**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Department of Computer Science and Engineering**

**CSE340: Computer Architecture   
Spring 2015**

**Quiz-1**

**Full Marks:15 Time: 20 Mins**

1. Design a logic circuit that has four inputs and one output. Output will be HIGH (1) when majority of the inputs are High (1). **15**

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**Department of Computer Science and Engineering**

**CSE340: Computer Architecture   
Spring 2015**

**Quiz-1**

**Full Marks:15 Time: 20 Mins**

1. Design a ripple adder and explain its limitations. Design another adder that overcomes the limitations of a ripple adder.  **15**

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**Department of Computer Science and Engineering**

**CSE340: Computer Architecture   
Spring 2015**

**Quiz-1**

**Full Marks:15 Time: 20 Mins**

1. Why do you need a D-flip flop? Explain with an example. Design a shift register using D flip flop. **15**