



College of Engineering & Technology

Department: Mechanical Engineering

Marks: 15

Lecturer: Dr. Rola Afify

Time: 3.00 - 4.00

Course Code: ME356

Date: 4/11/2015

Name:

R.N.:

Answer the following questions:

Question one (6 marks)

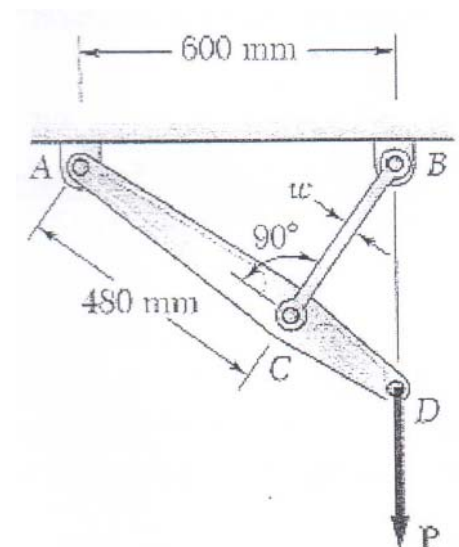
A) Define:

i) Strength:

ii) Ductility:

iii) Creep:

B) What are the types of stresses? mention the equation of each type.



Question two (9 marks)

Link BC, shown in Figure, is 6 mm thick and is made of steel with a 450 MPa ultimate strength in tension. What should be the width w if this structure is designed to support a 20 kN load P with a factor of safety of 3?