K21U 6744

Reg. No. : $\qquad$
Name : $\qquad$

I Semester B.B.A./B.B.A. (R.T.M.) Degree (C.B.C.S.S. - O.B.E. - Regular/ Supplementary/Improvement) Examination, November 2021
(2019 Admission Onwards) Complementary Elective Course 1C01BBA/BBA(RTM) : STATISTICS FOR BUSINESS DECISIONS

Time : 3 Hours
PART - A

Answer all questions. Each question carries 1 mark :

1. What is secondary data?
2. What is meant by census ?
3. What is classification?
4. What is time series?
5. Define correlation.
6. What is trend?
PART - B

Answer any 6 questions. Each question carries 2 marks :
7. Define statistics.
8. List out the components of time series.
9. What is whole sale price index number?
10. List out two uses of consumer price index.
11. What is chain base index numbers?
12. What is probable error of coefficient of correlation?
13. What is perfect correlation?
14. What is simple and multiple regression ?

PART - C
Answer any 4 questions. Each question carries 3 marks :
15. List out the objectives of classification.
16. Which are the functions of statistics?
17. 'Statistics is like clay of which you can make God or Devil as you please.' Comment on the statement.
18. Explain the method of moving average.
19. What are the steps involved in the construction of consumer price index numbers ?
20. Calculate the coefficient of correlation between $x$ and $y$ from the following data :

## X

No. of pairs of observation Standard deviation
Covariance between $x$ and $y$

15
3.01
$y$
15
3.03
8.13
$(4 \times 3=12)$

## PART - D

Answer any 2 questions. Each question carries 5 marks :
21. Define index number. Explain various steps in the construction of index numbers.
22. What is meant by diagrams ? Discuss various types of diagrams used in statistics.
23. Find Karl Pearson's coefficient of correlation between heights and weights of 10 students and comment.
Heights (inches): $\begin{array}{lllllllll}62 & 72 & 78 & 58 & 65 & 70 & 66 & 63 & 60\end{array} 72$
Weights (kgs.) : $\quad 50 \quad 65 \quad 63 \quad 50 \quad 54 \quad 60 \quad 61 \quad 55 \quad 54 \quad 65$.
24. Work out the trend values by 4 yearly moving average method for the following data and plot the given values and trend values on a graph :
Year 2002200320042005200620072008200920102011
$\begin{array}{llllllllll}\text { Production } 80 & 90 & 92 & 83 & 87 & 96 & 100 & 110 & 105 & 118\end{array}$
( $2 \times 5=10$ )

