- 1. Which of the following interfacing chips is commonly used for I/O operations in microprocessor systems?
- a) 8155
- b) 8255
- c) ADC
- d) DAC

Answer: b) 8255

Explanation: The 8255 chip is commonly used for interfacing I/O devices with microprocessor systems. It provides three ports, each of which can be individually programmed as input or output.

- 2. Which interfacing chip is used for connecting keyboards and displays in microprocessor-based systems?
- a) ADC
- b) DAC
- c) 8155
- d) 8255

Answer: c) 8155

Explanation: The 8155 chip is commonly used for keyboard and display interfacing in microprocessor systems. It provides I/O ports along with timer/counter functionality.

- 3. What is the primary function of an ADC interfacing chip in a microprocessor system?
- a) Digital to Analog Conversion
- b) Analog to Digital Conversion
- c) Keyboard interfacing

## d) Memory interfacing

Answer: b) Analog to Digital Conversion

Explanation: ADC (Analog to Digital Converter) interfacing chips are used to convert analog signals from sensors or other devices into digital data that can be processed by the microprocessor.

- 4. Which of the following chips is used for interfacing LEDs in microprocessor systems?
- a) 8255
- b) DAC
- c) ADC
- d) 8155

Answer: a) 8255

Explanation: The 8255 chip can be used for interfacing LEDs in microprocessor systems by configuring its ports as outputs and driving the LEDs accordingly.

- 5. Which interfacing chip is primarily used for converting digital signals to analog voltages?
- a) ADC
- b) 8255
- c) DAC
- d) 8155

Answer: c) DAC

Explanation: DAC (Digital to Analog Converter) chips are used to convert digital signals from the microprocessor into corresponding analog voltages or currents.

6. In a microprocessor system, which chip is responsible for interfacing memory modules with

the CPU?

- a) ADC
- b) DAC
- c) 8155
- d) 8255

Answer: d) 8255

Explanation: The 8255 chip is not used for memory interfacing. Instead, memory interfacing is typically handled by specialized memory interfacing chips or directly by the microprocessor itself through its address and data buses.

- 7. What is the primary purpose of interfacing a keyboard with a microprocessor system?
- a) Input data from the keyboard to the microprocessor
- b) Output data from the microprocessor to the keyboard
- c) Convert analog signals to digital signals
- d) Convert digital signals to analog signals

Answer: a) Input data from the keyboard to the microprocessor

Explanation: Interfacing a keyboard with a microprocessor system allows users to input data or commands that can be processed by the microprocessor.

- 8. Which chip is commonly used for expanding the I/O capabilities of a microprocessor system?
- a) ADC
- b) DAC
- c) 8155
- d) 8255

Answer: c) 8155

Explanation: The 8155 chip is commonly used for expanding the I/O capabilities of a microprocessor system by providing additional input/output ports.

- 9. What type of data does an ADC chip convert into digital form?
- a) Analog
- b) Digital
- c) Binary
- d) Hexadecimal

Answer: a) Analog

Explanation: ADC chips convert analog data, such as voltage or current levels, into digital form that can be processed by the microprocessor.

- 10. Which chip is primarily responsible for controlling the flow of data between the microprocessor and external devices?
- a) ADC
- b) DAC
- c) 8255
- d) 8155

Answer: c) 8255

Explanation: The 8255 chip is primarily responsible for controlling the flow of data between the microprocessor and external devices by providing I/O ports that can be programmed for input or output operations.