



Princess Sumaya University for Technology
Computer Engineering Dept.

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22342 Computer Organization & Assembly Language

Sun 25 Mar 2012

Quiz 2 (5 Minutes)

Student Name: .

ID:

Student Serial Number (1 – 34):

Question: A programmer decided to use unsigned binary integers to save the “Exam Grade” and signed binary integer to save “Temperature”. The CPU stored the grade in register R1 and the temperature in register R2.
(2 Points)

Determine the decimal values of R1 and R2 given their binary contents are:

R1

1	0	0	1
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 ← Exam Grade

R2

1	0	0	1
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 ← Temperature

Solution:

$$R_1 \Rightarrow 1001 = 9 \quad \checkmark$$

$$R_2 \Rightarrow \begin{array}{r} 1001 \\ 0111 \end{array} = -7 \quad \checkmark$$

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