

Name:

**Ministry of Higher Education** 

Giza Higher Institute of Engineering & Technology

**Civil Engineering Department** 

Course Name: Theory of Structures (2)A

Course Code : CIV 211 Date : 11 / 11 / 2019

**Mid-Term Exam** 

Total Marks: 15 No. of Questions:1

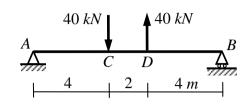
Academic Year: 2019/2020
Semester: First
Level: 2 Civil
Time: 1 Hour
Examiner: Dr. M. Abdel-Kader

Code:

## **Question (1): (15 Marks)**

- a) Using the **moment-area method**, determine the slope at A and the deflection at D.
- b) Using the **conjugate beam method**, determine the slope at **B** and the deflection at **C**.
- c) Sketch the elastic curve of the beam.

 $EI = 1 \times 10^4 \ kN.m^2$ 



## **Solution:**

**a**)