Course Name:	Computer Architecture	Course Code:	EE204
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Exam Type:	Quiz 1f	Page(s):	2

Student : Name:_____ Roll No._____ Section:_____

Question 1a [2]

1. **In I-type instruction function field is represented by bit numbers _____.**
2. **In R-type instruction Destination field is represented by bit numbers _____.**

Question 1b [8]

Convert the following numbers to binary scientific notation then multiply the resulting values. The answer will be normalized and then its 32-bit IEEE 754 floating point representation will be provided as answer.

a. **13.1875**
b. **4.5**

Question 2 [10]

Given the following values

A = $(75)_{10}$ B = $(6)_{10}$

a) Draw the circuit diagram of a 4-bit divider circuit. (Optimized version of the Divider)

b) Use your circuit in part (a) to compute A / B. Show the binary values of all the registers at every step.

Iteration	Step	Dividend→Remainder/ Quotient	Divider
0	Initial values	0100 1011	0110
1			
2			
3			
4			
5			