Quiz 3

Due Mar 12 at 23:59   **Points** 5   **Questions** 10   **Available** Mar 11 at 18:00 - Mar 12 at 23:59
Time Limit 60 Minutes

Instructions

Quiz 3 is scheduled from 11th March 2023, 6:00 pm to 12th March 2023, 11:59 pm.

- Number of questions - 10
- Each question carries 0.5 M
- Time duration - 1 Hour
- Read the question properly and answer.

All the best!!!!

Attempt History

	Attempt	Time	Score
LATEST	**Attempt 1**	23 minutes	4.5 out of 5

> ⚠ Correct answers will be available on Mar 13 at 18:00.

Score for this quiz: **4.5** out of 5

Submitted Mar 12 at 18:23

This attempt took 23 minutes.

Question 1   0.5 / 0.5 pts

Which of the following is true.

○ Mean is not affected by extreme values

◉ Median cannot easily be used to estimate population parameter.

○ Median can easily be used to estimate population parameter.

○ Median is affected by extreme values

Question 2   0.5 / 0.5 pts

A die is thrown twice. What is the probability that both numbers are even prime?

○ 1/6

◉ 1/36

○ 1/3

○ 1/2

Incorrect

Question 3   0 / 0.5 pts

White and red balls are contained in a bag. A total of two balls are chosen without being replaced. The odds of picking a white ball first and subsequently a red ball are 0.28. On the first draw, there is a 0.5 chance of selecting a white ball. Given that the first ball drawn was white, calculate the chance of selecting a red ball on the second draw.

○ None of the above

○ 59/100

○ 58/100

○ 14/25

Question 4   0.5 / 0.5 pts

If X follows a binomial distribution B(n, 0.2). If E(X) = 5 then the sample

size n is ----- and V(X) is ------

○ n = 25 and V(X) = 5

○ n = 15 and V(X) = 4

○ n = 20 and V(X) = 4

⦿ n = 25 and V(X) = 4

Question 5   0.5 / 0.5 pts

A book of 200 pages contains 200 misprinted. Estimate the probability that a given page contains at least 2 misprints

○ 0.423

○ 0.29

⦿ 0.2642

○ 0.3243

Question 6   0.5 / 0.5 pts

If the joint probability density function of the random variable(x, y) is given by

f(x,y) =2, 0≤x≤y≤1 then fy(y) is

- ◉ 2y

- ○ y

- ○ 3y

- ○ 5y

Question 7   0.5 / 0.5 pts

Let the random variable 'X' follows normal distribution with mean 70 and standard deviation 13. What is the value of P(60<X<90)?

- ○ 0.1717

- ○ 0.1617

- ○ 0.8716

○ 0.7176

Question 8

0.5 / 0.5 pts

Random samples of size 100 are drawn from a population with mean 100 and standard deviation 25. what is the standard deviation of sample mean?

○ 3.5

◉ 2.5

○ 1.5

○ 4.5

Question 9

0.5 / 0.5 pts

1. What is the best description of a point estimate?

○ the margin of error used to estimate a parameter

○ All of the above

◉ a sample statistic used to estimate a parameter

○ any value from the sample used to estimate a parameter

Question 10   0.5 / 0.5 pts

A statement made about a population for testing purposes is called

○ Type I error

◉ Hypothesis

○ Statistics

○ Level of Significance

Quiz Score: **4.5** out of 5