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CS302  
Past Papers  
(Paper 1)

Question No : 1 of 52 Marks: 1 (Budgeted Time 1 Min)

The diagram given below represents \_\_\_\_\_



**VuAnswers.com**

Answer ( Please select your correct option )

- Demorgans law
- Associative law
- Product of sum form
- Sum of product form

**correct**      **Made by: Waqar Siddhu**

Question No : 2 of 52 Marks: 1 (Budgeted Time 1 Min)

The decimal "8" is represented as \_\_\_\_\_ using Gray-Code.

**VuAnswers.com**

Answer ( Please select your correct option )

- 0011
- 1100
- 1000
- 1010

**correct**      **Made by: Waqar Siddhu**

Question No : 3 of 52 Marks: 1 (Budgeted Time 1 Min)

The binary numbers A = 1100 and B = 1001 are applied to the inputs of a comparator. What are the output levels?

**VuAnswers.com**

Answer ( Please select your correct option )

- $A > B = 1, A < B = 0, A = B = 1$
- $A > B = 0, A < B = 1, A = B = 0$
- $A > B = 1, A < B = 0, A = B = 0$
- $A > B = 0, A < B = 1, A = B = 1$

**Made by: Waqar Siddhu**

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Question No : 4 of 52 Marks: 1 (Budgeted Time 1 Min)

The simplest of the Encoders are the \_\_\_\_\_ Encoders

VuAnswers.com

- Answer ( Please select your correct option )
- $2^{n-1}$ -to- $n$
  - $n$ -to- $2^n$
  - $2^n$ -to- $n$
  - $n$ -to- $2^{n-1}$
- correct
- Made by: Waqar Siddhu**

Question No : 5 of 52 Marks: 1 (Budgeted Time 1 Min)

Using multiplexer as parallel to serial converter requires \_\_\_\_\_ connected to the multiplexer

VuAnswers.com

- Answer ( Please select your correct option )
- A parallel to serial converter circuit
  - A counter circuit
  - A ABCD to Decimal decoder
  - A 2-to-8 bit decoder
- correct
- Made by: Waqar Siddhu**

Question No : 6 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

VuAnswers.com

- Answer ( Please select your correct option )
- ENP, ENT
  - ENI, ENC
  - ENP, ENC
  - ENT, ENI
- correct
- Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)  
Given the state diagram of an up/down counter, we can find \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- correct**
- Made by: Waqar Siddhu**

Question No : 8 of 52 Marks: 1 (Budgeted Time 1 Min)  
A 4-bit parallel in / serial out shift register contains the value "0100", \_\_\_\_\_ clock signal(s) will be required to shift the value completely out of the register (i.e. to set the register to 0).

**VuAnswers.com**

- Answer ( Please select your correct option )
- 1
  - 2
  - 3
  - 4
- correct**
- Made by: Waqar Siddhu**

Question No : 9 of 52 Marks: 1 (Budgeted Time 1 Min)  
 $(A + B)(A + \bar{B} + C)(\bar{A} + C)$  is an example of \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- Product of sum form
  - Sum of product form
  - Demorgans law
  - Associative law
- correct**
- Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers
  - Represent positive numbers
- Made by: Waqar Siddhu**

Question No : 11 of 52 Marks: 1 (Budgeted Time 1 Min)

$1011 - 101 =$  \_\_\_\_\_

Note: both values are in binary

**VuAnswers.com**

- Answer ( Please select your correct option )
- 1100
  - 0110
  - 0011
  - 1001
- Made by: Waqar Siddhu**

Question No : 12 of 52 Marks: 1 (Budgeted Time 1 Min)

At  $J = 1$ , and  $K = 1$ , output of JK Flip-flop will be \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- Set
  - Reset
  - Toggle
  - Invalid
- Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers
  - Represent positive numbers
- correct**
- Made by: Waqar Siddhu**

Question No : 14 of 52 Marks: 1 (Budgeted Time 1 Min)

Using 15 digits (including the sign digit) notation the largest number that can be represented is \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- $999,999,999,999 \times 10^{100}$
  - $0.999,999,999,999 \times 10^{100}$
  - $999,999,999,999 \times 10^{99}$
  - $0.999,999,999,999 \times 10^{99}$
- correct**
- Made by: Waqar Siddhu**

Question No : 15 of 52 Marks: 1 (Budgeted Time 1 Min)

The \_\_\_\_\_ output of first 74HC163 counter is connected to \_\_\_\_\_ and \_\_\_\_\_ inputs of other 74HC163 counter to form a single cascaded counter

Answer ( Please select your correct option ) **VuAnswers.com**

- RCO, ENT, ENP
  - ENT, RCO, ENP
  - ENP, RCO, ENT
  - RCO, ENI, ENC
- correct**
- Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers correct
  - Represent positive numbers
- Made by: Waqar Siddhu**

Question No : 17 of 52 Marks: 1 (Budgeted Time 1 Min)

The best state assignment tends to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Maximizes the number of state variables that don't change in a group of related states correct
  - Minimizes the number of state variables that don't change in a group of related states
  - Minimizes the equivalent states
  - Maximizes the equivalent states
- Made by: Waqar Siddhu**

Question No : 18 of 52 Marks: 1 (Budgeted Time 1 Min)

In \_\_\_\_\_, the  $\bar{Q}$  output of the last flip-flop of the shift register is connected to the data input of the first flip-flop.

Answer ( Please select your correct option ) **VuAnswers.com**

- Moore machine
  - Mealy machine
  - Johnson counter correct
  - Ring counter
- Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers
  - Represent positive numbers
- correct**
- Made by: Waqar Siddhu**

Question No : 20 of 52 Marks: 1 (Budgeted Time 1 Min)

Flip flops are also called \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- Bi-stable dualvibrators
  - Bi-stable transformer
  - Bi-stable multivibrators
  - Bi-stable singlevibrators
- correct**
- Made by: Waqar Siddhu**

Question No : 21 of 52 Marks: 1 (Budgeted Time 1 Min)

If  $S=1$  and  $R=0$ , then  $Q(t+1) =$  \_\_\_\_\_ for positive edge triggered flip-flop

**VuAnswers.com**

- Answer ( Please select your correct option )
- 0
  - 1
  - Invalid
  - Input is invalid
- correct**
- Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers
  - Represent positive numbers
- Made by: Waqar Siddhu**

Question No : 23 of 52 Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ Flip-flops are obsolete now.

**VuAnswers.com**

- Answer ( Please select your correct option )
- Edge-triggered
  - Master-Slave
  - T-Flip-flop
  - D-Flip-flop
- Made by: Waqar Siddhu**

Question No : 24 of 52 Marks: 1 (Budgeted Time 1 Min)

Bi-stable devices remain in either of their \_\_\_\_\_ states unless the inputs force the device to switch its state.

**VuAnswers.com**

- Answer ( Please select your correct option )
- Ten
  - Eight
  - Three
  - Two
- Made by: Waqar Siddhu**



Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers correct
  - Represent positive numbers
- Made by: Waqar Siddhu**

Question No : 26 of 52 Marks: 1 (Budgeted Time 1 Min)

RCO Stands for \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Reconfiguration Counter Output
  - Reconfiguration Clock Output
  - Ripple Counter Output
  - Ripple Clock Output correct
- Made by: Waqar Siddhu**

Question No : 27 of 52 Marks: 1 (Budgeted Time 1 Min)

The Sequential circuit, whose output is determined by the current state only is known as \_\_\_\_\_.

Answer ( Please select your correct option ) **VuAnswers.com**

- Moore Machine correct
  - Mealy Machine
  - Counter
  - Flip Flop
- Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers correct
  - Represent positive numbers
- Made by: Waqar Siddhu**

Question No : 29 of 52 Marks: 1 (Budgeted Time 1 Min)

The output of this circuit is always \_\_\_\_\_



Answer ( Please select your correct option ) **VuAnswers.com**

- 1 correct
  - 0
  - A
  - $\bar{A}$
- Made by: Waqar Siddhu**

Question No : 30 of 52 Marks: 1 (Budgeted Time 1 Min)

Which is not characteristic of a shift register?

