1. Which component of the 8085A processor is responsible for executing arithmetic and logical operations?
a) CPU
b) ALU
c) Memory
d) Assembler

Answer: b) ALU
Explanation: ALU (Arithmetic Logic Unit) is the component responsible for executing arithmetic and logical operations within the CPU (Central Processing Unit).

2. What is the function of the Fetch cycle in the 8085A processor architecture?
a) Retrieve data from memory
b) Execute instructions
c) Decode instructions
d) Store results

Answer: a) Retrieve data from memory
Explanation: During the Fetch cycle, the processor retrieves the next instruction or data from memory in order to execute it.

3. In microprocessor terminology, what does ALU stand for?
a) Arithmetic Logic Unit
b) Assembly Language Unit
c) Address Location Unit
d) Advanced Learning Unit

Answer: a) Arithmetic Logic Unit
Explanation: ALU stands for Arithmetic Logic Unit, which performs arithmetic and logical operations on data.

4. What is the purpose of an interrupt in microprocessor architecture?
a) To stop the processor
b) To enhance memory access speed
c) To temporarily suspend the main program
d) To increase ALU efficiency

Answer: c) To temporarily suspend the main program
Explanation: Interrupts temporarily suspend the execution of the main program to handle specific events or tasks.

5. Which term refers to the temporary storage units within the CPU in the 8085A architecture?
a) Cache
b) Registers
c) RAM
d) ROM

Answer: b) Registers
Explanation: Registers are small, fast storage locations within the CPU used for temporary data storage and manipulation.

6. What distinguishes a microcontroller from a microprocessor?
a) Microcontrollers have a smaller memory capacity

b) Microcontrollers have integrated peripherals
c) Microcontrollers lack an ALU
d) Microcontrollers are slower

Answer: b) Microcontrollers have integrated peripherals
Explanation: Microcontrollers integrate peripherals like timers, ADCs, and communication interfaces on a single chip, whereas microprocessors require external components for such functionalities.

7. What is the primary function of an assembler in microprocessor programming?
a) Execute instructions
b) Convert assembly language code into machine code
c) Store data
d) Control interrupts

Answer: b) Convert assembly language code into machine code
Explanation: An assembler translates assembly language instructions into machine code that the processor can execute.

8. Which term describes the process of writing data to memory in microprocessor operation?
a) Fetch cycle
b) Decode cycle
c) Write cycle
d) Execute cycle

Answer: c) Write cycle
Explanation: The write cycle involves writing data to memory, typically after processing or

manipulation.

9. What is the primary purpose of control requirements in microcontrollers?
a) To manage power consumption
b) To regulate clock speed
c) To control peripheral devices
d) To handle interrupts

Answer: c) To control peripheral devices
Explanation: Control requirements in microcontrollers involve managing and controlling peripheral devices connected to the microcontroller.

10. How are microcontrollers classified based on their architecture?
a) By clock speed
b) By memory capacity
c) By instruction set
d) By integrated peripherals

Answer: d) By integrated peripherals
Explanation: Microcontrollers can be classified based on the peripherals they integrate, such as ADCs, timers, and communication interfaces.

Related posts:

1. Steam generators and boilers MCQs
2. Vapour Cycles MCQs
3. Gas Dynamics MCQs
4. Air Compressors MCQs

5. Nozzles and Condensers MCQs
6. Introduction to stress in machine component MCQs
7. Shafts MCQS
8. Springs MCQs
9. Brakes & Clutches MCQs
10. Journal Bearing MCQs
11. Energy transfer in turbo machines MCQs
12. Steam turbines MCQs
13. Water turbines MCQs
14. Rotary Fans, Blowers and Compressors MCQs
15. Power transmitting turbo machines MCQs
16. Energy transfer in turbo machines MCQs
17. Steam turbines MCQs
18. Water turbines MCQS
19. Rotary Fans, Blowers and Compressors MCQs
20. Power transmitting turbo machines MCQs
21. Introduction to Computer Engineering MCQs
22. Types of Analysis MCQS
23. Heat Transfer and Conduction MCQs
24. Extended Surfaces (fins) MCQs
25. Convection MCQs
26. Thermal and Mass Transfer MCQs
27. Thermal Radiation & Boiling/Condensation MCQs
28. Mechanical processes MCQs
29. Electrochemical and chemical metal removal processes MCQs
30. Thermal metal removal processes MCQs
31. Rapid prototyping fabrication methods MCQs

32. Technologies of micro fabrication MCQs
33. Power Plant Engineering MCQs
34. Fossil fuel steam stations MCQs
35. Nuclear Power Station MCQs
36. Hydro-Power Station MCQs
37. Power Station Economics MCQs
38. Design of Belt, Rope and Chain Drives MCQS
39. Spur and Helical Gears MCQs
40. Bevel Gears MCQs
41. Design of I.C. Engine Components MCQs
42. Linear system and distribution models MCQs
43. Supply chain (SCM) MCQs
44. Inventory models MCQs
45. Queueing Theory & Game Theory MCQs
46. Project Management & Meta-heuristics MCQs
47. Overview of Systems Engineering MCQS
48. Structure of Complex Systems MCQs
49. Concept Development and Exploration MCQs
50. Engineering Development MCQs
51. Basic Concepts & Laws of Thermodynamics MCQs
52. Properties of Steam MCQs
53. Air standard cycles MCQS
54. Fuels & combustion MCQs
55. Materials Science MCQs
56. Alloys and Materials MCQs
57. Metal Heat Treatment MCQs
58. Material Testing and Properties MCQs

59. Chemical Analysis of Metal Alloys MCQs
60. Stress and strain MCQs
61. Bending MCQs
62. Torsion in shafts MCQs
63. Theories of failures MCQs
64. Columns & struts MCQs
65. Manufacturing Process MCQs