

King Fahd University of Petroleum & Minerals
DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING
CE 203 STRUCTURAL MECHANICS I (Section 2)
Second Semester 1435 / 2014 (132)

Name: _____
ID #: _____

Quiz # 2

Score
10

Rewrite the solution of the problem below from the HW that you just did (without looking at your solution).

The wood specimen is subjected to the pull of 10 kN in a tension testing machine. If the allowable normal stress for the wood is $(\sigma_t)_{\text{allow}} = 12 \text{ MPa}$ and the allowable shear stress is $\tau_{\text{allow}} = 1.2 \text{ MPa}$, determine the required dimensions b and t so that the specimen reaches these stresses simultaneously. The specimen has a width of 25 mm.

