Quiz 2

Total points 13/15

(1) Quiz 2 will also serve for the attendance of Today's (5 April 2020) lecture.
(2) All questions are compulsory and there is no negative marking.

The respondent's email address (**jaiswal.5@iitj.ac.in**) was recorded on submission of this form.

✓ The difference between the values of statistic is called _____ * 2/2

sampling fluctuation ✓

✗ Whenever sample size is not fixed, the standard error of the mean measures the _____ * 0/2

Variablity ✗

Correct answers

variability in the sampling distribution

Variability in the sampling distribution

variability of the sampling distribution

Variability of the sampling distribution

Variability of sampling distribution

variability of sampling distribution

Variability in sampling distribution

variability in sampling distribution

Standard Deviation of the mean

standard Deviation of the mean

variability in the sampling distribution i.e. standard deviation of the mean

Variability in the sampling distribution i.e. standard deviation of the mean

VARIABILITY OF SAMPLING DISTRIBUTION

Variability of sampling distribution and precision

variability in the sampling distribution

variability in the sampling distribution.

✓ The Central Limit Theorem says that the distribution of the summation of n (a very large value) random variables would be * 2/2

- ○ Standard normal distribution
- ○ Normal distribution
- ◉ Insufficient information to conclude ✓

✓ Samples of size 25 are selected from a population with mean 40 and standard deviation 7.5. The mean and standard deviation of the sampling distribution of sample means are * 3/3

- ○ 40, 7.5
- ◉ 40, 1.5 ✓
- ○ 40, 0.3
- ○ 40, 2.25

✓ The expense amount for an experiment is normally distributed with mean 4000 and standard deviation 500. Calculate the probability that the sum of 100 such expenses is less than 407500. * 3/3

- ○ 0.68215
- ○ 0.06681
- ◉ 0.93319 ✓
- ○ Insufficient information to calculate the probability

✓ Dr. Bhatnagar gives MTech (AI) students 90 minutes to complete the Quiz for Statistical Techniques course. Most students use almost all the time allowed, and relatively few students finish early, so the distribution of times that it takes students to finish the quiz is strongly skewed to the left. The mean and standard deviation of the finishing times are 85 and 10 minutes, respectively. Suppose, you took random samples of 40 students and calculated sample mean finishing time (X). What would be the shape of the distribution of X? * 3/3

- ○ strongly skewed to the left
- ○ strongly skewed to the right
- ◉ Approximately normal ✓
- ○ Insufficient information to determine the shape