



QP – 360

16

I Semester B.B.A. Examination, April/May 2021
(CBCS) (F + R) (2014 – 15 and Onwards)

BUSINESS ADMINISTRATION

1.5 : Quantitative Methods For Business – I

Time : 3 Hours

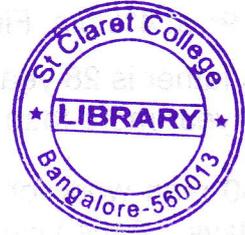
Max. Marks : 70

Instruction : Answer should be written in **English** only.

SECTION – A

Answer **any five** sub-questions from the following. **Each** sub-question carries 2 marks. (5×2=10)

1. a) What is integers ? Give example.
- b) Find the HCF of 20, 32 and 48.
- c) Find the LCM of 40, 72 and 135.
- d) State the types of equation.
- e) What do you mean by row matrix ?
- f) If $A = \begin{bmatrix} 3 & 6 & 0 & 9 \\ 4 & 2 & -1 & 5 \end{bmatrix}$ $B = \begin{bmatrix} 6 & 3 & 0 & 9 \\ 3 & -3 & 6 & 9 \end{bmatrix}$ find $A + B$.
- g) Find the simple interest at 10% p.a. for 5 years on ₹ 10,000.



SECTION – B

Answer **any three** questions of the following. **Each** question carries 6 marks. (3×6=18)

2. The price of 2 kgs of rice and 5 kgs of wheat is ₹ 85 and price of 3 kgs of rice and 8 kgs of wheat is ₹ 132. Find the price of rice and wheat.
3. Solve the equation by elimination method. $X + Y = 15$ and $3X - Y = 21$.
4. If $B = \begin{bmatrix} 2 & -1 \\ 3 & 2 \end{bmatrix}$ find B^2 .
5. Find the difference between the simple interest and compound interest on ₹ 3,000 in 3 years at 4% p.a.
6. If the 3rd and 6th terms of a A. P. are 7 and 13 respectively. Find the A.P. and the 15th term.

P.T.O.



SECTION - C

Answer any three questions of the following. Each question carries 14 marks.

(3×14=42)

7. a) Solve x and y , $6x + 2y = 8xy$, $3x + 8y = 30xy$.
 b) Solve by elimination method $2x + 3y = 5$ and $3x + 5y = 8$.
8. a) Solve for A and B is $2A + B = \begin{bmatrix} 6 & 3 \\ 6 & -2 \end{bmatrix}$ and $3A + 2B = \begin{bmatrix} 1 & 0 \\ 0 & 5 \end{bmatrix}$.
 b) Solve by Cramer's rule
 $6x + 5y = 2$
 $4x - 3y = 14$.
9. a) A bill for ₹ 12,750 drawn on May 27th for 4 months was discounted on July 19th at 4% p.a. Find (a) Bankers discount (b) True discount (c) Bankers gain.
 b) A father is 28 year older than the son. In 5 year the father's age will be 7 year more than twice than of the son. Find their present age.
10. a) 30 men work for 8 hours a day for 24 days to finish work. In how many days, 18 men working for 10 hours a day will finish double the work ?
 b) Find the compound interest of ₹ 9,600 at 12% p.a. in 4 years payable half yearly.
11. a) Nine tables and eight chairs cost ₹ 456. Eight tables and nine chairs cost ₹ 462. Determine the cost of each table and chair.
 b) Find the HCF and LCM of 440, 1800 and 2800.