FIRST SEMESTER M.Com. DEGREE EXAMINATION, NOVEMBER 2019
(CUCSS PG)
CC19P MCM1 C03 – QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS
(Commerce)
(2019 Admission Regular)

Time: Three Hours   Maximum: 30 Weightage

Section-A
Answer any *four* questions. Each question carries 2 weightage.

1. What are the assumptions of ANOVA?

2. What are sign tests?

3. Define Null hypothesis.

4. What are the characteristics of the Normal distribution?

5. Define and distinguish between Type I and Type II error.

6. What do you mean by coefficient of determination? What does it indicate?

7. Explain line of best fit. Why are there always two lines of regression?

(4 x 2 = 8 Weightage)

Section-B
Answer any *four* questions. Each question carries 3 weightage.

8. Define SPSS. What are the various steps in the application of SPSS?

9. It is claimed that a random sample of 1000 types with mean life of 15269 km is drawn from a population of tyres which has a mean life of 15200 km and slandered deviation of 1248 km. Test the validity of the claim.

10. For a Binomial distribution, Mean = 4 and variance is 4/3. Write down all the terms of the distribution.

11. If r_{12}=0.98, r_{13}=0.44 and r_{23}= 0.54. Compute $r_{1.23}$, $r_{2.13}$ and $r_{3.12}$.

12. If in the key punching of 80 column cards, the average mistakes per card is 0.3, what percent of cards will have (i) no mistake (ii) one mistake (iii) three mistakes.

13. Define estimation. What are the properties for a good estimator?

14. Of a large group of men 5% are under 60 inches in height and 40% are between 60 and 65 inches. Assuming a normal distribution, find the mean height and standard deviation.

(4 x 3 = 12 Weightage)

Section-C

Answer any *two* questions. Each question carries 5 weightage.

15. Test whether son's eye colour and father's eye colour are associated with the help of the data given below.

Father's eye colour	Eye colour of son	
	Not light	light
Not light	230	148
Light	151	471

16. Define Quantitative Techniques. Explain the role of Quantitative Techniques in decision making.

17. In a village 'A' out of a random sample of 1000 persons, 100 were found to be vegetarians while in another village 'B' out of 1500 persons, 180 were found to be vegetarians. Do you find a significant difference in food habits of the people of the two villages?

18. The following data relate to the scores obtained by 9 students of a school in an intelligence test and their exam marks:

Test scores : 50 60 50 60 80 50 80 40 70

Exam marks: 30 60 40 50 60 30 70 50 60

   a) Obtain the regression equation of exam marks on intelligence test score of the students

   b) If the intelligence test score of a student is 65, what would be his expected exam marks?

(2 x 5 = 10 Weightage)

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