CS-302 Digital & Logical Design

Update MCQS For Mid Term

Solve By Vu Topper RM

85% To 100% Marks

وَتُعِزُّ مَن تَشَاء وَتُذِلُّ مَن تَشَاء

VU Virtual University

PROFESSIONAL ONLINE ACADEMY

VU-TOPPER RM

We Offers

- LMS Handling
- Important Notes
- Online Classes
- Assignments
- Quiz & GDB's
- Projects

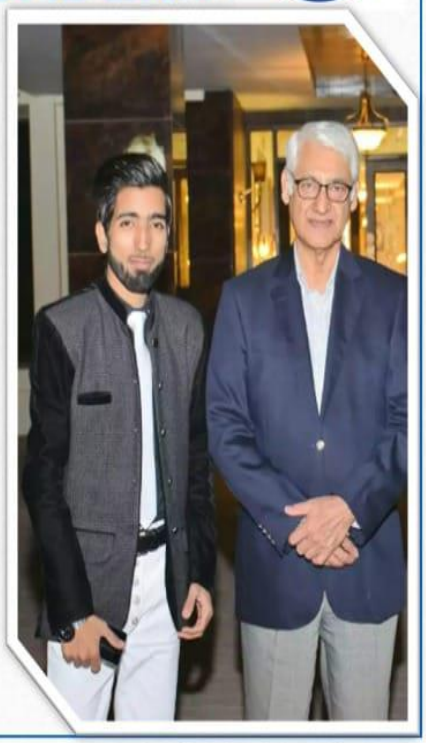
NOTHING Is IMPOSSIBLE

Join Us Now

For More Info Contact us at:

Rizwan Manzoor

0322-4021365



بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

On a Karnaugh map, grouping the 0s produces

A. a SOP expression
B. a "don't care" condition
C. AND-OR logic
D. a POS expression

A logic circuit that determines if one input is equal to another is called a_____.

A. Comparator
B. Encoder
C. Multiplexer
D. Adder

A _____ can not operate without a memory element.

A. Cell
B. Unit
C. Clock
D. Counter Page 211

Boolean algebra is the _____ of Digital Systems.

A. Science
B. Equation
C. Expression
D. Mathematics Page 71

A logic circuit for the expression X = A'B + AB' can be implemented using _____.

A. three AND gates, two OR gates, one inverter
B. two AND gates, two OR gates, two inverters
C. two AND gates, one OR gate, two inverters
D. two AND gates, one OR gate

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

In K-map simplification method, a group of four adjacent 1's lead to a term with_____

A. Three literals less than the total number of variables
B. Two literals less than the total number of variables
C. One literal less than the total number of variables
D. Four literals less than the total number of variables

The 4-variable Karnaugh Map (K-Map) has _____ cells for min or max terms

A. 12
B. 16
C. 4
D. 8

In look ahead circuits P stands for_____.

A. Carry generate.
B. Carry propagate.
C. Carry input.
D. Propagation delay.

The OLMC can be configured to provide a feedback input signal to the AND gate array input. There are _____ possibilities.

A. Two
B. Five
C. Four
D. Three Page 200

The problem of excessive delays caused by carry propagation can be reduced by a _____ circuit.

A. Carry Look Ahead
B. Full Adder
C. Ripple Carry Adder
D. Half Adder

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Half-Adder Logic circuit contains _____ XOR Gates.

A. 0
B. 3
C. 1
D. 2

_____ is the example of Commutative Law for Multiplication

A. A+B=B+A
B. A(B+C) = B(A+C)
C. AB=BA
D. AB+C = A+BC

The OLMC of the GAL16V8 is similar to the OLMC of the _____ with some enhancements.

A. GAL14V10
B. GAL22V10
C. GAL12V10
D. GAL16V10

Multiplexers can be interpreted as _____.

A. Many-to-One
B. Many-to-Many
C. One-to-One
D. One-to-Many

In Complex mode of GAL16V8, OLMCs can be configured in _____ ways.

A. 5
B. 4
C. 2
D. 3

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

In GAL16V8, each product term is implemented using a 32-bit input _____ gate.

A. XOR
B. OR
C. NAND
D. AND **Page 81**

The sum terms in Standard POS form are called _____
Maxterms

A standard sum term is equal to zero for only one combination of _____ values.
Literal

versions of logic gates are designed to withstand harsh and severe environmental conditions.

