0119444

13125

Reg. No. | | | | | | | | |

I Semester B.Com. Degree Examination, August - 2021

COMMERCE

Methods and Techniques for Business Decisions

(CBCS Scheme 2014-15 & Onwards Regular-Repeaters)

Time : 3 Hours **Maximum Marks : 70**

Instructions to Candidates :

Answer should be completely in English.

SECTION - A

Answer any **Five** sub - questions. Each sub - question carries **2** marks. **(5×2=10)**

1. a) Define Prime numbers.

b) Find HCF of 12 and 20?

c) Solve for $X : x+3+x=5$.

d) What is diagonal Matrix?

e) What is Banker's Discount?

f) Find 5th term of the sequence 12,15,17,.....

g) Find Simple interest on Rs. 50,000 @ 10% for a year.

SECTION - B

Answer any **Three** questions. Each question carries **6** marks. **(3×6=18)**

2. $\frac{X-1}{14}+\frac{X-2}{21}=\frac{X-3}{7}$.

3. Find the greatest number which will divide 14,490 and 31,530 as its leave the remainder 6 in each case.

4. $\begin{vmatrix} X & 2 & 1 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{vmatrix}$ = -12 Find X.

5. Find 15th term of AP 1,3,5,.....?

6. If 20 men complete a piece of work in 12 days, how long will 40 men take to do the same piece of work.

[P.T.O.

SECTION - C

Answer any **Three** questions. Each question carries **14** marks. **(3×14=42)**

7. a) Solve by formula method $14x^2 - 53x + 14 = 0$.

b) $\left.\begin{aligned} 4x - 2y &= 12 \\ 5x + 3y &= 26 \end{aligned}\right\}$ Solve by substitution method.

8. Find Inverse of the Matrix $A \begin{bmatrix} 1 & 0 & -4 \\ -2 & 2 & 5 \\ 3 & -1 & 2 \end{bmatrix}$.

9. a) Find compound and simple interest on Rs. 40,000/- for 3 years at 12% P.A.

b) Find Banker's Discount, True Discount and Banker's gain in Rs. 3030 for 73 days at 5% P.A.

10. a) How many numbers of two digits are divisible by 3.

b) Find 3 numbers in G.P if their sum is 19 & product is 216.

11. a) 5 men each working 9 hours a day can finish a work in 30 days. How many men are required to finish Eight time the work in 25 days each working 8 hrs day.

b) The Income of A and B is in the Ratio of 4:3 and their Expenditure is in the Ratio of 3:2. If both of them save 6,000/- each. Find their present Income.