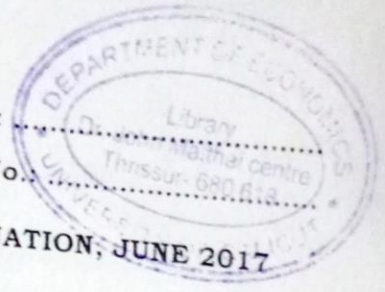


Name:

Reg. No.



SECOND SEMESTER M.A.ECONOMICS DEGREE EXAMINATION, JUNE 2017
(CCSS)

2013 Admission

EC 02 C07 - STATISTICS FOR ECONOMICS

Time: Three Hours

Maximum: 80 Marks

Part A

Answer all questions.
Each question carries 1 mark.

1. The mean and the variance are equal in:
 - (a) All probability distributions
 - (b) The binomial distribution
 - (c) The Poisson distribution
 - (d) The hypergeometric distribution
2. Variance is the square of
 - (a) SD
 - (b) Mean
 - (c) Probability
 - (d) Both b and c
3. Which of the following is a method of non probability sampling:
 - (a) Random sampling
 - (b) Systematic sampling
 - (c) Stratified sampling
 - (d) Convenience sampling
4. Z test is proposed for:
 - (a) Large sample
 - (b) Small sample
 - (c) Medium sample
 - (d) Both small and large sample
5. A Poisson distribution has the following probability function:
 - (a) $e^{-m} m^x$
 - (b) em
 - (c) e^{bm}
 - (d) None
6. The binomial distribution is a:
 - (a) Discrete distribution
 - (b) Continuous distribution
 - (c) Positively skewed distribution
 - (d) None of the above
7. The expected value of the random variable:
 - (a) will also be the most likely value of the random variable
 - (b) is another term for the mean value
 - (c) is also called the variance
 - (d) cannot be greater than 1.
8. In statistics, point estimation involves the use of sample data to calculate
 - (a) Single value
 - (b) Double value
 - (c) Two time periods
 - (d) None
9. A population:
 - (a) is a part of Sample
 - (b) has less than 30 observations
 - (c) is usually identified as N
 - (d) All of the above

Turn over

10. The standard error of the mean is:
- (a) The standard deviation of the sampling distribution of sample means
 - (b) Always normally distributed
 - (c) Sometimes less than 0.
 - (d) None of the above

(10 x 1 = 10 Marks)

Part B

*Answer any eight questions.
Each question carries 5 marks.*

- 11. What is type I error. Explain.
- 12. A sample of 80 Chief Financial Officers revealed 20 had at one time been dismissed from a job. Develop a 95 per cent confidence interval for the proportion that has been dismissed from a job.
- 13. Explain the nature of Pareto distributions.
- 14. Explain ANOVA.
- 15. Differentiate between one tailed and two tailed test?
- 16. Analyze the concept of law of large numbers.
- 17. Examine the significance of testing a hypothesis.
- 18. Examine Kruksal Wallis test.
- 19. A bag has 3 white and 4 red balls. Two balls are randomly drawn from the bag. How many white balls are expected from the draw?
- 20. Outline Central Limit theorem.
- 21. What do you mean method of least squares ?
- 22. Briefly explain Wicoxon-Mann Whitney U test.

(8 x 5 = 40 Marks)

Part C

*Answer any two questions.
Each question carries 15 marks.*

- 23. Explain the significance of nonparametric tests.
- 24. Examine the significance of statistical inference in economics.
- 25. The Appliance Center reports on its TV commercials that "more than 70 percent of our customers have purchased an appliance with us before". The CEO of the company hired a marketing research firm to independently validate this claim. In a sample of 200 recent buyers, 160 reported that they had, in fact, purchased an appliance from the Appliance Center before. At the 0.01 significance level is the claim of the commercial correct?
- 26. Explain the different types of probability distributions with suitable examples.

(2 x 15 = 30 Marks)