A. Business
B. Commercial
C. **Military**
D. Domestic

The bolean expression A + BC equals

A. (A' + B)(A' + C)
B. (A + B')(A + C')
C. (A + B)(A + C)
D. (A + B)(A' + C)

The Boolean expression (A + B' + C) is

A. **a sumterm**
B. a maxterm
C. a literal term
D. a product term

VU Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

A _____ is converted into a standard POS by using the rule $AA^{-} = 0$.

A. Non-standard SOP
B. Simplified SOP
C. Simplified POS
D. Non-standard POS

Question No:1 (Marks:1) Vu-Topper RM

Function tables are required to represent the input/output combinations for each segment in 7-segment display.

A. One
B. Two
C. Five
D. Seven Page 104

Question No:2 (Marks:1) Vu-Topper RM

The decimal value "20" is equivalent to binary value _____ .

A. 10100 Google
B. 00110
C. 11001
D. 00111

Question No:3 (Marks:1) Vu-Topper RM

Decimal number system is Base_____number system

A. Two Page 5
B. One
C. Five
D. Eight

Question No:4 (Marks:1) Vu-Topper RM

NOT gate is also known as an _____.

A. Inverter circuit Google
B. Switch circuit
C. Both

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

D. None

Question No:5 (Marks:1) Vu-Topper RM

A variable can have a _____ value.

A. 0 or 1 value Page 71 ok

B. 0 or 0 value

C. 1 or 0 value

D. 0 and 1 value

Question No:6 (Marks:1) Vu-Topper RM

_____ come in different configurations they are identified by unique number

A. PALs Page 186 ok

B. PLAS

C. DALS

D. ADLS

Question No:7 (Marks:1) Vu-Topper RM

Arithmetic and Logic Units can perform any of the arithmetic operations and logic operations on _____ input values.

A. One

B. Two Page 147

C. Four

D. Three

Question No:8 (Marks:1) Vu-Topper RM

A _____ output can change from one state to the other by applying appropriate inputs.

A. Latch Page 211

B. Logic

C. Analog

D. None of these

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:9 **(Marks:1)** **Vu-Topper RM**

When the error condition is not detected in BCD adder, the circuit output is 0 and the 2nd Adder input B is set to _____.

A. 0000 Page 142

B. 1111

C. 0011

D. 1100

Question No:10 **(Marks:1)** **Vu-Topper RM**

A _____ attached to the Select inputs of the Demultiplexer routes the incoming serial bits to successive outputs where each bit is stored.

A. Data

B. Buffer

C. Memory

D. Counter Page 178 ok

Question No:11 **(Marks:1)** **Vu-Topper RM**

The _____ allows both its AND Gate array and the OR gate array to be programmed independently.

A. PLA Page 188

B. DLA

C. LPS

D. PAL

Question No:12 **(Marks:1)** **Vu-Topper RM**

In 16-bit ALU, the Carry outputs C1, C2 and C3 from the Look-Ahead Carry generator circuit are generated after a gate delay of _____.

A. 2 Page 151

B. 4

C. 3

D. 1

Question No:13 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

The GAL16V8 has eight _____each connected to eight product terms.

A. OLMCs Page 200

B. POS

C. SOP

D. CELLS

Question No:14 (Marks:1) Vu-Topper RM

In 1-to-4 demultiplexer, how many select lines are required

A. 1 select lines

B. 2 select lines Page 396

C. 3 select lines

D. 4 select lines

Question No:15 (Marks:1) Vu-Topper RM

In the Iterative Circuit for A>B, the output of Module 0 is 1 when

A. A>B of Module 1 is 1 Page 155

B. B>A of Module 1 is 1

C. A=B of Module 1 is 1

D. A-B of Module 1 is 1

Question No:16 (Marks:1) Vu-Topper RM

A circuit that converts the n inputs to 2^n outputs is called_____.

A. Decoder Google ok

B. Shifter

C. Encoder

D. Comparator

Question No:17 (Marks:1) Vu-Topper RM

The Decimal-to-BCD Encoder has _____ outputs

A. Two

B. Ten

C. Four Page 166 ok

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

D. Five

Question No:18 **(Marks:1)** **Vu-Topper RM**

In a Digital System, Binary data is used and represented in_____.

A. Static
B. Serial
C. Variable
D. Parallel **Page 175**

Question No:19 **(Marks:1)** **Vu-Topper RM**

The absence of a _____ element in sequential circuit restricts the use of digital combinational circuits to certain application areas.