Answer ( Please select your correct option ) **VuAnswers.com**

- Serial in/parallel in correct
  - Serial in/parallel out
  - Parallel in/serial out
  - Parallel in/parallel out
- Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers correct
  - Represent positive numbers
- Made by: Waqar Siddhu**

Question No : 32 of 52 Marks: 1 (Budgeted Time 1 Min)

Smallest unit of binary data is a \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Bit correct
  - Nibble
  - Byte
  - Word
- Made by: Waqar Siddhu**

Question No : 33 of 52 Marks: 1 (Budgeted Time 1 Min)

The \_\_\_\_\_ of a ROM is the time it takes for the data to appear at the Data Output of the ROM chip after an address is applied at the address input lines

Answer ( Please select your correct option ) **VuAnswers.com**

- Write Time
  - Refresh Time
  - Refresh Time
  - Access Time correct
- Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers correct
  - Represent positive numbers
- Made by: Waqar Siddhu**

Question No : 35 of 52 Marks: 1 (Budgeted Time 1 Min)

FIFO is an acronym for \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- First In, First Out correct
  - Fly in, Fly Out
  - Fast in, Fast Out
  - None of given options
- Made by: Waqar Siddhu**

Question No : 36 of 52 Marks: 1 (Budgeted Time 1 Min)

If the FIFO Memory output is already filled with data then \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- It is locked, no data is allowed to enter
  - It is not locked, the new data overwrites the previous data.
  - Previous data is swapped out of memory and new data enters correct
  - None of given options
- Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers correct
  - Represent positive numbers
- Made by: Waqar Siddhu**

Question No : 38 of 52 Marks: 1 (Budgeted Time 1 Min)

A flash A/D converter uses :

Answer ( Please select your correct option ) **VuAnswers.com**

- Counters correct not sure
  - Flip-flops
  - Op-amps
  - An integrator
- Made by: Waqar Siddhu**

Question No : 39 of 52 Marks: 1 (Budgeted Time 1 Min)

LUT is an acronym for \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Look Up Table correct
  - Local User Terminal
  - Least Upper Time Period
  - None of given options
- Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers
  - Represent positive numbers
- correct**
- Made by: Waqar Siddhu**

Question No : 41 of 52 Marks: 2 (Budgeted Time 4 Min)

Divide binary number "1101" by binary number "101", write down all the steps.

Answer ( Please click here to Add Answer ) **VuAnswers.com**

**Made by: Waqar Siddhu**

Question No : 42 of 52 Marks: 2 (Budgeted Time 4 Min)

Name the single change which can be made to convert a combinational circuit to a sequential circuit?

Answer ( Please click here to Add Answer ) **VuAnswers.com**

**Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers
  - Represent positive numbers
- correct**

**Made by: Waqar Siddhu**

Question No : 44 of 52 Marks: 2 (Budgeted Time 4 Min)

What is the function of row and column decoders?

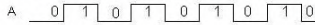
Answer ( Please click here to Add Answer ) **VuAnswers.com**

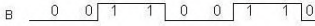
Large memories such as the 16 KB memory have row and column decoders that split the input address into a row address and a column address and activate a row and column select lines respectively.

**Made by: Waqar Siddhu**

Question No : 45 of 52 Marks: 3 (Budgeted Time 6 Min)

Following two waves are applied at 2-input AND gate, Draw the output waveform of this gate.

A 

B 

Answer ( Please click here to Add Answer ) **VuAnswers.com**

Blank area for drawing the output waveform.

**Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers
  - Represent positive numbers
- correct**
- Made by: Waqar Siddhu**

Question No : 47 of 52 Marks: 3 (Budgeted Time 6 Min)

Write down three characteristics of serial in / serial out 4-bit left shift register.

Answer ( Please [click here to Add Answer](#) ) **VuAnswers.com**

**Made by: Waqar Siddhu**

Question No : 48 of 52 Marks: 3 (Budgeted Time 6 Min)

Draw the circuit diagram of operational amplifier used as an inverting amplifier.

Answer ( Please [click here to Add Answer](#) ) **VuAnswers.com**

**Made by: Waqar Siddhu**



Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers correct
  - Represent positive numbers
- Made by: Waqar Siddhu**

Question No : 50 of 52 Marks: 5 (Budgeted Time 10 Min)

Draw the next-state table of a 3-bit Up Counter.

Answer ( Please click here to Add Answer ) **VuAnswers.com**

Normal Arial 12 B I U

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**Made by: Waqar Siddhu**

Question No : 10 of 52 Marks: 1 (Budgeted Time 1 Min)

The 2's complement method is used to \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- Convert binary numbers to decimal
  - Convert decimal numbers to binary
  - Represent signed numbers
  - Represent positive numbers
- correct**
- Made by: Waqar Siddhu**

Question No : 52 of 52 Marks: 5 (Budgeted Time 10 Min)

Analog to Digital converters exhibit different types of errors during their conversion operation. Explain at least two.

Answer ( Please click here to Add Answer ) VuAnswers.com

Normal Arial 12 B I U

**Made by: Waqar Siddhu**

## (Paper 2)

Question No : 1 of 52	Marks: 1 (Budgeted Time 1 Min)
Caveman number system is Base _____ number system	
VuAnswers.com	
<input type="radio"/> 2	correct
<input type="radio"/> 5	
<input type="radio"/> 10	
<input type="radio"/> 16	
Made by: Waqar Siddhu	
Question No : 2 of 52	Marks: 1 (Budgeted Time 1 Min)
If two numbers in BCD representation generate an invalid BCD number then the binary _____ is added to the result	
VuAnswers.com	
<input type="radio"/> 1001	correct
<input type="radio"/> 0110	
<input type="radio"/> 1111	
<input type="radio"/> 1100	
Made by: Waqar Siddhu	
Question No : 3 of 52	Marks: 1 (Budgeted Time 1 Min)
The Gray code is different from the unsigned binary code because _____	
VuAnswers.com	
<input type="radio"/> Successive values of Gray code differ by only one bit	correct
<input type="radio"/> Gray Code is positional code	
<input type="radio"/> Gray Code does not support negative values	
<input type="radio"/> Gray Code ranges from "0" to "9"	
Made by: Waqar Siddhu	

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Question No : 4 of 52 Marks: 1 (Budgeted Time 1 Min)

"74ALS" stands for \_\_\_\_\_

**VuAnswers.com**

Answer ( Please select your correct option )

Advanced Low-frequency Schottky TTL

Advanced Low-dissipation Schottky TTL

Advanced Low-Power Schottky TTL

Advanced Low-propagation Schottky TTL

**correct**

**Made by: Waqar Siddhu**

Question No : 5 of 52 Marks: 1 (Budgeted Time 1 Min)

The 3-variable Karnaugh Map (K-Map) has \_\_\_\_\_ cells for min or max terms

**VuAnswers.com**

Answer ( Please select your correct option )

4

8

12

16

**correct**

**Made by: Waqar Siddhu**

Question No : 6 of 52 Marks: 1 (Budgeted Time 1 Min)

The cell marked 6 in 4-variable K-Map represent minterm 6 or the maxterm 6 having the following binary value of variables A, B, C and D.

**VuAnswers.com**

Answer ( Please select your correct option )

A=1, B=1, C=0, D=0

A=0, B=1, C=1, D=0

A=0, B=0, C=1, D=1

A=1, B=0, C=0, D=1

**correct**

**Made by: Waqar Siddhu**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 8 of 52

Marks: 1 (Budgeted Time 1 Min)

In a sequential circuit the next state is determined by \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

State variable, current state

Current state, Flip-Flop output

Current state and external input

correct

Input and clock signal applied

Made by: Waqar Siddhu

Question No : 9 of 52

Marks: 1 (Budgeted Time 1 Min)

In CMOS 5 Volt series, Input voltage for Logic high signal ( $V_{IH}$ ) is in the range of \_\_\_\_\_ volts.

