## 19 Lecture - CS302

## Important Mcqs

1. What is the purpose of a demultiplexer?
2. a) To route one input to several outputs b) To route several inputs to one output c) To combine multiple signals into one output d) None of the above

Solution: a
2. How many control lines are required for a 4-to-1 demultiplexer? a) 1 b) 2 c) 3 d) 4

## Solution: b

3. Which logic gate is commonly used to implement a demultiplexer? a) AND gate b) OR gate c) NOT gate d) XOR gate

## Solution: a

4. What is the output of a demultiplexer when all control lines are low? a) All outputs are low b) All outputs are high c) One output is high and the rest are low d) None of the above

## Solution: a

5. Which demultiplexer is commonly used for decoding address lines in memory devices? a) 1-to-2 demultiplexer b) 2-to-4 demultiplexer c) 3-to-8 demultiplexer d) 4-to-16 demultiplexer

Solution: c
6. Which demultiplexer is equivalent to two 2-to-1 demultiplexers? a) 1-to-2 demultiplexer b) 2-to-4 demultiplexer c) 3-to-8 demultiplexer d) 4-to-16 demultiplexer

Solution: b
7. What is the function of the enable input in a demultiplexer? a) To select which output to route the input to b) To enable or disable the demultiplexer c) To control the polarity of the output signals d) None of the above

Solution: b
8. Which demultiplexer is commonly used for separating the color signals in a video signal? a) 1-to-2 demultiplexer b) 2-to-4 demultiplexer c) 3-to-8 demultiplexer d) 4-to-16 demultiplexer

## Solution: a

9. What is the difference between a demultiplexer and a decoder? a) A decoder has multiple inputs and one output, while a demultiplexer has one input and multiple outputs b) A decoder is used for data compression, while a demultiplexer is used for data expansion c) A decoder outputs binary codes, while a demultiplexer outputs analog signals d) There is no difference between a demultiplexer and a decoder

## Solution: a

10. Which demultiplexer is commonly used for splitting a serial data stream into parallel data streams?
a) 1-to-2 demultiplexer b) 2-to-4 demultiplexer c) 3-to-8 demultiplexer d) 4-to-16 demultiplexer

## Solution: a

