



K26U 0828

Reg. No. :

Name :

**Second Semester B.B.A./B.B.A.(AAM/RTM)/B.B.A. (Hospital
Administration) Degree (C.B.C.S.S. – O.B.E.-Supplementary)
Examination, April 2026
(2020 to 2023 Admissions)
Complementary Elective Course
2C03BBA/BBA(RTM/AAM)/BBH : QUANTITATIVE TECHNIQUES FOR
BUSINESS DECISIONS**

Time : 3 Hours

Max. Marks : 40

SECTION - A

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

1. Define Quantitative Techniques.
2. What is a random experiment ?
3. What is a Type I error ?
4. Write the sample space for tossing a coin twice.
5. If $P(A) = 0.3$, find $P(A')$.
6. What is a standard normal variate ?

(6×1=6)

SECTION – B

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

7. Explain the limitations of quantitative techniques.
8. Define conditional probability.
9. State properties of the binomial distribution.
10. If $P(A) = 0.5$, $P(B) = 0.4$, $P(A \cap B) = 0.2$, find $P(A \cup B)$.
11. A die is thrown once. Find the probability of getting a number divisible by 3.
12. Explain the level of significance.
13. What is the Poisson distribution ? State its uses.
14. What is hypothesis testing ?

(6x2=12)

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SECTION - C

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

15. Explain applications of quantitative techniques in business.
16. A card is drawn from a pack of 52 cards. Find the probability of getting :
a) a king b) a red card
17. A coin is tossed 5 times. Find the probability of getting exactly 2 heads.
18. A Poisson distribution has a mean of 2. Find $P(X = 0)$ and $P(X = 1)$.
19. A normal distribution has a mean of 50 and an SD of 10. Find the probability of $X > 60$.
20. Explain the types of errors in hypothesis testing.

(4×3=12)

SECTION – D

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

21. Explain the procedure of hypothesis testing.
22. A binomial distribution has $n = 4$, $p = 0.5$. Find :
- Mean
 - Variance
 - $P(X = 2)$.
23. A Poisson distribution has a mean of 3. Find :
- $P(X = 2)$
 - $P(X \leq 2)$.
24. An urn contains 4 white and 6 black balls. Two balls are drawn without replacement. Find the probability that both are white.

(2×5=10)