

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	49 minutes	4 out of 5

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

Score for this quiz: **4** out of 5

Submitted Mar 12 at 0:42

This attempt took 49 minutes.

Incorrect

Question 1

0 / 0.5 pts

Which is the suitable measure to find average income of a group of persons?

☐ Mode

☐ Quartiles

☐ Median

☒ Mean

Question 2**0.5 / 0.5 pts**

Suppose four letters are selected from word AMRITSAR. What is chance that all selected letters are different?

☐ 7/2☐ 2/7☐ 11/70☒ 15/70**Question 3****0.5 / 0.5 pts**

In a reputed school, the probability of boys playing baseball is 0.6 and the probability of boys playing baseball and foot ball is 0.24. what is the probability of those who play baseball also play football?

☒ 40%☐ 20%☐ 30%☐ 50%**Question 4****0.5 / 0.5 pts**

In a binomial distribution, if $n=15$, $p=0.25$ then the value of $P(X=5)$ is

☒ 0.1651☐ 0.6865☐ 0.1561☐ 0.8516**Question 5****0.5 / 0.5 pts**

Jobs arrive at a facility at an average rate of 5 in an 8 hour shift. The arrival of the jobs follows Poisson distribution. The average service time of a job on the facility is 40 minutes. The service time follows exponential distribution. Idle time (in hours) at the facility per shift will be

☐ 5/7☐ 7/5☐ 10/3☒ 14/3**Incorrect****Question 6****0 / 0.5 pts**

A fair and an unfair coin with $P(T)=3/4$ are tossed three times simultaneously . Let X be a random variable which denote the number of heads shown by fair coin and Y denotes the number of heads shown by unfair coin then $P(X=Y)$ is _____

☒ 128/512☐ 136/512

☐ 1/2☐ None of these**Question 7****0.5 / 0.5 pts**

If $X \sim N(3, 16)$ then $P(X < 5) =$

☒ 0.3085☐ 0.3885☐ 0.3805☐ 0.3580**Question 8****0.5 / 0.5 pts**

If the maximum error with probability 0.95 is 1.2 and the standard deviation of population is 10, then sample size is

☒ 267☐ 262☐ 264☐ 260**Question 9****0.5 / 0.5 pts**

An estimator is a random variable because it varies from:

- ☐ Population to sample
- ☐ Population to population
- ☐ Sample to population
- ☒ Sample to sample

Question 10

0.5 / 0.5 pts

The point where the Null Hypothesis gets rejected is called as?

- ☐ Acceptance value
- ☐ Significant value
- ☒ Critical value
- ☐ Rejection value

Quiz Score: **4** out of 5