Answer ( Please select your correct option )

VuAnswers.com

3.5 to 5

correct

4.5 to 5

0 to 5

0 to 3.5

Made by: Waqar Siddhu

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Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 11 of 52

Marks: 1 (Budgeted Time 1 Min)

A feature that distinguishes JK flip-flop from SR flip-flop is \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Toggle condition

correct

Preset input

Type of clock

Clear input

Made by: Waqar Siddhu

Question No : 12 of 52

Marks: 1 (Budgeted Time 1 Min)

Which one of the following expressions is an example of Commutative Law for Multiplication?

Answer ( Please select your correct option )

VuAnswers.com

$AB+C = A+BC$

$A(B+C) = B(A+C)$

$AB=BA$

correct

$A+B=B+A$

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 14 of 52

Marks: 1 (Budgeted Time 1 Min)

The design and implementation of synchronous counters start from \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Truth table

K-map

State table

State diagram

correct

Made by: Waqar Siddhu

Question No : 15 of 52

Marks: 1 (Budgeted Time 1 Min)

In a state diagram, the transition from a current state to the next state is determined by \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Current state, inputs

correct

Current state, outputs

Previous state, inputs

Previous state, outputs

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 17 of 52

Marks: 1 (Budgeted Time 1 Min)

The sequence of states that are implemented by a n-bit Johnson counter is \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

$n+2$  (n plus 2)

$2n$  (n multiplied by 2)

correct

$2^n$  (2 raise to power n)

$n^2$  (n raise to power 2)

Made by: Waqar Siddhu

Question No : 18 of 52

Marks: 1 (Budgeted Time 1 Min)

Flip flops are also called \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Bi-stable dualvibrators

Bi-stable transformer

Bi-stable multivibrators

correct

Bi-stable singlevibrators

Made by: Waqar Siddhu

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Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 20 of 52

Marks: 1 (Budgeted Time 1 Min)

The operation of J-K flip-flop is similar to that of the SR flip-flop except that the J-K flip-flop \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Doesn't have an invalid state

correct

Sets to clear when both J = 0 and K = 0

It does not show transition on change in pulse

It does not accept asynchronous inputs

Made by: Waqar Siddhu

Question No : 21 of 52

Marks: 1 (Budgeted Time 1 Min)

The minimum time for which the input signal has to be maintained at the input of flip-flop is called \_\_\_\_\_ of the flip-flop.

Answer ( Please select your correct option )

VuAnswers.com

Set-up time

Pulse Stability time (PST)

Hold time

correct

Pulse Interval time

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 23 of 52

Marks: 1 (Budgeted Time 1 Min)

The divide-by-60 counter in digital clock is implemented by using two cascading counters:

Answer ( Please select your correct option )

VuAnswers.com

Mod-6, Mod-10

correct

Mod-50, Mod-10

Mod-10, Mod-50

Mod-50, Mod-6

Made by: Waqar Siddhu

Question No : 24 of 52

Marks: 1 (Budgeted Time 1 Min)

The hours counter is implemented using \_\_\_\_\_.

Answer ( Please select your correct option )

VuAnswers.com

Mod-10 and Mod-2 counters

A single decade counter and a flip-flop

correct

Only a single Mod-12 counter is required

Mod-10 and Mod-6 counters

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 26 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ is used to simplify the circuit that determines the next state.

Answer ( Please select your correct option )

VuAnswers.com

State diagram

Next state table

State reduction

State assignment

correct

Made by: Waqar Siddhu

Question No : 27 of 52

Marks: 1 (Budgeted Time 1 Min)

The alternate solution for a demultiplexer-register combination circuit is \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Parallel in / Serial out shift register

Serial in / Parallel out shift register

correct

Parallel in / Parallel out shift register

Serial in / Serial Out shift register

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option ) VuAnswers.com

- AND correct
  - OR
  - NOT
  - XOR
- Made by: Waqar Siddhu**

Question No : 29 of 52 Marks: 1 (Budgeted Time 1 Min)

A GAL is essentially a \_\_\_\_\_.

Answer ( Please select your correct option ) VuAnswers.com

- Non-reprogrammable PAL
  - PAL that is programmed only by the manufacturer
  - Reprogrammable PAL correct
  - Reprogrammable PAL
- Made by: Waqar Siddhu**

Question No : 30 of 52 Marks: 1 (Budgeted Time 1 Min)

Which is not characteristic of a shift register?

Answer ( Please select your correct option ) VuAnswers.com

- Serial in/parallel in correct
  - Serial in/parallel out
  - Parallel in/serial out
  - Parallel in/parallel out
- Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option ) VuAnswers.com

- AND
  - OR
  - NOT
  - XOR
- correct**
- Made by: Waqar Siddhu**

Question No : 32 of 52 Marks: 1 (Budgeted Time 1 Min)

A Nibble consists of \_\_\_\_\_ bits

Answer ( Please select your correct option ) VuAnswers.com

- 2
  - 4
  - 8
  - 16
- correct**
- Made by: Waqar Siddhu**

Question No : 33 of 52 Marks: 1 (Budgeted Time 1 Min)

The address, from which the data is read, is provided by \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- Depends on circuitry
  - None of given options
  - RAM
  - Microprocessor
- correct**
- Made by: Waqar Siddhu**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 35 of 52

Marks: 1 (Budgeted Time 1 Min)

In order to synchronize two devices that consume and produce data at different rates, we can use \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Read Only Memory

First In First Out Memory

correct

Flash Memory

Fast Page Access Mode Memory

Made by: Waqar Siddhu

Question No : 36 of 52

Marks: 1 (Budgeted Time 1 Min)

If the FIFO Memory output is already filled with data then \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

It is locked, no data is allowed to enter

It is not locked, the new data overwrites the previous data.

Previous data is swapped out of memory and new data enters

None of given options

correct Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 38 of 52

Marks: 1 (Budgeted Time 1 Min)

The process of converting the analogue signal into a digital representation (code) is known as \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Strobing

Amplification

Quantization

correct

Digitization

Made by: Waqar Siddhu

Question No : 39 of 52

Marks: 1 (Budgeted Time 1 Min)

Sampling of an analog signal produces :

Answer ( Please select your correct option )

VuAnswers.com

A series of impulses those are proportional to the frequency of the signal

A series of impulses those are proportional to the amplitude of the signal

Digital codes that represent the analog signal amplitude

Digital codes that represent the time of each sample

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)  
The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option ) VuAnswers.com

- AND
  - OR
  - NOT
  - XOR
- correct**
- Made by: Waqar Siddhu**

Question No : 41 of 52 Marks: 2 (Budgeted Time 4 Min)  
Write down the ABEL symbols that are used for NOT, AND, OR and XOR operations.

Answer ( Please [click here](#) to Add Answer ) VuAnswers.com

Normal Arial 12 B I U

---

**Made by: Waqar Siddhu**

Question No : 42 of 52 Marks: 2 (Budgeted Time 4 Min)  
What is meant by state variable?

Answer ( Please [click here](#) to Add Answer ) VuAnswers.com

Normal Arial 12 B I U

---

**Made by: Waqar Siddhu**



Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 44 of 52

Marks: 2 (Budgeted Time 4 Min)

What is the function of row and column decoders?

Answer ( Please [click here](#) to Add Answer )

VuAnswers.com



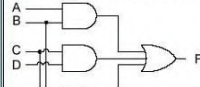
Normal Arial 12 B I U

Made by: Waqar Siddhu

Question No : 45 of 52

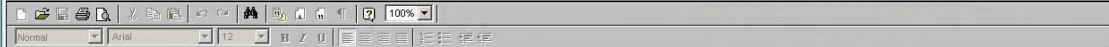
Marks: 3 (Budgeted Time 6 Min)

From the circuit diagram given below derive the output expression.



Answer ( Please [click here](#) to Add Answer )

VuAnswers.com



Normal Arial 12 B I U

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option )

VuAnswers.com

AND

correct

OR

NOT

XOR

Made by: Waqar Siddhu

Question No : 47 of 52

Marks: 3 (Budgeted Time 6 Min)

Suppose a 2 bit up-down counter having states "A, B, C, D". The counter counts upward when X=1 and downward when X=0. Write down IF-THEN-ELSE statements to show how present states change to next states and previous states.

Answer ( Please click here to Add Answer )

VuAnswers.com



Made by: Waqar Siddhu

Question No : 48 of 52

Marks: 3 (Budgeted Time 6 Min)

How DRAMs are different from SRAMs? Write three point of differences.

Answer ( Please click here to Add Answer )

VuAnswers.com



Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option ) VuAnswers.com

- AND
  - OR
  - NOT
  - XOR
- correct**
- Made by: Waqar Siddhu**

Question No : 50 of 52 Marks: 5 (Budgeted Time 10 Min)

Draw the state diagram of a 3-bit up-down counter. Use an external input X; when X sets to logic 1, the counter counts downward otherwise counts upward.

Answer ( Please [click here](#) to Add Answer ) VuAnswers.com

**Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

The PROM consists of a fixed non-programmable \_\_\_\_\_ Gate array configured as a decoder.

Answer ( Please select your correct option ) VuAnswers.com

- AND
  - OR
  - NOT
  - XOR
- correct**
- Made by: Waqar Siddhu**

Question No : 52 of 52 Marks: 5 (Budgeted Time 10 Min)

How a registered based LIFO memory is implemented? Draw block diagram of five bytes registered based LIFO memory.

Answer ( Please [click here](#) to Add Answer ) VuAnswers.com

**Made by: Waqar Siddhu**

## (Paper 3)

Question No : 1 of 52	Marks: 1 (Budgeted Time 1 Min)
Excess-8 code assigns _____ to "-8"	
VuAnswers.com	
<input type="radio"/> 1110	
<input type="radio"/> 1100	
<input type="radio"/> 1000	
<input type="radio"/> 0000	correct
Made by: Waqar Siddhu	

Question No : 2 of 52	Marks: 1 (Budgeted Time 1 Min)
The Extended ASCII Code (American Standard Code for Information Interchange) represents _____ unique codes	
VuAnswers.com	
<input type="radio"/> 256	correct
<input type="radio"/> 255	
<input type="radio"/> 128	
<input type="radio"/> 127	
Made by: Waqar Siddhu	

Question No : 3 of 52	Marks: 1 (Budgeted Time 1 Min)
The 3-variable Karnaugh Map (K-Map) has _____ cells for min or max terms	
VuAnswers.com	
<input type="radio"/> 4	
<input type="radio"/> 8	
<input type="radio"/> 12	
<input type="radio"/> 16	correct
Made by: Waqar Siddhu	

For More Visit **VU Answer**

Question No : 4 of 52 Marks: 1 (Budgeted Time 1 Min)

The active high and active low inputs of 3-to-8 Decoder are as follows:

**VuAnswers.com**

- Answer ( Please select your correct option )
- One active-high and the remaining two are active-low.
  - Two active-high and the remaining one is active-low.
  - All active high
  - All active low
- Made by: Waqar Siddhu**

Question No : 5 of 52 Marks: 1 (Budgeted Time 1 Min)

Two 2-input, 4-bit multiplexers 74X157 can be connected to implement a \_\_\_\_ multiplexer.

**VuAnswers.com**

- Answer ( Please select your correct option )
- 2-input, 4-bit
  - 4-input, 8-bit
  - 4-input, 16-bit
  - 2-input, 8-bit
- correct Made by: Waqar Siddhu**

Question No : 6 of 52 Marks: 1 (Budgeted Time 1 Min)

GAL is an acronym for \_\_\_\_\_.

**VuAnswers.com**

- Answer ( Please select your correct option )
- Generic Analysis Logic
  - Giant Array Logic
  - General Array Logic
  - Generic Array Logic
- correct Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct

---

  - ENI, ENC

---

  - ENP, ENC

---

  - ENT, ENI
- Made by: Waqar Siddhu**

Question No : 8 of 52 Marks: 1 (Budgeted Time 1 Min)

$A(B + C) = AB + AC$  is an expression of \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- Demorgan's Law

---

  - Commutative Law

---

  - Distributive Law correct

---

  - Associative Law
- Made by: Waqar Siddhu**

Question No : 9 of 52 Marks: 1 (Budgeted Time 1 Min)

An 8-bit serial in / parallel out shift register contains the value "8", \_\_\_\_\_ clock signal(s) will be required to shift the value completely out of the register.

Answer ( Please select your correct option ) VuAnswers.com

- 1 correct

---

  - 2

---

  - 4

---

  - 8
- Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct
  - ENI, ENC
  - ENP, ENC
  - ENT, ENI
- Made by: Waqar Siddhu**

Question No : 11 of 52 Marks: 1 (Budgeted Time 1 Min)

The device shown here is most likely a \_\_\_\_\_



Answer ( Please select your correct option ) VuAnswers.com

- Comparator
  - Multiplexer correct
  - Demultiplexer
  - Parity generator
- Made by: Waqar Siddhu**

Question No : 12 of 52 Marks: 1 (Budgeted Time 1 Min)

What will be output state when J = 1, K = 0 and CLR input is active?

Answer ( Please select your correct option ) VuAnswers.com

- Q = 1 correct
  - Q = 0
  - Retains previous output state
  - Toggle output
- Made by: Waqar Siddhu**



Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)  
74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct

---

  - ENI, ENC

---

  - ENP, ENC

---

  - ENT, ENI
- Made by: Waqar Siddhu**

Question No : 14 of 52 Marks: 1 (Budgeted Time 1 Min)  
\_\_\_\_\_ counters as the name indicates are not triggered simultaneously.

Answer ( Please select your correct option ) VuAnswers.com

- Synchronous

---

  - Asynchronous correct

---

  - Positive-Edge triggered

---

  - Negative-Edge triggered
- Made by: Waqar Siddhu**

Question No : 15 of 52 Marks: 1 (Budgeted Time 1 Min)  
\_\_\_\_\_ is said to occur when multiple internal variables change due to change in one input variable.

Answer ( Please select your correct option ) VuAnswers.com

- Race condition correct

---

  - Propagation delay

---

  - Ripple effect

---

  - Clock skew
- Made by: Waqar Siddhu**

**For More Visit VU Answer**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 17 of 52

Marks: 1 (Budgeted Time 1 Min)

The Sequential circuit whose output depends on the current state and the input is known as \_\_\_\_\_.

Answer ( Please select your correct option )

VuAnswers.com

Moore Machine

Mealy Machine

correct

Counter

Flip Flop

Made by: Waqar Siddhu

Question No : 18 of 52

Marks: 1 (Budgeted Time 1 Min)

In \_\_\_\_\_, the  $\bar{Q}$  output of the last flip-flop of the shift register is connected to the data input of the first flip-flop.

Answer ( Please select your correct option )

VuAnswers.com

Moore machine

Mealy machine

Johnson counter

Ring counter

correct

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 20 of 52

Marks: 1 (Budgeted Time 1 Min)

The minimum time required for the input logic levels to remain stable before the clock transition occurs is known as the \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Pulse Stability time (PST)

Set-up time

correct

Hold time

Pulse Interval time

Made by: Waqar Siddhu

Question No : 21 of 52

Marks: 1 (Budgeted Time 1 Min)

RCC Stands for \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Reconfiguration Counter Output

Reconfiguration Clock Output

Ripple Counter Output

Ripple Clock Output

correct

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)  
74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct

---

  - ENI, ENC

---

  - ENP, ENC

---

  - ENT, ENI
- Made by: Waqar Siddhu**

Question No : 23 of 52 Marks: 1 (Budgeted Time 1 Min)  
The Sequential circuit, whose output is determined by the current state only is known as \_\_\_\_\_.

Answer ( Please select your correct option ) VuAnswers.com

- Moore Machine correct

---

  - Mealy Machine

---

  - Counter

---

  - Flip Flop
- Made by: Waqar Siddhu**

Question No : 24 of 52 Marks: 1 (Budgeted Time 1 Min)  
State Machine is a generic name given to \_\_\_\_\_.

Answer ( Please select your correct option ) VuAnswers.com

- Sequential circuits correct

---

  - Combinational circuits

---

  - Flip-flops

---

  - Counters
- Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct

---

  - ENI, ENC

---

  - ENP, ENC

---

  - ENT, ENI
- Made by: Waqar Siddhu**

Question No : 26 of 52 Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ is used to simplify the circuit that determines the next state.

Answer ( Please select your correct option ) VuAnswers.com

- State diagram

---

  - Next state table

---

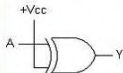
  - State reduction

---

  - State assignment correct
- Made by: Waqar Siddhu**

Question No : 27 of 52 Marks: 1 (Budgeted Time 1 Min)

The output of this circuit is always \_\_\_\_\_.



Answer ( Please select your correct option ) VuAnswers.com

- 1

---

  - 0

---

  - A correct

---

  - $\bar{A}$
- Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct

---

  - ENI, ENC

---

  - ENP, ENC

---

  - ENT, ENI
- Made by: Waqar Siddhu**

Question No : 29 of 52 Marks: 1 (Budgeted Time 1 Min)

Which is not characteristic of a shift register?

Answer ( Please select your correct option ) VuAnswers.com

- Serial in/parallel in correct

---

  - Serial in/parallel out

---

  - Parallel in/serial out

---

  - Parallel in/parallel out
- Made by: Waqar Siddhu**

Question No : 30 of 52 Marks: 1 (Budgeted Time 1 Min)

Assume that a 4-bit serial in/serial out shift register is initially clear. We wish to store the nibble 1100. What will be the 4-bit pattern after the second clock pulse? (Right-most bit first.)

Answer ( Please select your correct option ) VuAnswers.com

- 1100

---

  - 0011

---

  - 0000 correct

---

  - 1111
- Made by: Waqar Siddhu**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 32 of 52

Marks: 1 (Budgeted Time 1 Min)

Smallest unit of binary data is a \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Bit

correct

Nibble

Byte

Word

Made by: Waqar Siddhu

Question No : 33 of 52

Marks: 1 (Budgeted Time 1 Min)

The \_\_\_\_\_ of a ROM is the time it takes for the data to appear at the Data Output of the ROM chip after an address is applied at the address input lines

Answer ( Please select your correct option )

VuAnswers.com

Write Time

Refresh Time

Refresh Time

Access Time

correct

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct

---

  - ENI, ENC

---

  - ENP, ENC

---

  - ENT, ENI
- Made by: Waqar Siddhu**

Question No : 35 of 52 Marks: 1 (Budgeted Time 1 Min)

The total amount of memory that is supported by any digital system depends upon \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- The size of the address bus of the microprocessor correct

---

  - The organization of memory

---

  - The structure of memory

---

  - The size of decoding unit
- Made by: Waqar Siddhu**

Question No : 36 of 52 Marks: 1 (Budgeted Time 1 Min)

The voltage gain of the Inverting Amplifier is given by the relation \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- $V_{out} / V_{in} = - R_f / R_i$  correct

---

  - $V_{out} / R_f = - V_{in} / R_i$

---

  - $R_f / V_{in} = - R_i / V_{out}$

---

  - $R_f / V_{in} = R_i / V_{out}$
- Made by: Waqar Siddhu**



Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 38 of 52

Marks: 1 (Budgeted Time 1 Min)

A Bash A/D converter uses :

Answer ( Please select your correct option )

VuAnswers.com

Counters

Flip-Flops

Op-amps

correct

An integrator

Made by: Waqar Siddhu

Question No : 39 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ of a D/A converter is determined by comparing the actual output of a D/A converter with the expected output.

Answer ( Please select your correct option )

VuAnswers.com

Resolution

Accuracy

correct

Quantization

Missing Code

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 41 of 52

Marks: 2 (Budgeted Time 4 Min)

Identify the following quantities as analog and digital.

- a) Pressure in a bicycle tire
- b) Number of students in a class
- c) Speed of a car
- d) Temperature

Answer ( Please click here to Add Answer )

VuAnswers.com



Made by: Waqar Siddhu

Question No : 42 of 52

Marks: 2 (Budgeted Time 4 Min)

What is strobing method?

Answer ( Please click here to Add Answer )

VuAnswers.com



Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)  
74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct
  - ENI, ENC
  - ENP, ENC
  - ENT, ENI
- Made by: Waqar Siddhu**

Question No : 44 of 52 Marks: 2 (Budgeted Time 4 Min)  
How many address bits are required for a 2048-bit memory organized as a 256 x 8 memory?

Answer ( Please [click here](#) to Add Answer ) VuAnswers.com

Normal Arial 12 B I U

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**Made by: Waqar Siddhu**

Question No : 45 of 52 Marks: 3 (Budgeted Time 6 Min)  
Express each decimal number in binary as an 8-bit sign-magnitude number.  
(a) +29  
(b) -85

Answer ( Please [click here](#) to Add Answer ) VuAnswers.com

Normal Arial 12 B I U

---

**Made by: Waqar Siddhu**



Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct
  - ENI, ENC
  - ENP, ENC
  - ENT, ENI
- Made by: Waqar Siddhu**

Question No : 49 of 52 Marks: 5 (Budgeted Time 10 Min)

Convert the following caveman numbers into decimal numbers, perform all the steps.

a)  $\Omega\Omega$   
 b)  $\uparrow\Delta\Delta\Sigma$

Answer ( Please [click here](#) to Add Answer ) VuAnswers.com

**Made by: Waqar Siddhu**

Question No : 50 of 52 Marks: 5 (Budgeted Time 10 Min)

You are given the Next-state table of a moor machine, using this information draw the state diagram of the machine.

Present State			Next State		
Q <sub>2</sub>	Q <sub>1</sub>	Q <sub>0</sub>	Q <sub>2</sub>	Q <sub>1</sub>	Q <sub>0</sub>
0	1	1	1	1	1
1	1	1	0	0	1
1	0	1	1	1	0

Answer ( Please [click here](#) to Add Answer ) VuAnswers.com

**Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct

---

- ENI, ENC

---

- ENP, ENC

---

- ENT, ENI

*Made by: Waqar Siddhu*

Question No : 52 of 52 Marks: 5 (Budgeted Time 10 Min)

Analog to Digital converters exhibit different types of errors during their conversion operation. Explain at least two.

Answer ( Please [click here](#) to Add Answer ) VuAnswers.com

Normal | Arial | 12 | B | I | U | 100%

---

*Made by: Waqar Siddhu*

## (Paper 4)

Question No : 1 of 52 Marks: 1 (Budgeted Time 1 Min)

The hexadecimal value "FD" is equivalent to binary value \_\_\_\_\_

**VuAnswers.com**

Answer ( Please select your correct option )

11011111

11111101 **correct**

11001110

00010111

**Made by: Waqar Siddhu**

Question No : 2 of 52 Marks: 1 (Budgeted Time 1 Min)

"A + B = B + A" is \_\_\_\_\_

**VuAnswers.com**

Answer ( Please select your correct option )

Demorgan's Law

Distributive Law

Commutative Law **correct**

Associative Law

**Made by: Waqar Siddhu**

Question No : 3 of 52 Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ is invalid number of cells in a single group formed by the adjacent cells in K-map

**VuAnswers.com**

Answer ( Please select your correct option )

2

8

12 **correct**

16

**Made by: Waqar Siddhu**

Question No : 4 of 52 Marks: 1 (Budgeted Time 1 Min)

The \_\_\_\_\_ Encoder is used as a keypad encoder.

Answer ( Please select your correct option ) **VuAnswers.com**

- 2-to-8 encoder
  - 4-to-16 encoder
  - BCD-to-Decimal
  - Decimal-to-BCD Priority
- correct**     *Made by: Waqar Siddhu*

Question No : 5 of 52 Marks: 1 (Budgeted Time 1 Min)

The Programmable Array Logic (PAL) has \_\_\_\_\_ AND array and a \_\_\_\_\_ OR array

Answer ( Please select your correct option ) **VuAnswers.com**

- Fixed, programmable
  - Programmable, fixed
  - Fixed, fixed
  - Programmable, programmable
- correct**
- Made by: Waqar Siddhu*

Question No : 6 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- ENP, ENT
  - ENI, ENC
  - ENP, ENC
  - ENT, ENI
- correct**
- Made by: Waqar Siddhu*



Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- correct**
- Made by: Waqar Siddhu**

Question No : 8 of 52 Marks: 1 (Budgeted Time 1 Min)

A 4-bit parallel in / serial out shift register contains the value "0100", \_\_\_\_\_ clock signal(s) will be required to shift the value completely out of the register (i.e. to set the register to 0).

**VuAnswers.com**

- Answer ( Please select your correct option )
- 1
  - 2
  - 3
  - 4
- correct**
- Made by: Waqar Siddhu**

Question No : 9 of 52 Marks: 1 (Budgeted Time 1 Min)

In Single-Precision Floating Point format, "exponent" is represented by \_\_\_\_\_ bits.

**VuAnswers.com**

- Answer ( Please select your correct option )
- 8-bits
  - 16-bits
  - 32-bits
  - 64-bits
- correct**
- Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)  
Given the state diagram of an up/down counter, we can find \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- The next state of a given present state **correct**
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- Made by: Waqar Siddhu**

Question No : 11 of 52 Marks: 1 (Budgeted Time 1 Min)  
Programmable Array Logic (PAL) has \_\_\_\_\_ input(s) and \_\_\_\_\_ output(s).

Answer ( Please select your correct option ) **VuAnswers.com**

- Single, multiple
  - Multiple, single
  - Single, single
  - Multiple, multiple **correct**
- Made by: Waqar Siddhu**

Question No : 12 of 52 Marks: 1 (Budgeted Time 1 Min)  
At  $S = 0$  and  $R = 1$ , an active-HIGH SR latch is in \_\_\_\_\_ condition.

Answer ( Please select your correct option ) **VuAnswers.com**

- SET
  - RESET **correct** **not sure**
  - Invalid
  - No change
- Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- correct** **Made by: Waqar Siddhu**

Question No : 14 of 52 Marks: 1 (Budgeted Time 1 Min)

The negative edge triggered flip-flop changes state on \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Positive half cycle of clock
  - Negative half of clock
  - Low-to-high transition of clock
  - High-low transition of clock
- correct** **Made by: Waqar Siddhu**

Question No : 15 of 52 Marks: 1 (Budgeted Time 1 Min)

When four 1's are taken as a group on a Karnaugh map, the number of variables eliminated from the output expression is/are \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- 1
  - 2
  - 3
  - 4
- correct** **Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- Made by: Waqar Siddhu**

Question No : 17 of 52 Marks: 1 (Budgeted Time 1 Min)

The design and implementation of synchronous counters start from \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- Truth table
  - K-map
  - State table
  - State diagram
- correct** **Made by: Waqar Siddhu**

Question No : 18 of 52 Marks: 1 (Budgeted Time 1 Min)

The best state assignment tends to \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- Maximizes the number of state variables that don't change in a group of related states
  - Minimizes the number of state variables that don't change in a group of related states
  - Minimizes the equivalent states
  - Maximizes the equivalent states
- correct** **Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

VuAnswers.com

Answer ( Please select your correct option )

- The next state of a given present state
- The previous state of a given present state
- Both the next and previous states of a given state
- The state diagram shows only the inputs/outputs of a given states

correct

**Made by: Waqar Siddhu**

Question No : 20 of 52 Marks: 1 (Budgeted Time 1 Min)

In \_\_\_\_\_, the Q output of the last flip-flop of the shift register is connected to the data input of the first flip-flop of the shift register.

VuAnswers.com

Answer ( Please select your correct option )

- Moore machine
- Mealy machine
- Johnson counter
- Ring counter

correct

**Made by: Waqar Siddhu**

Question No : 21 of 52 Marks: 1 (Budgeted Time 1 Min)

If  $S=1$  and  $R=0$ , then  $Q(t+1) = \_\_\_\_\_\_$  for positive edge triggered flip-flop

VuAnswers.com

Answer ( Please select your correct option )

- 0
- 1
- Invalid
- Input is invalid

correct

**Made by: Waqar Siddhu**

**For More Visit VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- correct**
- Made by: Waqar Siddhu**

Question No : 23 of 52 Marks: 1 (Budgeted Time 1 Min)

Which of the following is NOT a sequential circuit?

Answer ( Please select your correct option ) **VuAnswers.com**

- SR latch
  - Counter
  - Full Adder
  - JK Flip-flop
- correct**
- Made by: Waqar Siddhu**

Question No : 24 of 52 Marks: 1 (Budgeted Time 1 Min)

Each stage of Master-slave flip-flop works in \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- One complete clock signal
  - One fourth of the clock signal
  - One third of the clock signal
  - One half of the clock signal
- correct**
- Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- correct**
- Made by: Waqar Siddhu**

Question No : 26 of 52 Marks: 1 (Budgeted Time 1 Min)

RCO Stands for \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- Reconfiguration Counter Output
  - Reconfiguration Clock Output
  - Ripple Counter Output
  - Ripple Clock Output
- correct**
- Made by: Waqar Siddhu**

Question No : 27 of 52 Marks: 1 (Budgeted Time 1 Min)

A divide-by-50 counter divides the input \_\_\_\_\_ signal to a 1 Hz signal.

Answer ( Please select your correct option ) **VuAnswers.com**

- 10 Hz
  - 50 Hz
  - 100 Hz
  - 500 Hz
- correct**
- Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)  
Given the state diagram of an up/down counter, we can find \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- Made by: Waqar Siddhu**

**correct**

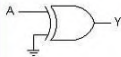
Question No : 29 of 52 Marks: 1 (Budgeted Time 1 Min)  
In asynchronous transmission when the transmission line is idle, \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- It is set to logic low
  - It is set to logic high
  - Remains in previous state
  - State of transmission line is not used to start transmission
- Made by: Waqar Siddhu**

**correct**

Question No : 30 of 52 Marks: 1 (Budgeted Time 1 Min)  
The output of this circuit is always \_\_\_\_\_



**VuAnswers.com**

- Answer ( Please select your correct option )
- 1
  - 0
  - A
  - $\bar{A}$
- Made by: Waqar Siddhu**

**correct**



Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)  
Given the state diagram of an up/down counter, we can find \_\_\_\_\_

**VuAnswers.com**

- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- Made by: Waqar Siddhu**

**correct**

Question No : 32 of 52 Marks: 1 (Budgeted Time 1 Min)  
A Nibble consists of \_\_\_\_\_ bits

**VuAnswers.com**

- 2
  - 4
  - 8
  - 16
- Made by: Waqar Siddhu**

**correct**

Question No : 33 of 52 Marks: 1 (Budgeted Time 1 Min)  
The \_\_\_\_\_ of a ROM is the time it takes for the data to appear at the Data Output of the ROM chip after an address is applied at the address input lines

**VuAnswers.com**

- Write Time
  - Refresh Time
  - Refresh Time
  - Access Time
- Made by: Waqar Siddhu**

**correct**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)  
Given the state diagram of an up/down counter, we can find \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- Made by: Waqar Siddhu**

**correct**

Question No : 35 of 52 Marks: 1 (Budgeted Time 1 Min)  
In order to synchronize two devices that consume and produce data at different rates, we can use \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- Read Only Memory
  - First In First Out Memory
  - Flash Memory
  - Fast Page Access Mode Memory
- Made by: Waqar Siddhu**

**correct**

Question No : 36 of 52 Marks: 1 (Budgeted Time 1 Min)  
The process of converting the analogue signal into a digital representation (code) is known as \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- Strobing
  - Amplification
  - Quantization
  - Digitization
- Made by: Waqar Siddhu**

**correct**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)  
Given the state diagram of an up/down counter, we can find \_\_\_\_\_

**VuAnswers.com**

- Answer ( Please select your correct option )
- The next state of a given present state **correct**
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- Made by: Waqar Siddhu**

Question No : 38 of 52 Marks: 1 (Budgeted Time 1 Min)  
A flash A/D converter uses :

**VuAnswers.com**

- Answer ( Please select your correct option )
- Counters
  - Flip-flops
  - Op-amps **correct**
  - An integrator
- Made by: Waqar Siddhu**

Question No : 39 of 52 Marks: 1 (Budgeted Time 1 Min)  
\_\_\_\_\_ of a D/A converter is determined by comparing the actual output of a D/A converter with the expected output.

**VuAnswers.com**

- Answer ( Please select your correct option )
- Resolution
  - Accuracy **correct**
  - Quantization
  - Missing Code
- Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- Made by: Waqar Siddhu**

Question No : 41 of 52 Marks: 2 (Budgeted Time 4 Min)

How many 4-bit Parallel Adders are required to add two BCD digits?

Answer ( Please click here to Add Answer ) VuAnswers.com



**Made by: Waqar Siddhu**

Question No : 42 of 52 Marks: 2 (Budgeted Time 4 Min)

What is meant by "excitation inputs"?

Answer ( Please click here to Add Answer ) VuAnswers.com



**Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- Made by: Waqar Siddhu**

correct

Question No : 44 of 52 Marks: 2 (Budgeted Time 4 Min)

Generally two types of D/A Converters are used. Write down their names.

Answer ( Please click here to Add Answer ) **VuAnswers.com**

**Made by: Waqar Siddhu**

Question No : 45 of 52 Marks: 3 (Budgeted Time 6 Min)

Draw the function table of an Half adder circuit.

Answer ( Please click here to Add Answer ) **VuAnswers.com**

**Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- correct**
- Made by: Waqar Siddhu**

Question No : 47 of 52 Marks: 3 (Budgeted Time 6 Min)

Draw a circuit diagram of flip-flop based static memory cell.

Answer ( Please click here to Add Answer ) **VuAnswers.com**

**Made by: Waqar Siddhu**

Question No : 46 of 52 Marks: 3 (Budgeted Time 6 Min)

What is RAM Stack, which register stores the address of top of the stack?

Answer ( Please click here to Add Answer ) **VuAnswers.com**

**Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)


Given the state diagram of an up/down counter, we can find \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- correct**
- Made by: Waqar Siddhu**

Question No : 50 of 52 Marks: 5 (Budgeted Time 10 Min)

You are given the block diagram of 74HC163 4-bit Synchronous Counter. Connect two 74HC163 4-bit Synchronous Counters to form a single Cascaded Decade Counter.



Answer ( Please [click here](#) to Add Answer ) **VuAnswers.com**



**Made by: Waqar Siddhu**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

Answer ( Please select your correct option ) **VuAnswers.com**

- The next state of a given present state
  - The previous state of a given present state
  - Both the next and previous states of a given state
  - The state diagram shows only the inputs/outputs of a given states
- correct**
- Made by: Waqar Siddhu**

Question No : 52 of 52 Marks: 5 (Budgeted Time 10 Min)

What is operational amplifier and how it can be used as an inverting amplifier? Write down the relation for its voltage gain.

Answer ( Please [click here](#) to Add Answer ) **VuAnswers.com**

Normal Arial 12 B I U

\_\_\_\_\_

**Made by: Waqar Siddhu**



## (Paper 5)

Question No : 1 of 52 Marks: 1 (Budgeted Time 1 Min)

Caveman number system is Base \_\_\_\_\_ number system

Answer ( Please select your correct option ) VuAnswers.com

2

5 correct

10

16

**Made by: Waqar Siddhu**

Question No : 2 of 52 Marks: 1 (Budgeted Time 1 Min)

$110 / 10 =$  \_\_\_\_\_

Note: both values are in binary

Answer ( Please select your correct option ) VuAnswers.com

11 correct

10

111

101

**Made by: Waqar Siddhu**

Question No : 3 of 52 Marks: 1 (Budgeted Time 1 Min)

The circuit diagram below explains the \_\_\_\_\_



A  $\rightarrow$   $A+(B+C)$  A  $\rightarrow$   $A+B$   
B  $\rightarrow$   $(A+B)+C$

Answer ( Please select your correct option ) VuAnswers.com

Associative Law for Multiplication

Commutative Law for Addition

Commutative Law for Multiplication

Associative Law for Addition

correct **Made by: Waqar Siddhu**

Question No : 4 of 52 Marks: 1 (Budgeted Time 1 Min)

$A + \bar{A}B =$  \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

- A
- B
- A.B
- A+B

correct

Made by: Waqar Siddhu

Question No : 5 of 52 Marks: 1 (Budgeted Time 1 Min)

$\bar{A}B + \bar{A}B\bar{C} + AC$  is an example of \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

- Product of sum form
- Sum of product form
- Demorgans law
- Associative law

correct

Made by: Waqar Siddhu

Question No : 6 of 52 Marks: 1 (Budgeted Time 1 Min)

A standard POS form has \_\_\_\_\_ terms that have all the variables in the domain of the expression.

Answer ( Please select your correct option )

VuAnswers.com

- Sum
- Product
- Min
- Composite

correct

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 8 of 52 Marks: 1 (Budgeted Time 1 Min)

Given the state diagram of an up/down counter, we can find \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

The next state of a given present state

correct

The previous state of a given present state

Both the next and previous states of a given state

The state diagram shows only the inputs/outputs of a given states

Made by: Waqar Siddhu

Question No : 9 of 52 Marks: 1 (Budgeted Time 1 Min)

A multiplexer with a register circuit converts \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Serial data to parallel

Parallel data to serial

correct

Serial data to serial

Parallel data to parallel

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 11 of 52 Marks: 1 (Budgeted Time 1 Min)

When  $PRE' = 0$  and  $CLR' = 1$ ,  $Q_t = 0$  then  $Q_{(t+1)}$  will be \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Output of flip-flop will be set (Logic 1)

correct

Output of flip-flop will be reset (Logic 0)

Output of flip-flop will be invalid

Flip-flop will change output on Clock transition

Made by: Waqar Siddhu

Question No : 12 of 52 Marks: 1 (Budgeted Time 1 Min)

Compared to analog systems, digital systems \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

are less prone to noise

correct

not sure

can represent an infinite number of values

can handle much higher power

occupy large space

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 14 of 52 Marks: 1 (Budgeted Time 1 Min)

Determine the values of  $A$ ,  $B$ ,  $C$ , and  $D$  for the sum term  $\bar{A} + B + \bar{C} + D$

Answer ( Please select your correct option )

VuAnswers.com

$A = 1, B = 0, C = 0, D = 0$

$A = 1, B = 0, C = 1, D = 0$

correct

$A = 0, B = 1, C = 0, D = 1$

$A = 1, B = 0, C = 1, D = 1$

Made by: Waqar Siddhu

Question No : 15 of 52 Marks: 1 (Budgeted Time 1 Min)

Determine the values of  $A$ ,  $B$ ,  $C$ , and  $D$  for the product term  $\bar{A}BCD$

Answer ( Please select your correct option )

VuAnswers.com

$A = 0, B = 1, C = 0, D = 1$

correct

$A = 1, B = 0, C = 1, D = 0$

$A = 1, B = 1, C = 1, D = 1$

$A = 0, B = 0, C = 1, D = 0$

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

**Made by: Waqar Siddhu**

Question No : 17 of 52

Marks: 1 (Budgeted Time 1 Min)

The design and implementation of synchronous counters start from \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Truth table

K-map

State table

State diagram

correct

**Made by: Waqar Siddhu**

Question No : 18 of 52

Marks: 1 (Budgeted Time 1 Min)

The Sequential circuit whose output depends on the current state and the input is known as \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Moore Machine

Mealy Machine

correct

Counter

Flip Flop

**Made by: Waqar Siddhu**

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

**Made by: Waqar Siddhu**

Question No : 20 of 52 Marks: 1 (Budgeted Time 1 Min)

In \_\_\_\_\_, the Q output of the last flip-flop of the shift register is connected to the data input of the first flip-flop of the shift register.