A. Memory **Page 210**
B. Logic
C. Both
D. None

Question No:20 **(Marks:1)** **Vu-Topper RM**

The BCD to 7-Segment Decoder unlike the Binary Decoders activates multiple but unique set of outputs for each _____ BCD input combination.

A. 1-bit
B. 2-bit
C. 3-bit
D. 4-bit **Page 1**

Question No:21 **(Marks:1)** **Vu-Topper RM**

In look ahead circuits G stands for_____.

A. Carry Input
B. Carry Output
C. Carry Propagate
D. Carry Generator **Page 150 and 151**

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:22 **(Marks:1)** **Vu-Topper RM**

When the fuse of the _____ gate input is blown to set the input to logic high, the output of the XOR gate is opposite of the OR gate output.

A. OR
B. XOR **Page 186**
C. AND
D. NAND

Question No:23 **(Marks:1)** **Vu-Topper RM**

Combinational Logic is used for combinational circuits, where as Registered Logic is based on ------circuits.

A. 4 Wire **Page 194**
B. 3 Wire
C. 2 Wire
D. 1 Wire

Question No:24 **(Marks:1)** **Vu-Topper RM**

The 4-bit ALU (74XX381) only has three function select inputs allowing only ____ different arithmetic and logic functions.

A. 8 **Page 147**
B. 6
C. 4
D. 2

Question No:25 **(Marks:1)** **Vu-Topper RM**

Which of the following is the MSI version of the Look-Ahead Carry Generator, which provides identical inputs and outputs except for the C4 output?

A. 74XX182 **Page 151**
B. 47xx182
C. 182XX74
D. 74XX183

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:26 **(Marks:1)** **Vu-Topper RM**

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

A. OR
B. AND **Page 182** **ok**
C. XOR
D. NAND

Question No:27 **(Marks:1)** **Vu-Topper RM**

Each Octal Number digit can represent a _____ Binary Number

A. 3 Bit **Page 31**
B. 4
C. 5
D. 6

Question No:28 **(Marks:1)** **Vu-Topper RM**

The simplified expressions using either of the two K-maps are _____.

A. Logical
B. Physical
C. Identical **Page 89** **ok**
D. None of these

Question No:29 **(Marks:1)** **Vu-Topper RM**

The _____ gate and ____ gate implementation connected at the B input of the 4bit Adder

A. AND and OR **Page 146**
B. XOR and And
C. NOT and OR
D. NAND and XOR

Question No:30 **(Marks:1)** **Vu-Topper RM**

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

In 16-Input Multiplexer, the four outputs are connected together through a 4-input ____ gate.?

A. OR **Page 171**

B. AND

C. XOR

D. NAND

Question No:31 **(Marks:1)** **Vu-Topper RM**

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

A. 12 **Google** **ok**

B. 10

C. 14

D. 16

Question No:32 **(Marks:1)** **Vu-Topper RM**

XOR is an abbreviation of-

A. Exclusively-OR **Google**

B. Exclusively-AND

C. Exclusively-XOR

D. Exclusively-NAND

Question No:33 **(Marks:1)** **Vu-Topper RM**

When the control line in tri-state buffer is high, the buffer operates like a _____ gate

A. OR

B. AND

C. NOT **Page 196**

D. XOR

Question No:34 **(Marks:1)** **Vu-Topper RM**

The expression F=A.B.C describes the operation of three bits ___ Gate.

A. OR **Google**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

B. AND
C. XOR
D. NAND

Question No:35 (Marks:1) Vu-Topper RM
How many sets of AND-OR based circuit are used to allow complemented and un-complemented B input to be applied at the B inputs of the two 4-bit Adders?
A. One
B. Two Page 146 ok
C. Five
D. Four

Question No:36 (Marks:1) Vu-Topper RM
The product terms in Standard SOP are called_____
A. Minterms Page 85
B. Minimum
C. Maximum
D. Manterms

Question No:37 (Marks:1) Vu-Topper RM
In 8-input multiplexer, when ___ is set to 0, the first multiplexer is selected allowing its inputs 1C0, 1C1, 1C2 and 1C3 to be selected.
A. B
B. C Page 170 ok
C. D
D. A

Question No:38 (Marks:1) Vu-Topper RM
Basic function of a Comparator is to _____ two binary quantities.
A. Different
B. Compare Page 153
C. Both

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

D. None of these

Question No:39 **(Marks:1)** **Vu-Topper RM**

How many of enable inputs is(are) active-low in 74XX138 3-to-8 Decoder?

