



Department of Civil Engineering
NATIONAL INSTITUTE OF TECHNOLOGY CALICUT
CE2008D STRUCTURAL ANALYSIS I

Winter 2019-20
Homework Assignment 3 (Module: 3)

S is your class serial number; bring the completed assignment as and when you return to the campus

1. For the plane truss shown in Fig. 1, determine all the member forces if $E = 200$ GPa and the cross-section of all the members are equal to A . Take $W = (20 + S/5)$ kN and $A = (4000 + 10S)$ mm².

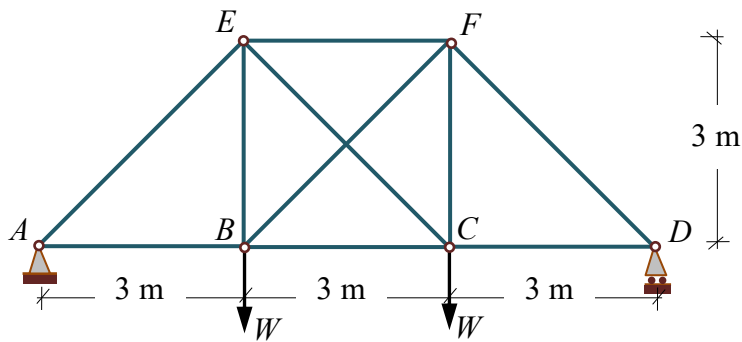


Figure 1

2. (a) For the cantilever truss in Fig. 2, determine all the member forces if $E = 200$ GPa and the cross-section of all the members are equal to A . Take $W = (10 + 0.1 \times S)$ kN and $A = (5000 + 20S)$ mm².
(b) Also determine the vertical deflection at the tip C .

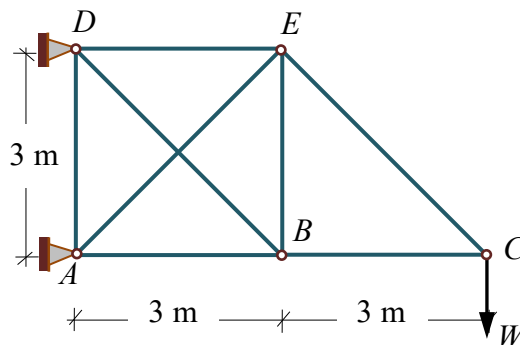


Figure 2

