17 Lecture - CS302

Important Mcqs

1. **What is the function of the 74xx138 decoder?**
   A) Converts 8-bit code to 3-bit output
   B) Converts 3-bit code to 8-bit output
   C) Converts 2-bit code to 4-bit output
   D) Converts 4-bit code to 2-bit output

Answer: B) Converts 3-bit code to 8-bit output

2. **How many inputs does the 74xx138 decoder have?**
   A) 1
   B) 2
   C) 3
   D) 4

Answer: C) 3

3. **How many outputs does the 74xx138 decoder have?**
   A) 4
   B) 6
   C) 8
   D) 10

Answer: C) 8

4. **What is the maximum number of inputs that can be decoded by the 74xx138 decoder?**
   A) 4
   B) 6
   C) 8
   D) 10

Answer: C) 8

5. **What is the active output for the input code 001 in the 74xx138 decoder?**
   A) Y0
   B) Y1
   C) Y2
   D) Y3

Answer: D) Y3

6. **What is the active output for the input code 111 in the 74xx138 decoder?**
   A) Y0

B) Y1
C) Y6
D) Y7

Answer: D) Y7

7. **What is the function of the enable input in the 74xx138 decoder?**
   A) To enable the decoder to function
   B) To disable the decoder
   C) To select the input code
   D) To select the output

Answer: B) To disable the decoder

8. **What is the function of the active-low output in the 74xx138 decoder?**
   A) Inverts the output signal
   B) Disables the output signal
   C) Enables the output signal
   D) None of the above

Answer: A) Inverts the output signal

9. **What is the maximum number of output lines that can be enabled in the 74xx138 decoder?**
   A) 1
   B) 2
   C) 3
   D) 8

Answer: C) 3

10. **What is the function of the address decoder in a digital circuit?**
    A) Converts binary codes to analog signals
    B) Converts analog signals to digital codes
    C) Decodes memory addresses to select a specific memory location
    D) None of the above

Answer: C) Decodes memory addresses to select a specific memory location