Reg. No. : ....

Name : ....

II Semester B.B.A./B.B.A.T.T.M./B.B.A.R.T.M. Degree (C.B.C.S.S. – Reg./Supple./Imp.) Examination, May 2017
(2014 Admn. Onwards)
Complementary Course
2C03 BBA/BBA(TTM)/BBA(RTM) : QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS

Time : 3 Hours   Max. Marks : 40

SECTION – A

Answer the **4** questions. **Each** question carries ½ mark.

1. What is an event ?

2. Explain alternate hypothesis.

3. What do you mean by type I error ?

4. What is analysis of variance ?   (4×½=2)

SECTION – B

Answer **any four** questions. **Each** question carries **1** mark.

5. State any four functions of quantitative techniques.

6. State the practical situations where Poisson distribution can be used.

7. What is equally likely events ?

8. What is the probability of getting at most two heads while tossing three unbiased coin ?

9. Explain two-tailed test.

10. What are the different types of variances ?   (4×1=4)

SECTION – C

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

11. Explain the uses of quantitative techniques in business and industry.

12. Explain the properties of Normal Distribution.

13. A sub-committee of 6 members is to be formed out of a group consisting of 7 men and 4 women. Calculate the probability that the sub-Committee will consist of at least 2 women.

14. Find the probability of getting a total of 7 or 11 in a single throw with two dice.

15. 8 unbiased coins were tossed simultaneously. Find the probability of getting 6 or more heads.

16. In a town 10 accident took place in a span of 100 days. Assuming that the number of accidents follows Poisson, find the probability that there will be atleast three accidents in a day.

17. Given a normal distribution with mean = 40 and SD = 10. Find the value of X that has 15% of the area to its left.

18. The average life of 26 electric bulbs were found to be 1200 hours with a standard deviation of 150 hours. Test whether these bulbs could be considered as random sample from a normal population with mean 1300 hours.   **(6×3=18)**

SECTION – D

Answer **any 2** questions. **Each** question carries **8** marks.

19. The theory predicts that the proportion of beans in four given groups should be 9 : 3 : 3 : 1. In an examination with 1600 beans, the numbers in the four groups were 882, 313, 287 and 118. Does the experimental results support the theory.

20. The following table gives the yields of 15 samples of plot under three varieties of seed :

A	B	C
20	18	25
21	20	28
23	17	22
16	15	28
20	25	32

Test using analysis of variance whether there is a significant difference in the average yield of seeds.

21. There are 100 students in a College of which 36 are boys studying statistics and 13 are girls not studying statistics. If there are 55 girls in all, find the probability that a boy picked up at random is not studying statistics.   **(2×8=16)**