Ministry of Higher Education

Giza Higher Institute for Eng. & Tech.

Civil Engineering Department

Course Name: Theory of Structures (1)

Course Code: CIV 201



Academic Year : 2015-2016

Semester: First
Level: Second
Time: 1½ Hours
Date: 24/11/2015

Examiner: Dr. M. Abdel-Kader

Mid-Term Exam

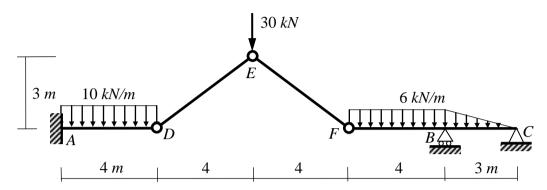
- Attempt all questions.
- The Exam consists of 3 questions in 1 page.
- Maximum grade is 20 Marks.

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.



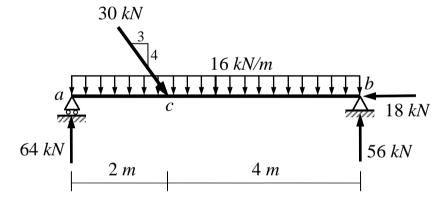
Question (2): (8 Marks)

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.

