

Digital Design

COE 211

Sheet - 01

1. Convert the following decimal numbers to binary form

$(12)_{10}$	$(25)_{10}$	$(58)_{10}$
$(82)_{10}$	$(23)_{10}$	$(45)_{10}$

2. Add the following binary number

$11+11$	$100+10$	$111+11$
$10 + 100$	$10001 + 01111$	$10101 + 0010$

3. Perform the following binary multiplication

1×11	11×11	101×111
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4. How many bits are required to represent the following decimal number?

17	49	345
35	132	114

5. Generate the binary sequence for each decimal sequence

0 through 7	19 through 40	101 through 120
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