A. One
B. Two
C. Four
D. Three **Page 160**

Question No:40 **(Marks:1)** **Vu-Topper RM**

A Karnaugh Map is organized in the form of a(an)_____.

A. Array **Page 89**
B. Method
C. Function
D. Data Type

Question No:41 **(Marks:1)** **Vu-Topper RM**

The _____Gate is used in circuits to generate the 1's Complement of a number by inverting all its bits.

A. OR
B. AND
C. NOT **Page 44** **ok**
D. XOR

Question No:42 **(Marks:1)** **Vu-Topper RM**

The OR Gate performs a Boolean_____function

A. Addition **Page 22**
B. Subtraction
C. Both
D. None of these

Question No:43 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

The expression F=A+B+C

A. OR

B. AND

C. NOT

D. NAND

Question No:44 **(Marks:1)** **Vu-Topper RM**

In Caveman number system, the value “2” is represented by symbol _____.

A. > Page 11

B. <

C. =

D. @

Question No:45 **(Marks:1)** **Vu-Topper RM**

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

A. Sum Page 85 ok

B. Min

C. Product

D. Composite

Question No:46 **(Marks:1)** **Vu-Topper RM**

The 4-bit 2’s complement representation of “-7” is _____

A. 1001 Page 23

B. 0011

C. 0010

D. 1111

Question No:47 **(Marks:1)** **Vu-Topper RM**

The AND Gate performs a logical _____ function.

A. Multiplication Page 40

B. Different

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What’s app 03224021365

Vu Topper RM

C. None
D. Both

Question No:48 **(Marks:1)** **Vu-Topper RM**
The Adjacent 1s Detector accepts 4-bit inputs. If ____ adjacent 1s are detected in the input, the output is set to high.
A. 1
B. 2 **Page 123** **ok**
C. 3
D. 4

Question No:49 **(Marks:1)** **Vu-Topper RM**
In 16-input multiplexer, the decoder inputs ____ and ____ enable one out of the four multiplexers.
A. C and D **Page 171** **ok**
B. A and B
C. B and A
D. A and D

Question No:50 **(Marks:1)** **Vu-Topper RM**
8-bit parallel data can be converted into serial data by using _____ multiplexer
A. 8-to-1 **Page 175** **ok**
B. 4-to-2
C. 8-to-4
D. 4-to-4

Question No:51 **(Marks:1)** **Vu-Topper RM**
The carry, instead of rippling through the 4-bits of the individual ALU circuit, has to propagate through ___ ALU units in 16-bit ALU.
A. Four **Page 150**
B. One
C. Two

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

D. Three

Question No:52 **(Marks:1)** **Vu-Topper RM**

A SOP expression having a domain of 3 variables will have a truth table having ____ combinations of inputs and corresponding output values.

A. 4 **Page 87** **ok**

B. 3

C. 2

D. 1

Question No:53 **(Marks:1)** **Vu-Topper RM**

The _____ is the slowest and consumes more power.

A. Standard TTL **Page 61**

B. Simple LTT

C. None

D. Different TTL

Question No:54 **(Marks:1)** **Vu-Topper RM**

The output of a NAND gate is _____ when all the inputs are one.

A. 1 **Page 47**

B. 2

C. 3

D. 4

Question No:55 **(Marks:1)** **Vu-Topper RM**

If the number of samples that are collected is reduced by half, the reconstructed signal will be _____ from/to the original.

A. Different **Page 1**

B. Between

C. Both

D. None of these

Question No:56 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Canonical form is a unique way of representing _____.

A. SOP **Page 117**

B. POS

C. SUM

D. PRODUCT

Question No:57 **(Marks:1)** **Vu-Topper RM**

In 16-bit ALU, the G output is activated if the 4-bit unit generates a _____ irrespective of _____.

A. Carry in, carry out

B. Carry out, carry in **Page 150** **ok**

C. Input number, carry in

D. Carry in, input number

Question No:58 **(Marks:1)** **Vu-Topper RM**

Any of the _____ forms of the Karnaugh Map can be used to simplify Boolean expressions

A. 2 **Page 89**

B. 3

C. 4

D. 5

Question No:59 **(Marks:1)** **Vu-Topper RM**

The ____ enable input of the decoder when set to 1 disables the decoder and the multiplexers.

