

College of Engineering & Technology

Department: Mechanical EngineeringMarks: 15Lecturer: Dr. Rola AfifyTime: 11.00 - 12.00Course Code: ME356Date: 4/11/2015

Name:

<u>R.N.:</u>

Answer the following questions: Question one (6 marks)

A) Define:

i) Elasticity:

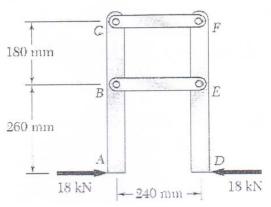
ii) Brittleness:

iii) Machinability:

B) What are the general considerations in Machine Design?

Question two (9 marks)

Members ABC and DEF, shown in Figure, are joined with steel links (E = 200 GPa). Each of the links is made of 25 x 25 mm plates. Determine the change in length of members BE and CF. (Hint: $\sigma = E\varepsilon$)



Good Luck 1/1 Dr. Rola Afify