



K18U 0522

Reg. No. :

Name :

II Semester B.B.A./B.B.A.T.T.M./B.B.A.R.T.M. Degree (CBCSS – Reg./
Supple./Imp.) Examination, May 2018

Complementary Course

2C03 BBA/BBA (TTM)/BBA (RTM) : QUANTITATIVE TECHNIQUES FOR
BUSINESS DECISIONS
(2014 Admn. Onwards)

Time : 3 Hours

Max. Marks : 40

SECTION – A

Answer **all** questions. **Each** question carries $\frac{1}{2}$ mark. (4× $\frac{1}{2}$ =2)

1. What do you mean by an event ?
2. State two types of theoretical distributions.
3. What is degree of freedom ?
4. What do you mean by variance ?

SECTION – B

Answer **any four** questions. **Each** question carries **1** mark. (4×1=4)

5. State the uses of Poisson distribution.
6. Define an independent event.
7. What do you mean by quantitative techniques ?
8. What is type I error ?
9. If 2 coins are flipped, find the probability of getting two heads.
10. What is F-test ?

P.T.O.



SECTION – C

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

(6×3=18)

11. Write the properties of normal distribution.
12. What are the limitations of quantitative techniques ?
13. State the different rules of probability.
14. Given $P(A) = 3/5$ and $P(B) = 1/5$, find $P(A \text{ or } B)$, if A and B are mutually exclusive events.
15. The monthly incomes of 1000 employees are normally distributed around a mean of Rs. 2,500 with standard deviation of Rs. 250. Find the number of employees whose monthly income would be between Rs. 2,000 and 3,000.
16. There are 4 men and 6 women on the city council. If one council member is selected for a committee at random, how likely is it that it is a woman ?
17. Six dice are thrown 729 times. How many times do you expect at least three dice to show 5 or 6 ?
18. The income distribution of workers in a factory was found to be normal with mean Rs. 1,000 and standard deviation Rs. 100. There were 180 persons getting above Rs. 1,200. How many persons were there in all ?

SECTION – D

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

(2×8=16)

19. If the average monthly income of 100 employees normally distributed is Rs. 900 with a standard deviation of Rs. 60, what should be lowest monthly income of the 10 highest paid employees ?
 20. Two groups of 100 people each were taken for testing the use of vaccine. 15 persons contracted the disease out of the inoculated persons, while 25 contracted the disease in the other group. Test the efficiency of the vaccine, use chi-square test at 5% level of significance.
 21. 1000 articles from a factory were examined and found to be 3% defective. Among 1500 similar articles from a second factory are found to be only 2% defective. Can it reasonably be concluded that the product of the first factory is inferior to the second ?
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