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