

Mid-Term Exam

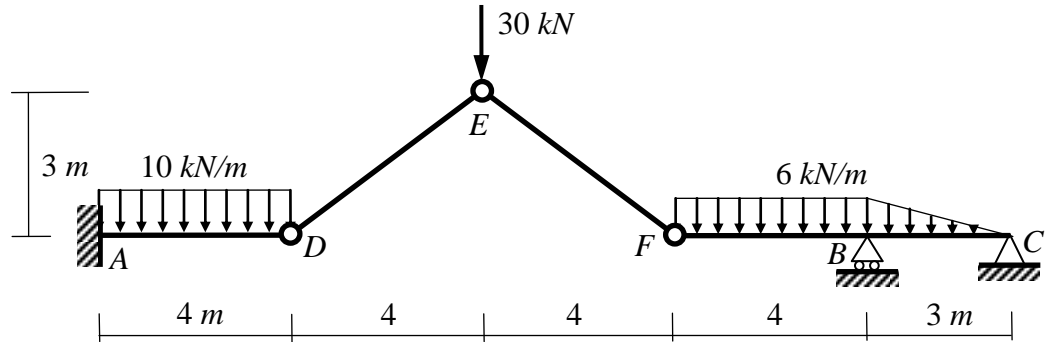
- Attempt all questions.
- The Exam consists of 3 questions in 1 page.
- Maximum grade is **20 Marks**.

Question (1): (9 Marks)

For the shown structure, determine the reactions at the supports **A**, **B** and **C**.

Note:

In your answer sheet, draw the final reactions (direction and magnitude) on the structure.



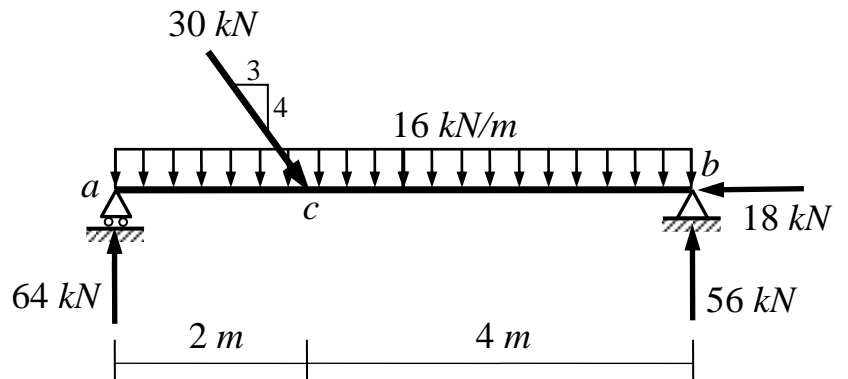
Question (2): (8 Marks)

For the shown beam,

- (a) Draw the normal force, shear force and bending moment diagrams.
- (b) Determine the location and the value of the maximum positive bending moment.

Note:

The reactions are given.



Question (3): (3 Marks)

Determine whether each of the shown structures is stable or unstable. If stable, determine whether it is statically determinate or indeterminate. If statically indeterminate, determine the degree of indeterminacy.