A. G **Page 171**

B. B

C. A

D. S

Question No:60 **(Marks:1)** **Vu-Topper RM**

A specific half-adder has _____ inputs and _____ output(s).

A. 2.2 **Google** **ok**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

B. 3.3
C. 4.2
D. 3.5

Question No:61 **(Marks:1)** **Vu-Topper RM**
The _____ input selects/deselects both the decoders simultaneously.
A. Enable **Page 161**
B. Disable
C. Active high
D. Active low

Question No:62 **(Marks:1)** **Vu-Topper RM**
All ABEL statements must end with _____.
A. ; **Page 203** **ok**
B. @
C. :
D. #

Question No:63 **(Marks:1)** **Vu-Topper RM**
Removing the NOT gate at the output of the NOR gate results in an _____.
A. OR gate **Page 50**
B. AND
C. XOR
D. NOT

Question No:64 **(Marks:1)** **Vu-Topper RM**
In Odd parity generator circuit which gate is used to detect parity errors?
A. XOR **Page 132**
B. AND
C. XOR
D. NAND

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:65 **(Marks:1)** **Vu-Topper RM**

When the number 29 is represented on 7-segment display, which BCD input is represented on LSD display unit?

A. 1001 **Page 172**

B. 1000

C. 1100

D. 1010

Question No:66 **(Marks:1)** **Vu-Topper RM**

The expression _____ is an example of Commutative Law for Multiplication.

A. AB=BA **Page 72**

B. BA@AB

C. BA=AB

D. AB#BA

Question No:67 **(Marks:1)** **Vu-Topper RM**

In a 4-variable K-map, a 2-variable product term is produced by

A. 4-cell group of 1s **ok**

B. a 8-cell group of 1s

C. a 2-cell group of 1s

D. a 4-cell group of 0s

Question No:68 **(Marks:1)** **Vu-Topper RM**

The output of any CMOS series logic gate can be at logic high'1' or logic low '0'

A. 3.3 and 5volt

B. 2.2 and 5volt

C. 1.1 and 5volt

D. 3.2 and 5volt

Question No:69 **(Marks:1)** **Vu-Topper RM**

1011 – 101 = _____

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

A. 0110 ok
B. 0011
C. 1100
D. 0101

Question No:70 (Marks:1) Vu-Topper RM
(A+B).(A+C)=
A. AC+B
B. AB=C
C. BC=D
D. AB+B

Question No:71 (Marks:1) Vu-Topper RM
_____ and _____ are the steps of the Quine-McCluskey.
A. Draw a table and make groups.
B. Write binary codes and write SOP.
C. Write binary codes and write POS.
D. Find prime implicants and select minimal set of the prime implicants. ok

Question No:72 (Marks:1) Vu-Topper RM
K-Map is difficult to manage for _____ or more variables.
A. 3
B. 5
C. 7 Google ok
D. 9

Question No:73 (Marks:1) Vu-Topper RM
In 32-bit Single –Precision floating point format representation the range of exponent value is from _____to _____
A. +127 to -126
B. -126 to 127
C. +125 to 126

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

D. -127 to +128

Question No:74 **(Marks:1)** **Vu-Topper RM**

The output of the expression F=A.B.C will be logic _____when A=1,B=0, C=1.

A. One
B. Two
C. Six
D. Zero

Question No:75 **(Marks:1)** **Vu-Topper RM**

The NOR logic gate is the same as operation of the…….gate with on inverter connected to the output

A. OR
B. AND
C. NOT
D. NAND

Question No:76 **(Marks:1)** **Vu-Topper RM**

The GAL22V10 device is available as low-voltage _____ version.

A. 3.0V
B. 3.3V **Page 194** **ok**
C. 2.0V
D. 1.5V

Question No:77 **(Marks:1)** **Vu-Topper RM**

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

A. All active low
B. All active high
C. One active high and two are remaining active low
D. Two active-high and the remaining one is active-low

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:78 **(Marks:1)** **Vu-Topper RM**

The 16 input multiplexer the decoder input….and…..enable one out of four multiplexer

A. C, D

B. A, C

C. B, D

D. A, B

Question No:79 **(Marks:1)** **Vu-Topper RM**

The Programmable Array Logic (PAL) has _____ AND array and a _____ OR array.

A. Fixed, fixed

B. Programmable, fixed **Page 182** **ok**

C. Fixed, programmable

D. Programmable, programmable

Question No:80 **(Marks:1)** **Vu-Topper RM**

If odd-Parity is being used therefore the 4-bit data and the parity bit should add up to give _____of 1s.

A. Prime

B. Add **Page 131**

C. Both

D. Even

Question No:81 **(Marks:1)** **Vu-Topper RM**

How many 74HC85s are cascaded together forms a 12-bit Comparator circuit?

A. 1

B. 4

C. 3 **Page 156**

D. 2

Question No:82 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

In 2-bit comparator the input combinations 00 01, 00 10, 00 11, 01 10, 01 11 and 10 11 are for_____?cs302

A. A>B
B. A=B
C. A<B Page 109 ok
D. A==B

Question No:83 (Marks:1) Vu-Topper RM

The based devolves with WC supply….vexes

A. +1
B. -2
C. +3
D. +5

Question No:84 (Marks:1) Vu-Topper RM

In 16-bit ALU, the Carry Out 16 is generated only when ALU3 has received Carry In ____.

A. 6
B. 8
C. 10
D. 12 Page 150

Question No:85 (Marks:1) Vu-Topper RM

Subtraction also have output check 1 has been

A. Simple
B. Difficult
C. None
D. Borrowed

Question No:86 (Marks:1) Vu-Topper RM

The data digit circuit operates with which contribution of value given blow

A. +5volts and o volts

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

B. +1volts and 5 volts
C. -5volts and o volts
D. *5volts and o volts

Question No:87 **(Marks:1)** **Vu-Topper RM**

_____ single digit BCD Adders can be cascaded together to form a 2-digit BCD Adder.

A. One
B. Two **Page 143**
C. Four
D. Three

Question No:88 **(Marks:1)** **Vu-Topper RM**

If S=1and R=0 then for positive edge triggered flip flop

A. 1
B. 2
C. 3
D. 4

Question No:89 **(Marks:1)** **Vu-Topper RM**

The terminal count of 4 bit binary counter in the UP mode is…….

A. 1001 **Page 288**
B. 0011
C. 1100
D. 1010

Question No:90 **(Marks:1)** **Vu-Topper RM**

For a gated D latch If EN =1 and D =1 then Q (t+1) =……

A. 1
B. 2
C. 3
D. 4

Question No:91 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Which of the following expression is in the product-of-sums form?
A. AB(CD)
B. AB+CD Google ok
C. (AB)(CD)
D. (A + B)(C+D)

Question No:92 (Marks:1) Vu-Topper RM
Binary Decoders have _____ inputs and _____ outputs
A. 2n
B. 2^n,n Page 158 ok
C. 2n.n
D. n 2

Question No:93 (Marks:1) Vu-Topper RM
Addition of two decimal digits in BCD can be done through
A. Full Adder
B. BCD adder Page 141 ok
C. Ripple Carry Adder
D. Carry Look Ahead Genertor

Question No:94 (Marks:1) Vu-Topper RM
_____ have Buffers at the inputs which produce the
A. PLA
B. PAL Page 184
C. GAL
D. EPROM

Question No:95 (Marks:1) Vu-Topper RM
Both the multiplexer are selected simultaneously when….is not to logic….. In 2 input 8 bit multiplexer
A. S LOW
B. S HIGH
C. C LOW

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

D. C HIGH

Question No:96 **(Marks:1)** **Vu-Topper RM**

The primary use of multiplexers is _____.

A. Data Router
B. Operation sequencing
C. Logic function generator
D. Parallel to Serial Converter Page 172

Question No:97 **(Marks:1)** **Vu-Topper RM**

A standard interface for programming the In-System PLD consists of

A. 4 wires Page 194
B. 2 wires
C. 1 wires
D. 3 wires

Question No:98 **(Marks:1)** **Vu-Topper RM**

In 8 multiplexer the two output are connected though a gate

A. OR
B. AND
C. XOR
D. NAND

Question No:99 **(Marks:1)** **Vu-Topper RM**

The……select input (S) of the 4 input multiplexer are common dual 4 input multiplexer

A. One
B. Two
C. Five
D. Nine

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:100 **(Marks:1)** **Vu-Topper RM**

Maxterm is the sum of……of the corresponding monetary with its literal complemented

