

**Second Semester FYUGP Degree (Reg) Examination April
2026****KU2DSCBBA104 - BUSINESS MATHEMATICS**

2025 Admission onwards

Time : 1.5 hours

Maximum Marks : 50

Section A

Answer any 6 questions. Each carry 2 marks.

1. If a matrix has 36 elements, what are the possible orders it can have?
2. What do you mean by equal matrices?
3. What is an equation?
4. Solve $7(x-2) + 8(x-3) - 22 = x + 10$
5. How to calculate the sum of n terms of an AP?
6. How to calculate the sum of n terms of a GP?
7. Calculate the simple interest on 18,000 for 4 years at 5% per annum.
8. What is appreciation?

Section B

Answer any 4 questions. Each carry 6 marks.

9. Find the sum of all numbers between 200 and 400 which are divisible by 7?
10. Which terms of the sequence 3, 9, 15 is 111?
11. 8 th term of GP 1, $\frac{1}{5}$, $\frac{1}{25}$
12. A future amount of Rs 50,000 is expected in 6 years. Calculate its present value if the discount rate is 7% per annum.
13. The ratio of boys to girls in a class is 3:5. If there are 24 boys, how many girls are there?
14. Divide Rs 600 between A and B in the ratio 2:3.

Section C

Answer any 1 questions. Each carry 14 marks.

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15. Find the inverse the matrix

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

16. Solve $x + y = 5$, $xy = 6$