

College of Engineering & Technology

Department: Mechanical Engineering Marks: 15

Lecturer: Dr. Rola Afify
Course Code: ME276

Time: 11:15 – 12:00
Date: 29/10/2014

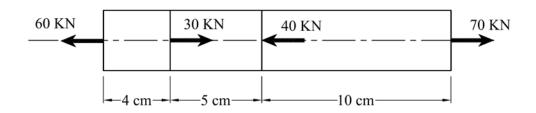
Answer the following questions:

Question one (6 marks)

A round shaft of length 20 cm and diameter 3 cm has a modulus of elasticity 200 GPa is elongated by an axial load of 80 kN. Calculate the tensile stress and strain.

Question two (9 marks)

A circular steel rod of length 19 cm and diameter 3 cm loaded as shown in the figure. Calculate the extension in the 10 cm length part, if the modulus of elasticity 210 GPa. Draw the Normal Force Diagram (N.F.D).



Good Luck Page(1/1)

Dr. Rola Afify