

# 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