



Mid-Term Exam

Total Marks: 20

No. of Questions:2 (Attempt all questions)

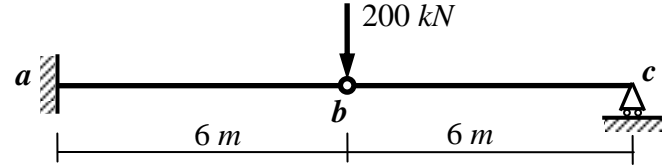
Name:

Code:

Question (1): (10 Marks)

Using the **double integration method**, determine the deflection at b , the slope at section just to the left of b , and sketch the elastic curve of the beam.

$$EI = 6 \times 10^5 \text{ kN.m}^2$$



Solution:

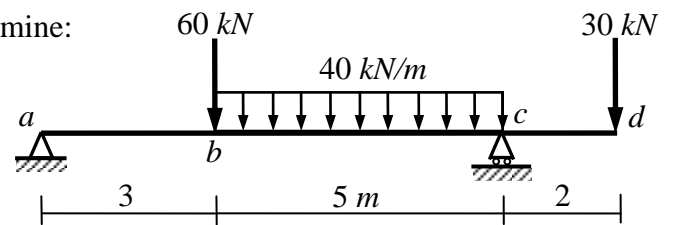
Question (2): (10 Marks)

For the shown beam, using the **moment-area method**, determine:

- (a) The slope at a
- (b) The deflection at b
- (c) The deflection at d

and sketch the elastic curve of the beam.

$$EI = 60 \text{ MN.m}^2$$



Solution: