

PREVIEW QUESTION BANK

Module Name : ntr24-ed02 PLC and Microcontroller -Instruction Medium- Hindi-ENG
Exam Date : 18-May-2024 Batch : 15:00-18:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	15732001	<p>Which of the following statements is true regarding microcontrollers?</p> <ol style="list-style-type: none"> 1. They only consist of a CPU 2. They are designed for general-purpose computing 3. They integrate a CPU, memory, and peripherals on a single chip 4. They lack input and output capabilities <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
Objective Question				
2	15732002	<p>What is the primary advantage of using a microcontroller over a microprocessor in certain applications?</p> <ol style="list-style-type: none"> 1. Higher processing speed 2. Lower cost and reduced complexity 3. Larger memory capacity 4. Better multitasking capabilities <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
Objective Question				
3	15732003	<p>What is the major difference between the 8051 and 8052 microcontrollers?</p> <ol style="list-style-type: none"> 1. Clock frequency 2. Memory size 3. Number of I/O ports 4. Instruction set <p>A1 : 1</p> <p>A2 : 2</p>	2.0	0.00

A3 : 3

A4 : 4

Objective Question

4	15732004	<p>The 8051 microcontroller has _____ interrupt sources?</p> <p>1. 4 2. 8 3. 6 4. 2</p> <p>A1 : 1 A2 : 2 A3 : 3 A4 : 4</p>	2.0	0.00
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Objective Question

5	15732005	<p>Which option is correct in the size of ROM of the microcontroller family?</p> <p>1. 8051-4k, 8052-8k, 8031-0k 2. 8051-8k, 8052-0k, 8031-4k 3. 8051-16k, 8052-8k, 8031-4k 4. 8051-16k, 8052-8k, 8031-0k</p> <p>A1 : 1 A2 : 2 A3 : 3 A4 : 4</p>	2.0	0.00
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Objective Question

6	15732006	<p>Which block in the 8051 microcontroller's block diagram is responsible for handling external interrupts?</p> <p>1. Timer/Counter 2. Control Unit 3. Interrupt Control 4. ALU</p> <p>A1 : 1 A2 : 2 A3 : 3</p>	2.0	0.00
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A4 : 4

Objective Question

7	15732007	<p>Which block in the 8051 microcontroller is responsible for generating the RST (Reset) signal?</p> <ol style="list-style-type: none"> 1. Oscillator 2. Control Unit 3. Power Supply 4. Timer/Counter 	2.0	0.00
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

8	15732008	<p>Which of the following is considered the first microcontroller ever developed?</p> <ol style="list-style-type: none"> 1. Intel 8080 2. Motorola 6800 3. Intel 4004 4. Zilog Z80 	2.0	0.00
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

9	15732009	<p>8051 microcontrollers are manufactured by which of the following companies?</p> <ol style="list-style-type: none"> 1. Atmel 2. Philips 3. Intel 4. Option 1,2 and 3 	2.0	0.00
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

10	15732010	<p>Which of the following is an example of embedded memory controller?</p> <ol style="list-style-type: none">1. Intel 8031 microcontroller2. Intel 8051 microcontroller3. Intel 8081 microcontroller4. Intel 8085 microcontroller <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

11	15732011	<p>The 8051 has _____ parallel I/O ports?</p> <ol style="list-style-type: none">1. 22. 33. 44. 5 <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

12	15732012	<p>Port pin P3.4 on the 8051 has an additional use that is?</p> <ol style="list-style-type: none">1. Timer 02. Timer 13. interrupt 04. interrupt 1 <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

13	15732013	<p>PSEN stands for_____?</p> <ol style="list-style-type: none"> 1. Program Select Enable 2. Peripheral Store Enable 3. Program Store Enable 4. Peripheral Select Enable <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

14	15732014	<p>EA stands for_____?</p> <ol style="list-style-type: none"> 1. External Access 2. Enable Access 3. Electronic Able 4. External Able <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

15	15732015	<p>Does an 8051 microcontroller need external oscillator to run?</p> <ol style="list-style-type: none"> 1. True 2. False 3. Partially True 4. Partially False <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

16	15732016		2.0	0.00
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Which of the following is NOT a part of the 8051 microcontroller's I/O ports?

1. P0
2. P4
3. P1
4. P3

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

17 15732017

Port pin P1.7 on the 8051 has an additional use that is?

1. RXD
2. RD
3. T0
4. No alternate function

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

18 15732018

ALE stands for _____?

1. Arithmetic Logic Enable
2. Arithmetic Latch Enable
3. Address Latch Enable
4. Address Logic Enable

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

19 15732019

2.0 0.00

		<p>Which 8051 port needs pull-up resistors to function as an I/O port?</p> <ol style="list-style-type: none"> 1. Port 2 2. Port 1 3. Port 0 4. Port 4 <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>		
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Objective Question

20	15732020	<p>Number of pins in 8051 microcontroller with ____ package?</p> <ol style="list-style-type: none"> 1. 40 pins with DIP 2. 60 pins with LLC 3. 40 pins with LLC 4. 60 pins with DIP <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

21	15732021	<p>Which part of the 8051 microcontroller is responsible for storing immediate data and intermediate results during arithmetic operations?</p> <ol style="list-style-type: none"> 1. Stack Pointer (SP) 2. Accumulator (ACC) 3. Data Pointer (DPTR) 4. Register Bank <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

22	15732022		2.0	0.00
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The 8051 microcontroller features a bit-addressable area in which RAM location?

1. 00H
2. 20H
3. 80H
4. FFH

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

23 15732023

The 8051 microcontroller has ____K bytes of code space?

