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

II Semester B.B.A. Degree Examination, September - 2021

BUSINESS ANALYTICS-I

(CBCS Scheme Repeaters)

Paper :2.4

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

Instructions to Candidates:

1. Answers should be written completely in English.

SECTION - A

Answer any **FIVE** sub-questions. Each sub-question carries **Two** Marks. **(5×2=10)**

1. a) Give the meaning of Rational Numbers.

b) Find the LCM 72, 108, 2100.

c) Define linear equations.

d) Which term of the AP 5, 14, 23..... is 239?

e) What is inverse of Matrix?

f) What is banker discount?

g) Find out Compound interest of Rs.3000 for 7 years at 14% p.a.

SECTION - B

Answer any **THREE.** Each question carries **Five** Marks. **(3×5=15)**

2. What least value should be added to 1812 to make it divisible by 7,11,14?

3. If a= -5, l=52 and S_n=470. Find n and d.

[P.T.O.

4. Find x, if $\begin{bmatrix} x & 4 & 7 \\ 4 & 1 & x \\ -5 & -4 & 2 \end{bmatrix} = -40$

5. How long will it take for a Sum of money to grow from Rs.1,250 to Rs.10,000, if it is invested at 12.5% p.a. simple interest?

SECTION - C

Answer any **THREE** questions. Each question carries **FIFTEEN** Marks. **(3×15=45)**

6. a) $A=\begin{bmatrix} 4 & 2 & -1 \\ 3 & -7 & 1 \end{bmatrix}$ (7)

$B=\begin{bmatrix} 2 & 3 \\ -3 & 0 \\ -1 & 5 \end{bmatrix}$

Find $(AB)'$ and $B'A'$

b) Solve by formula Method $x^2-3x=10$ (8)

7. a) Solve for $\frac{2}{x-1}+\frac{3}{x+4}=\frac{5}{x+3}$ (7)

b) Solve by, Cramer's rule. (8)

$3x-y=6$

$2x-15=-3y$

8. a) If 10 men can earn Rs.10,500 in 7 days in how many days will 15 men earn Rs.22,500. (7)

b) A bill for Rs.12,750 drawn on May 27th for 4 months was discounted on july 19th at 4%p.a. Find i) Bankers discount ii) True discount iii) The Bankers gain (8)

iv) How much the holder of bill received.

9. a) Find the amount when Rs.10,000 is invested for 2½ years at 10% compounded yearly. **(7)**

b) Three numbers whose sum is 18 are in AP. If 2, 4,11 are added to them respectively, the resulting numbers are in GP. Find the numbers. **(8)**
