



Subject: Steel Structures

(Course Code):

Duration: 6 hours

Instructor: Amjad Islam

Total Marks: 30

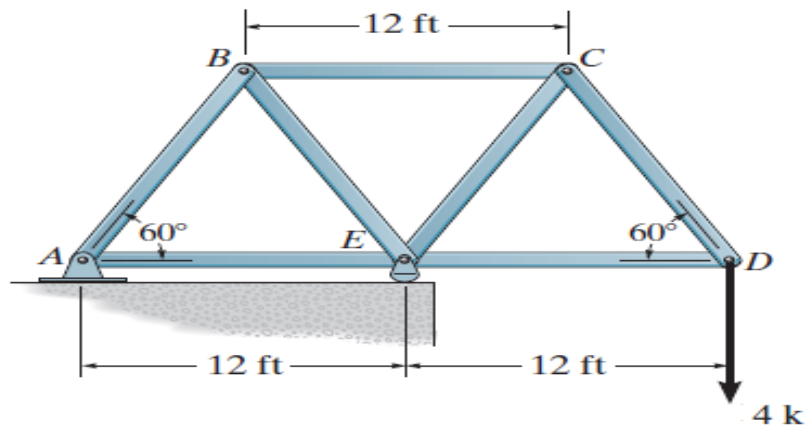
Note: Attempt all questions. Assume any necessary data, if required.

Q1: (5+5)

- a- Define Determinacy and Stability. Find if the truss given in Q2 is determinate and stable.
- b- Write a brief note on different types of loads. (CLO 1)

Q2: (10)

Determine the force in each member of the truss. State if the members are in tension or compression. Assume all members are pin connected. (CLO 2)



Q3: (10)

Determine the slope at B and the maximum displacement of the beam. Use the moment-area theorems. Take  $E = 29(103)$  ksi,  $I = 500$  in<sup>4</sup>. (CLO2)

