K21U 3440

Reg. No. : ....

Name : ....

**II Semester B.B.A./B.B.A.(R.T.M.) Degree (CBCSS – OBE – Reg./Sup./Imp.)
Examination, April 2021
(2019 Admission Onwards)
Complementary Elective Course
2C03BBA/BBA(RTM) : QUANTITATIVE TECHNIQUES FOR
BUSINESS DECISIONS**

Time : 3 Hours
Max. Marks : 40

PART – A

Answer **all** questions. **Each** question carries **1** mark. (6×1=6)

1. What is mutually exclusive event ?

2. State the meaning of permutation and combination.

3. What do you mean by normal distribution ?

4. State any two characteristics of binomial distribution.

5. What is random variable ?

6. What is standard error ?

PART – B

Answer **any 6** questions. **Each** question carries **2** marks. (6×2=12)

7. State the scope of Quantitative Techniques.

8. What is inverse probability ?

9. Explain addition and multiplication theorem of probability.

10. State the properties of Poisson distribution.

11. State the merits of normal distribution.

12. If X follows Poisson distribution such that $P(X = 1) = P(X = 2)$, find $P(X = 4)$ ($e^2 = 0.1353$). Also find mode of the distribution.

13. What is meant by level of significance ?

14. State the meaning of parametric and non-parametric tests.

P.T.O.

PART – C

Answer **any 4** questions. **Each** question carries **3** marks. **(4×3=12)**

15. Explain the statistical tools of Quantitative Techniques.

16. What are the different approaches to probability ?

17. Discuss the assumptions of Chi-square test.

18. The odds against X solving a Business Statistics problem are 8 to 6 and odds in favour of student Y solving the same problem are 14 to 16. What is the probability that ;

    1) Problem is solved   2) Problem is not solved.

19. Out of 500 items selected for inspection 0.2% are found to be effective. Find how many lots will contain exactly no defective if there are 1000 lots using poisson distribution.

20. In a multiple choice quiz each question has 5 alternatives, out of them only one answer is correct. What is the probability of 6 correct answers out of 10 questions ?

PART – D

Answer **any 2** questions. **Each** question carries **5** marks. **(2×5=10)**

21. What are the different classifications of Quantitative Techniques ?

22. What do you mean by testing of hypotheses ? Explain the various types of hypotheses.

23. A bag contains 8 balls, identical except for colour of which 5 are red and 3 white. A man draws two balls at random one after another without replacement. What is the probability that one of the balls drawn is white and other red ?

24. Fit a normal distribution to the following data.

Class	12-15	16-19	20-23	24-27	28-31	32-35	36-39
Frequency	6	10	22	25	20	12	9

———————————