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](#)	60 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 19:00

This attempt took 60 minutes.

Question 1	**0.5 / 0.5 pts**

Which one of the following variables is not categorical?

○ Choice on a test item (true or false)

○ Gender of person(male or female)

◉ Age of a person

○ Marital status of a person(single, married, divorced, other)

Question 2   0.5 / 0.5 pts

A box contains 10 identical balls. 6 of them are Green and 4 are Pink. Two balls are randomly selected without replacement from the box. What is the probability of getting two green balls?

⦿ 1/3

○ 6/10

○ 5/9

○ 5/10

Question 3   0.5 / 0.5 pts

There are 3 red balls, 4 green balls, and 5 black balls in a basket. The probability of not getting the red balls is

○ 5/12

⦿ 3/4

○ 1/3

○ 1/4

Question 4   0.5 / 0.5 pts

A binomial distribution may be approximated by a Poisson provided

○ both n and p are small

◉ n is large and p is small

○ both n and p are large

○ n is small and p is large

Question 5   0.5 / 0.5 pts

Suppose that a book of 600 pages contains 40 printing mistakes. Assume that these errors are randomly distributed throughout the book and x, the number of errors per page has a Poisson distribution . What is the probability that 10 pages selected at random will be free of errors ?

○ $\frac{1}{3}e^{-2}$

◉ $e^{-\frac{2}{3}}$

○ $2e^{-\frac{1}{3}}$

○ $\frac{1}{3}e^{-1}$

Incorrect

Question 6   0 / 0.5 pts

If X and Y are independent, the cumulative distribution function Fx,y(x,y) is equal to

---

○ P(X≤x) - P(Y≤x)

○ Fx(x).Fy(y)

○ P(X≤x) +P(Y≤y)

◉ Fx(x)+Fy(y)

Question 7   0.5 / 0.5 pts

A Normal distribution with mean μ=0 and Standard deviation σ =1 is

---

◉ Standard Normal distribution.

○ Regular Normal distribution

○ Ideal Normal distribution

○ Perfect Normal distribution

Question 8   0.5 / 0.5 pts

A randomly selected sample of 1,000 college students was asked whether they had ever used the drug Ecstasy. Sixteen percent (16% or 0.16) of the 1,000 students surveyed said they had. Which one of the following statements about the number 0.16 is correct?

○ It is a margin of error.

○ It is a population proportion.

○ It is a randomly chosen number.

◉ It is a sample proportion.

Question 9   0.5 / 0.5 pts

Find the 99% confidence interval estimate if the sample mean $\overline{X}$ =0,the sample size n=121 and σ=11.

○ -1.888941 to 1.888941

○ -1.133365 to 1.133365

◉ -2.575829 to 2.575829

○ -4.722354 to 4.722354

Question 10   0.5 / 0.5 pts

The rejection probability of Null Hypothesis when it is true is called as?

○ None of these

○ Level of margin

○ Level of Confidence

○ Level of significance

Quiz Score: **4.5** out of 5