1. 8
2. 16
3. 32
4. 64

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

24 15732024

Does the code space can be used for data, but the external data space cannot be used for code?

1. True
2. False
3. Partially True
4. Partially False

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

25 15732025

2.0 0.00

The 8051 has _____ K bytes of external space?

1. 64
2. 32
3. 16
4. 8

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

26 15732026

The bit data type is used only for ____ single bit addressable locations?

1. ROM
2. RAM
3. SFR
4. Sbit

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

27 15732027

The 8051 microcontroller has _____ bytes of data RAM?

1. 64
2. 32
3. 8
4. 128

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

28 15732028

2.0 0.00

Which library is used in 8051 microcontroller programming?

1. reg51.h
2. stdio.h
3. Option 1 and 2
4. No library is used

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

29	15732029	<p>The magnitude of signed char is___?</p> <ol style="list-style-type: none"> 1. 0 to 255 2. 0 to 65535 3. -128 to 127 4. 0 to 450 <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

30	15732030	<p>Does the crystal frequency of 8051 system affects the delay size?</p> <ol style="list-style-type: none"> 1. True 2. False 3. Partially True 4. Partially False <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

31	15732031		2.0	0.00
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Which bit is used to start and stop Timer 1 in the 8051?

1. TR0
2. TR1
3. TF0
4. TF1

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

32 15732032

What is the default mode of operation for the 8051 timers on power-up or reset?

1. Mode 0
2. Mode 1
3. Mode 2
4. Mode 3

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

33 15732033

What is the purpose of the GATE bit in TMOD for the 8051 timers?

1. It enables the timer
2. It selects the operating mode
3. It controls external gating
4. It is used to clear the timer flag

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

34 15732034

2.0 0.00

In the 8051, what is the function of the TF1 bit in the TCON register?

1. Timer 1 overflow flag
2. Timer 0 overflow flag
3. Timer 2 overflow flag
4. Timer flag for external interrupt 1 (INT1)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

35	15732035	<p>Which of the following is not a timer mode in the 8051?</p> <ol style="list-style-type: none"> 1. Timer/Counter Mode 0 2. Timer/Counter Mode 1 3. Timer/Counter Mode 2 4. Timer/Counter Mode 3 <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

36	15732036	<p>Which register is used to control the interrupt system in the 8051 microcontroller?</p> <ol style="list-style-type: none"> 1. TCON 2. IE 3. IP 4. PCON <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

37	15732037		2.0	0.00
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What is the clock source for the timers?

1. some external crystal applied to the micro-controller for executing the timer
2. from the crystal applied to the micro-controller
3. through the software
4. Through programming

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

38 15732038

What is the function of the TMOD register?

1. TMOD register is used to set various operation modes of timer/counter
2. TMOD register is used to load the count of the timer
3. Is the destination or the final register where the result is obtained after the operation of the timer
4. Is used to interrupt the timer

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

39 15732039

What steps are followed when we need to turn on any timer?

1. Load the count, start the timer, keep monitoring it, stop the time
2. Load the TMOD register, load the count, start the timer, keep monitoring it, stop the time
3. Load the TMOD register, start the timer, load the count, keep monitoring it, stop the time
4. None of the mentioned

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00

Objective Question

40 15732040

2.0 0.00

Auto reload mode is allowed in which mode of the timer?

- 1. Mode 0
- 2. Mode 1
- 3. Mode 2
- 4. Mode 3

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

41 15732041 2.0 0.00

What type of power supply is typically used for a PLC?

- 1. AC
- 2. DC
- 3. Both AC and DC
- 4. Solar

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

42 15732042 2.0 0.00

Which of the following represents a parallel branch in ladder logic?

- 1. |||
- 2. ===
- 3. //
- 4. <<<

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

43 15732043 2.0 0.00

	<p>What is the role of the "RTO" instruction in ladder logic?</p> <ol style="list-style-type: none"> 1. Reset Timer Output 2. Reset Timer On 3. Retain Timer Output 4. Run Timer Output <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>		
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Objective Question

44	15732044	<p>In ladder logic, what does the "XIO" instruction stand for?</p> <ol style="list-style-type: none"> 1. Examine If Open 2. Examine Input Open 3. Execute Input Open 4. Execute If Open <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

45	15732045	<p>What is the purpose of a compare instruction in ladder logic programming?</p> <ol style="list-style-type: none"> 1. To compare two values 2. To count pulses 3. To introduce a time delay 4. To control output devices <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

46	15732046		2.0	0.00
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		<p>programmable logic controllers are used in _____?</p> <ol style="list-style-type: none"> 1. Manufacturing 2. Automation 3. Option 1 and 2 4. None of the mentioned <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>		
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Objective Question

47	15732047	<p>Who invented the Programmable Logic Controller (PLC)?</p> <ol style="list-style-type: none"> 1. Jonas Wenstrom 2. Dick Morley 3. Thomas Davenport 4. None of the mentioned <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

48	15732048	<p>The visual programming language also called as _____?</p> <ol style="list-style-type: none"> 1. Relay logic 2. Ladder logic 3. Controller logic 4. All of the mentioned <p>A1 : 1</p> <p>A2 : 2</p> <p>A3 : 3</p> <p>A4 : 4</p>	2.0	0.00
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Objective Question

49	15732049		2.0	0.00
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The ladder logic in PLC consists of _____ ?

- 1. Logic gates
- 2. Functional blocks
- 3. Relay contacts and coils
- 4. Relays

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

50 15732050

What are the elements of ladder logic?

- 1. Normally open (contact)
- 2. Normally Close (contact)
- 3. Option 1 and 2
- 4. None of the mentioned

A1 : 1

A2 : 2

A3 : 3

A4 : 4

2.0 0.00