Reg. No. : ....

Name : ....

II Semester B.B.A./B.B.A.T.T.M./B.B.A.R.T.M. Degree (CBCSS-Supple./Improv.)
Examination, April 2020
(2014 – 2018 Admissions)
COMPLEMENTARY COURSE
2C03 BBA/BBA (TTM)/BBA (RTM) : Quantitative Techniques for Business Decisions

Time : 3 Hours

Max. Marks : 40

PART – A

Answer the **4** questions. **Each** question carries ½ mark.

1. What is an Independent event ?

2. What is conditional probability ?

3. What is Parametric test ?

4. What is large sample ?

(4×½=2)

PART – B

Answer **any four** questions. **Each** question carries **1** mark.

5. What is standard error ?

6. What is meant by 'CODING' with reference to Analysis of variance ?

7. What is Statistical Hypothesis ?

8. What is random experiment ?

9. If $P(A) = \frac{1}{13}$, $P(B) = \frac{1}{4}$ and $P(A \cap B) = \frac{1}{52}$. Find $P(A/B)$, $P(B/A)$.

10. Four coins are tossed simultaneously. What is the probability of Getting 2 heads ?

(4×1=4)

PART – C

Answer **any six** questions. **Each** question carries **3** marks.

11. Explain the areas of Quantitative Techniques.

12. A die is thrown. Find the probability of getting a
    i) '4'
    ii) an even number
    iii) '3' or '5'
    iv) Less than 3.

13. What are the characteristics of normal distribution ?

14. The scores of students in a test follow Normal distribution with mean = 80 and SD = 15. A sample of 1000 students has been drawn from the population. Find :

    1) Probability that a randomly chosen student has score between 85 and 95

    2) Appropriate number of students scoring less than 60.

15. The average life of 26 electric bulbs were found to be 1200 hours with a standard deviation of 150 hours. Test whether these bulbs could be considered as a random sample from a normal population with mean 1300 hours.

16. In a test given to two groups of students the marks obtained were as follows.

Group I	18	20	36	50	49	36	34	49	41
Group II	29	26	28	35	30	44	46		

    Assuming that the group standard deviations are the same and that the marks normally distributed, test the hypothesis that the group means are equal.

17. Explain the steps involved in Nonparametric test.

18. Explain the uses of t test.   **(6×3=18)**

PART – D

Answer **any two** questions. **Each** question carries **8** marks.

19. From the following data use χ^2 test and conclude whether innoculation is effective in preventing tuberculosis.

	Attacked	Not Attacked
Innoculated	31	469
Not innoculated	185	1315

20. Below are given the yield (in kg) per acre for 5 trial plots of 4 varieties of treatment.

Treatment

Plot No.	I	II	III	IV
1	42	48	68	80
2	50	66	52	94
3	62	68	76	78
4	34	78	64	82
5	52	70	70	66

Carry out an analysis of variance and state your conclusions.

21. Explain the uses of Quantitative techniques in business and Industry.

(2×8=16)

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