A. Terms

B. SOP

C. POS

D. NONE

Question No:101 **(Marks:1)** **Vu-Topper RM**

____ uses E2CMOS technology which is Electrically Erasable CMOS instead of Bipolar technology and fusible links.

A. PAL

B. GAL Page 183

C. PLA

D. PROM

Question No:102 **(Marks:1)** **Vu-Topper RM**

Any of the……forms of the karnaugh map can be used to simplify Boolean expression

A. One

B. Two

C. Five

D. Four

Question No:103 **(Marks:1)** **Vu-Topper RM**

What is the value of output adding of following binary number

1011+101 = _____

A. 11001 ok

B. 11001

C. 00110

D. 11101

Question No:104 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

The GAL22v10 is popular GAL having…….input and10 input/output

A. 6
B. 8
C. 10
D. 12

Question No:105 (Marks:1) Vu-Topper RM

To determine the seven expressions for each of the seven outputs in 7-segment display, seven ___-variable Karnaugh maps are used.

A. 3
B. 0
C. 2
D. 4

Question No:106 (Marks:1) Vu-Topper RM

A 3-variable Karnaugh map has

A. Eight cells
B. One cells
C. Two cells
D. Five cells

Question No:107 (Marks:1) Vu-Topper RM

In gate SR latch what is the value of the output of EN=1,S=0 and R=0?

A. 1
B. 2
C. 3
D. 4

Question No:108 (Marks:1) Vu-Topper RM

The limitation in implementation of parallel binary adders is known as _____.

A. Delay
B. Carry input

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

C. Carry output
D. Carry propagation Page 137 ok

Question No:109 (Marks:1) Vu-Topper RM
In Cascading Priority Encoders, the EO output is connected to the EI input of the encoder which handles _____.
A. Lower priority outputs
B. Higher priority outputs
C. Higher priority inputs
D. Lower priority inputs Page 166

Question No:110 (Marks:1) Vu-Topper RM
We have a digital circuit Different parts of circuit operate at different clock frequencies (4MHZ,2MHZ and 1MHZ), but we have a single clock sources of circuit we can get help by using
A. J-k flip-flop
B. J-d flip-flop
C. k-j flip-flop
D. None of these

Question No:111 (Marks:1) Vu-Topper RM
A Divide- by 20 counter can be achieved by using
A. Flip-Flop and DIV 10
B. Flip-Flop and DIV 12
C. Flip-Flop and DIV 14
D. Flip-Flop and DIV 16

Question No:112 (Marks:1) Vu-Topper RM
In a 4-bit binary counter, the next state after the terminal count in the DOWN mode is_____
A. 00 Page 288
B. 1111
C. 0001

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

D. 10000

Question No:113 **(Marks:1)** **Vu-Topper RM**

For a gated D-latch if EN-1 and D=1 then Q(t+1)=

A. 1
B. 2
C. 3
D. 4

Question No:114 **(Marks:1)** **Vu-Topper RM**

The ABEL symbol for "OR" operation is

A. #
B. @
C. !
D. *

Question No:115 **(Marks:1)** **Vu-Topper RM**

The domain of the expression AB'CD+AB'+CD+B is

A. A, B
B. B, C
C. A, B, C
D. A,B,C and D

Question No:116 **(Marks:1)** **Vu-Topper RM**

Boolean Addition operation is performed by a(n) ____gate.

A. OR
B. AND
C. XOR
D. NAND

Question No:117 **(Marks:1)** **Vu-Topper RM**

The maximum decimal number that can be represented using the 64-bit unsigned represented is..

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

A. (2^64)-1
B. (2^65)-2
C. (2^64)-3
D. (2^65)-0

Question No:118 **(Marks:1)** **Vu-Topper RM**
Implementing the Adjacent 1s detector circuit directly from the function table based on the SOP form requires _____ gates for the 8 product terms (minterms) with an 8-input OR gate.
A. 8 AND **Page 123** **ok**
B. 8 XOR
C. 8 OR
D. 8 NOR

Question No:119 **(Marks:1)** **Vu-Topper RM**
Is used when the output is connected back to the input of the PAL or if the output pin is used as a
A. Input
B. Output
C. None of these
D. Combinational input/ output

Question No:120 **(Marks:1)** **Vu-Topper RM**
The GAL22V10 is a popular GAL device having _____ inputs and ten inputs/outputs.
A. 10
B. 12 **Page 194** **ok**
C. 14
D. 16

