13319 (Pages : **2)** **Name .....**
Reg. No.....

FIRST SEMESTER M.Com DEGREE EXAMINATION (CUCSS)

MC 1C 2- Quantitative Techniques for Business Decisions
(2015 admissions)

Time : 3 Hours Maximum: 36 weightage

Part A
Answer **all** questions
Each question carries 1 weightage

1. What is inferential analysis?
2. What are confidential limits?
3. What is standard error?
4. What is product control?
5. What are contingency tables?
6. Expand SPSS.

(6 x 1= 6 weightage)

Part B
Answer any **six** questions
Each question carries 3 weightage

7. Explain the significance of quantitative approaches.
8. What is point estimation? Explain.
9. What is hypothesis? How it is framed?
10. Twenty-five factory workers total were asked how many vacation days they take a year. The average of the sample was 22.85 days, and the standard deviation of the sample was 5.80. Calculate the standard error for the sample average.
11. A genetics engineer was attempting to cross a tiger and a cheetah. She predicted a phenotypic outcome of the traits she was observing to be in the following ratio: 4 stripes only: 3 spots only: 9 both stripes and spots. When the cross was performed and she counted the individuals she found 50 with stripes only, 41 with spots only and 85 with both. According to the Chi-square test, did she get the expected outcome.
12. Enumerate the features of X chart.
13. Discuss the merits of control charts.
14. What is Rank correlation? Explain.

(6 x 3 = 18 weightage)

Part C

Answer any **two** questions

Each question carries 6 weightage

15. Explain the various methods to identify sample size with examples.
16. A research study was conducted to examine the differences between older and younger adults on perceived life satisfaction. A pilot study was conducted to examine this hypothesis. Ten older adults (over the age of 70) and ten younger adults (between 20 and 30) were give a life satisfaction test (known to have high reliability and validity). Scores on the measure range from 0 to 60 with high scores indicative of high life satisfaction; low scores indicative of low life satisfaction. The data are presented below. Compute the appropriate t-test.

Older Adults	**Younger Adults**
45	34
38	22
52	15
48	27
25	37
39	41
51	24
46	19
55	26
46	36

1. What would be the null hypothesis in this study?
2. What would be the alternate hypothesis?
3. What probability level did you choose and why?
4. What is your t_{crit}?

17. Explain the various types of correlation with examples.

(2 x 6 = 12 weightage)