



K23U 1943

Reg. No. :

Name :

**II Semester B.B.A./B.A. (RTM) Degree (CBCSS – OBE – Regular/
Supplementary/Improvement) Examination, April 2023
(2019 Admission Onwards)**

**COMPLEMENTARY ELECTIVE COURSE
2C03BBA/BBA(RTM) : Quantitative Techniques for Business Decisions**

Time : 3 Hours

Max. Marks : 40

SECTION – A

Answer **all** questions. **Each** question carries **1** mark.

1. What are quantitative techniques ?
2. What are mutually exclusive events ?
3. What is a random experiment ?
4. What is a binomial distribution ?
5. What is the level of significance ?
6. What are parametric tests ?

(6×1=6)

SECTION – B

Answer **any six** questions. **Each** question carries **2** marks.

7. A book contains 100 misprints distributed randomly throughout its 100 pages. What is the probability that a page observed at random contains at least two misprints ? Assume poisson distribution.
8. What are independent and dependent events ?
9. Two players Sangeetha and Haritha play a tennis match. It is known that the probability of Sangeetha winning the match is 0.6. What is the probability of Haritha winning the match ?
10. What is the Bayes Theorem ?
11. Find the mean and standard deviation of the following distribution
 $n = 16, p = 0.40$.
12. What is the normal approximation to binomial distribution ?
13. State any two properties of a standard normal curve.
14. Distinguish between one tailed and two tailed test.

(6×2=12)

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SECTION – C

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

15. State any three characteristics of a good hypothesis.
16. State any three characteristics of a poisson distribution.
17. A glass jar contains 6 red, 5 green and 8 blue balls. If a single ball is chosen at random from the jar, what is the probability of choosing 1.a red ball 2.a green ball 3.a blue ball ?
18. A dresser drawer contains five pairs of socks each with one of the following colours : blue, brown, red, white and black. Each pair is folded together in a matching set. You reach into the sock drawer and choose a pair of socks without looking. Now, you replace this pair with another pair. What is the probability that you will choose the red pair of socks both times ?
19. A student secures 72 marks in an examination in sociology for which class average is 54 the standard deviation is 20. He secure 76 marks in statistics for which his class average is 52 and the standard deviation is 12. What can you about the performance of this student with reference to those two examinations ? (Convert z scores or standard scores for both examinations and make your inferences).
20. State any three points of differences between null and alternative hypothesis.

(4×3=12)

SECTION – D

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

21. Discuss the role of quantitative techniques in business.
22. A class consists of 100 students, 25 of them are girls and 75 boys, 20 of them are rich and remaining poor, 40 of them are fair complexioned. What is the probability of selecting a fair complexioned rich girl ?

23.

x	0	1	2	3	4
f	123	59	14	3	1

Fit a poisson distribution to the above data.

24. Explain the steps in the testing of a hypothesis.

(2×5=10)