Answer ( Please select your correct option )

VuAnswers.com

Moore machine

Mealy machine

Johnson counter

correct

Ring counter

**Made by: Waqar Siddhu**

Question No : 21 of 52 Marks: 1 (Budgeted Time 1 Min)

Invalid state of NOR based SR latch occurs when \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

S=0, R=0

S=0, R=1

S=1, R=0

S=1, R=1

correct

**Made by: Waqar Siddhu**

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 23 of 52 Marks: 1 (Budgeted Time 1 Min)

Following is the circuit diagram of mono-stable device. Which gate will be replaced by the red colored rectangle in the circuit?



Answer ( Please select your correct option )

VuAnswers.com

AND

correct

XNOR

NAND

NOR

Made by: Waqar Siddhu

Question No : 24 of 52 Marks: 1 (Budgeted Time 1 Min)

A flip-flop is connected to +5 volts and it draws 5 mA of current during its operation, the power dissipation of the flip-flop is \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

10 mW

correct

25 mW

64 mW

84 mW

Made by: Waqar Siddhu

For More Visit **VU Answer**



Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

**Made by: Waqar Siddhu**

Question No : 26 of 52 Marks: 1 (Budgeted Time 1 Min)

The Sequential circuit, whose output is determined by the current state only is known as \_\_\_\_\_.

Answer ( Please select your correct option )

VuAnswers.com

Moore Machine

correct

Mealy Machine

Counter

Flip Flop

**Made by: Waqar Siddhu**

Question No : 27 of 52 Marks: 1 (Budgeted Time 1 Min)

In asynchronous transmission when the transmission line is idle, \_\_\_\_\_.

Answer ( Please select your correct option )

VuAnswers.com

It is set to logic low

It is set to logic high

correct

Remains in previous state

State of transmission line is not used to start transmission

**Made by: Waqar Siddhu**

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

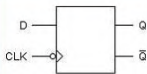
ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 29 of 52 Marks: 1 (Budgeted Time 1 Min)



Which of the following statement is true regarding above block diagram ?

Answer ( Please select your correct option )

VuAnswers.com

Triggering takes place on the negative-going edge of the CLK pulse

Triggering takes place on the positive-going edge of the CLK pulse

correct

Triggering can take place anytime during the LOW level of the CLK waveform

Triggering can take place anytime during the LOW level of the CLK waveform

Made by: Waqar Siddhu

Question No : 30 of 52 Marks: 1 (Budgeted Time 1 Min)

Which is not characteristic of a shift register?

Answer ( Please select your correct option )

VuAnswers.com

Serial in/parallel in

correct

Serial in/parallel out

Parallel in/serial out

Parallel in/parallel out

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 32 of 52 Marks: 1 (Budgeted Time 1 Min)

Smallest unit of binary data is a \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Bit

correct

Nibble

Byte

Word

Made by: Waqar Siddhu

Question No : 33 of 52 Marks: 1 (Budgeted Time 1 Min)

The high density FLASH memory cell is implemented using \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

1 floating-gate MOS transistor

correct

2 floating-gate MOS transistors

4 floating-gate MOS transistors

6 floating-gate MOS transistors

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

**Made by: Waqar Siddhu**

Question No : 35 of 52 Marks: 1 (Budgeted Time 1 Min)

In order to synchronize two devices that consume and produce data at different rates, we can use \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Read Only Memory

First In First Out Memory

correct

Flash Memory

Fast Page Access Mode Memory

**Made by: Waqar Siddhu**

Question No : 36 of 52 Marks: 1 (Budgeted Time 1 Min)

Stack is a \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Bust Flash Memory

FIFO memory

LIFO memory

correct

Flash Memory

**Made by: Waqar Siddhu**

**For More Visit [VU Answer](#)**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

Made by: Waqar Siddhu

Question No : 38 of 52 Marks: 1 (Budgeted Time 1 Min)

The process of converting the analogue signal into a digital representation (code) is known as \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

Strobng

Amplification

Quantization

correct

Digitization

Made by: Waqar Siddhu

Question No : 39 of 52 Marks: 1 (Budgeted Time 1 Min)

A hold action occurs :

Answer ( Please select your correct option )

VuAnswers.com

After the analog-to-digital conversion

During each sample

Immediately after a sample

correct

Before each sample

Made by: Waqar Siddhu

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

**Made by: Waqar Siddhu**

Question No : 41 of 52

Marks: 2 (Budgeted Time 4 Min)

What is the basic function of a comparator?

Answer ( Please click here to Add Answer )

VuAnswers.com

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**Made by: Waqar Siddhu**

Question No : 42 of 52

Marks: 2 (Budgeted Time 4 Min)

What is meant by state assignment process?

Answer ( Please click here to Add Answer )

VuAnswers.com

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**Made by: Waqar Siddhu**

For More Visit **VU Answer**

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option ) VuAnswers.com

- ENP, ENT correct
- ENI, ENC
- ENP, ENC
- ENT, ENI

*Made by: Waqar Siddhu*

Question No : 44 of 52 Marks: 2 (Budgeted Time 4 Min)

What is meant by Monotonicity of Digital-to-Analog converters?

Answer ( Please click here to Add Answer ) VuAnswers.com

*Made by: Waqar Siddhu*

Question No : 45 of 52 Marks: 3 (Budgeted Time 6 Min)

Convert each of the following decimal numbers to Excess-3 codes:  
a) 13                      b) 43

Answer ( Please click here to Add Answer ) VuAnswers.com

13=01000110  
43=01110110

*Made by: Waqar Siddhu*

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

**Made by: Waqar Siddhu**

Question No : 47 of 52

Marks: 3 (Budgeted Time 6 Min)

Write down three characteristics of serial in / serial out 4-bit left shift register.

Answer ( Please click here to Add Answer )

VuAnswers.com

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**Made by: Waqar Siddhu**

Question No : 46 of 52

Marks: 3 (Budgeted Time 6 Min)

How DRAMs are different from SRAMs? Write three point of differences.

Answer ( Please click here to Add Answer )

VuAnswers.com

Rich text editor toolbar with options like Bold, Italic, Underline, etc.

1. SRAM is static while DRAM is dynamic
2. SRAM is faster compared to DRAM
3. SRAM consumes less power than DRAM
4. SRAM uses more transistors per bit of memory compared to DRAM
5. SRAM is more expensive than DRAM
6. Cheaper DRAM is used in main memory while SRAM

**Made by: Waqar Siddhu**

For More Visit **VU Answer**



Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

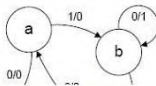
ENT, ENI

Made by: Waqar Siddhu

Question No : 50 of 52

Marks: 5 (Budgeted Time 10 Min)

Consider a state sequence a, f, d, e, a, b, e, f, d, e. Starting from initial state "a", draw a table for the inputs and outputs for the state diagram given below.



Answer ( Please click here to Add Answer )

VuAnswers.com

Made by: Waqar Siddhu

Question No : 7 of 52 Marks: 1 (Budgeted Time 1 Min)

74HC163 has two enable input pins which are \_\_\_\_\_ and \_\_\_\_\_

Answer ( Please select your correct option )

VuAnswers.com

ENP, ENT

correct

ENI, ENC

ENP, ENC

ENT, ENI

**Made by: Waqar Siddhu**

Question No : 52 of 52

Marks: 5 (Budgeted Time 10 Min)

Memory chips can be connected together in different manners to increase the total size of the memory. Draw block diagram of 4K x word memory if you are given four 4K x bytes chips.

Answer ( Please [click here](#) to Add Answer )

VuAnswers.com



**Made by: Waqar Siddhu**