Reg. No. : ....

Name : ....

II Semester B.B.A./B.B.A. (R.T.M.) Degree (CBCSS (OBE) – Regular)
Examination, April 2020
(2019 Admission)
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.

1. What is random experiment ?
2. Define probability.
3. State any two characteristics of binomial distribution.
4. What is standard normal variate ?
5. State the meaning of Poisson distribution.
6. State any two types of hypotheses.

(6×1=6)

PART – B

Answer **any 6** questions. **Each** question carries **2** marks.

7. State the various approaches to probability.
8. Discuss permutation and combination.
9. What are the characteristics of Poisson distribution ?
10. Narrate the properties of normal distribution.
11. The probability that a batsman scores a century in a cricket match is 1/3. What is the probability that out of 5 matches, he may score century in :
    1) Exactly 2 matches, and
    2) No match.
12. Explain central limit theorem.
13. Discuss the procedure for testing hypotheses.
14. State any four techniques of Operations Research.

(6×2=12

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PART – C

Answer **any 4** questions. **Each** question carries **3** marks.

15. What are the limitations of Quantitative Techniques ?

16. Explain the various theorems of probability.

17. A University has to select an examiner from a list of 50 persons. 20 of them are women and 30 men. 10 of them know Hindi and 40 do not, 15 of them are teachers and remaining are not. What is the probability of the University selecting a Hindi knowing women teacher ?

18. A and B play a game in which A's chance of winning is 2/3. In a series of 8 games what is the probability that A will win 6 or more games ?

19. In a competitive examination, 5000 students have appeared for a paper in Statistics. Their average mark was 62 and standard deviation was 12. If there are only 100 vacancies, find the minimum marks that one should score in order to get selected.

20. Explain Two Tailed and One Tailed Tests.

(4×3=12)

PART – D

Answer **any 2** questions. **Each** question carries **5** marks.

21. Define Quantitative Technique. Discuss the uses of QT in business.

22. What is Chi-square test ? Explain its characteristics and uses.

23. An urn 'A' contains 2 white and 4 black balls. Another urn 'B' contains 5 white and 7 black ball. A ball is transferred from the urn 'A' to urn 'B'. Then a ball is drawn from urn 'B'. Find the probability that it will be white.

24. Fit a Poisson distribution to the following data and calculate the theoretical frequencies.

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

(2×5=10)

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