364

b. R15328

c. R15347

d. R15382

e. R15332

Answer: C

48. An economist is interested in studying the monthly incomes of consumers in a particular region. The population standard deviation of monthly income is known to be R1050. A random sample of 50 individuals resulted in an average monthly income of R15000. What is the upper end point in a 99% confidence interval for the average monthly income in this region?

a. R15364

b. R15328

c. R15347

d. R15382

e. R15332

Answer: D

49. An economist is interested in studying the monthly incomes of consumers in a particular region. The population standard deviation of monthly income is known to be R1000. A random sample of 60 individuals resulted in an average monthly income of R15000. What is the upper end point in a 99% confidence interval for the average monthly income in this region?

a. R15364

b. R15328

c. R15347

d. R15382

e. R15332

Answer: E

50. On the basis of a random sample of 100 men from a particular province in South Africa, a 95% confidence interval for the mean height of men in the province is found to be (177.22 cm; 179.18 cm) . What is the value of the sample mean for this sample?

a. 178.20cm

b. 179.24cm

c. 177.38cm

d. 178.42cm

e. 176.58cm

Answer: A

51. On the basis of a random sample of 100 men from a particular province in South Africa, a 95% confidence interval for the mean height of men in the province is found to be (178.54 cm; 179.94 cm) . What is the value of the sample mean for this sample?

a. 178.20cm

b. 179.24cm

c. 177.38cm

d. 178.42cm

e. 176.58cm

Answer: B

52. On the basis of a random sample of 100 men from a particular province in South Africa, a 95% confidence interval for the mean height of men in the province is found to be (176.50 cm; 178.26 cm) . What is the value of the sample mean for this sample?

a. 178.20cm

b. 179.24cm

c. 177.38cm

d. 178.42cm

e. 176.58cm

Answer: C

53. On the basis of a random sample of 100 men from a particular province in South Africa, a 95% confidence interval for the mean height of men in the province is found to be (177.89 cm; 178.95 cm) . What is the value of the sample mean for this sample?

a. 178.20cm

b. 179.24cm

c. 177.38cm

d. 178.42cm

e. 176.58cm

Answer: D

54. On the basis of a random sample of 100 men from a particular province in South Africa, a 95% confidence interval for the mean height of men in the province is found to be (175.90 cm; 177.25 cm) . What is the value of the sample mean for this sample?

a. 178.20cm

b. 179.24cm

c. 177.38cm

d. 178.42cm

e. 176.58cm

Answer: E

55. On the basis of a random sample of 100 men from a particular province in South Africa, a 95% confidence interval for the mean height of men in the province is found to be (177.22 cm; 179.18 cm) . What is the value of the standard deviation of the population from which this sample was drawn?

a. 5.0

b. 3.6

c. 4.5

d. 2.7

e. 3.4

Answer: A

56. On the basis of a random sample of 100 men from a particular province in South Africa, a 95% confidence interval for the mean height of men in the province is found to be (178.54 cm; 179.94 cm) . What is the value of the standard deviation of the population from which this sample was drawn?

a. 5.0

b. 3.6

c. 4.5

d. 2.7

e. 3.4

Answer: B

57. On the basis of a random sample of 100 men from a particular province in South Africa, a 95% confidence interval for the mean height of men in the province is found to be (176.50 cm; 178.26 cm) . What is the value of the standard deviation of the population from which this sample was drawn?

a. 5.0

b. 3.6

c. 4.5

d. 2.7

e. 3.4

Answer: C

58. On the basis of a random sample of 100 men from a particular province in South Africa, a 95% confidence interval for the mean height of men in the province is found to be (177.89 cm; 178.95 cm) . What is the value of the standard deviation of the population from which this sample was drawn?

a. 5.0

b. 3.6

c. 4.5

d. 2.7

e. 3.4

Answer: D

59. On the basis of a random sample of 100 men from a particular province in South Africa, a 95% confidence interval for the mean height of men in the province is found to be (175.90 cm; 177.25 cm) . What is the value of the standard deviation of the population from which this sample was drawn?

a. 5.0

b. 3.6

c. 4.5

d. 2.7

e. 3.4

Answer: E

60.In developing a 95% confidence interval estimate for a population mean, the interval estimate was (62.84; 69.46) . What was the sample mean?

a. 66.15

b. 65.83

c. 65.35

d. 67.01

e. 66.87

Answer: A

Frequently Asked Questions (FAQs)

- **QUESTION 17A sugar company packages sugar in 5kg bags. The amount of sugar per bag varies according to a normal distribution. A sample of 25 bags is selected from the days production and the mean for**

(- li...@ on 15-Apr-2023)

1 Answer

The best idea to solve any word problem related to Statistics is to clear the concept first. For clearing concepts, you may watch the video lectures available on Examrace YouTube channel, one of them has been shared below

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