Question No:121 **(Marks:1)** **Vu-Topper RM**
Power dissipation of device's remaining constant throughout their operation

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

A. TTL
B. LLL
C. LTT
D. TLT

Question No:122 **(Marks:1)** **Vu-Topper RM**
In 8-input multiplexer, the two outputs are connected through a/an _____ gate.
A. OR **Page 170**
B. NOT
C. AND
D. XOR

Question No:123 **(Marks:1)** **Vu-Topper RM**
Digital circuits operate with voltage value (s).
A. 2
B. 3
C. 4
D. 5

Question No:124 **(Marks:1)** **Vu-Topper RM**
How many data select lines are required for selecting eight inputs?
A. 1
B. 2
C. 3 **Google**
D. 4

Question No:125 **(Marks:1)** **Vu-Topper RM**
High level Noise margins (VNH) of CMOS 5volt series circuit is
A. 3.3v
B. 2.3v
C. 3.3a
D. 3.1v

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:126 **(Marks:1)** **Vu-Topper RM**

Both the multiplexers are selected simultaneously when ___ is set to logic ___ in 2-Input, 8-bit Multiplexer.

A. S, Low **Page 171** **ok**

B. S,High

C. G,Slow

D. G,High

Question No:127 **(Marks:1)** **Vu-Topper RM**

The _____ select input(s) of the two 4-input multiplexers are common in Dual 4-input multiplexer.

A. Two **Page 168**

B. One

C. Five

D. Three

Question No:128 **(Marks:1)** **Vu-Topper RM**

The PLA can be programmed to give an output of constant ___ or _____.

A. 2.3

B. 0.1 **Page 190**

C. 0.0

D. 1.2

Question No:129 **(Marks:1)** **Vu-Topper RM**

Tri-State Buffer is a _____ gate with a control line that disconnects the output from the input.

A. OR

B. AND

C. NOT **Page 196**

D. NAND

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:130 **(Marks:1)** **Vu-Topper RM**

Divide-by-32 counter can be achieved by using

A. Flip-Flop and DIV 10
B. Flip-Flop and DIV 16
C. Flip-Flop and DIV 32
D. DIV 16 and DIV 32

Question No:131 **(Marks:1)** **Vu-Topper RM**

The counter states or the range of numbers of a counter is determined by the formula. (“n” represents the total number of flip-flops)

A. (n raise to power 2)
B. (n raise to power 2 and then minus 1)
C. (2 raise to power n)
D. (2 raise to power n and then minus 1)

Question No:132 **(Marks:1)** **Vu-Topper RM**

A 4- bit UP/DOWN counter is in DOWN mode and in the 1010 state. on the next clock pulse, to what state does the counter go?

A. 1001
B. 1011
C. 0011
D. 1100

Question No:133 **(Marks:1)** **Vu-Topper RM**

A 4-bit binary UP/DOWN counter is in the binary state zero. the next state in the DOWN mode is_____

A. 0001
B. 1111
C. 1000
D. 1110

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What’s app 03224021365

Question No:134 **(Marks:1)** **Vu-Topper RM**

Divide-by-160 counter is achieved by using

Flip-Flop and DIV 10

Flip-Flop and DIV 16

DIV 16 and DIV 32

DIV 16 and DIV 10

Question No:135 **(Marks:1)** **Vu-Topper RM**

A counter is implemented using three (3) flip-flops, possibly it will have _____ maximum output status.

A. 3

B. 7

C. 8

D. 15

Question No:136 **(Marks:1)** **Vu-Topper RM**

RCO stands for _____

A. Reconfiguration Counter Output

B. Ripple Counter Output

C. Reconfiguration Clock Output

D. Ripple Clock Output

Question No:137 **(Marks:1)** **Vu-Topper RM**

For a down counter that counts from (111 to 000), if current state is "101" the next state will be

A. 111

B. 110

C. 010

D. None of given options

Question No:138 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

The 74HC163 is a 4-bit Synchronous Counter.it has.....data output pins

A. 2
B. 4 **Page 278**
C. 6
D. 8

Question No:139 **(Marks:1)** **Vu-Topper RM**

_____ Counters as the name indicates are not triggered simultaneously

A. Asynchronous
B. Synchronous
C. Positive-Edge triggered
D. Negative-Edge triggered

Question No:140 **(Marks:1)** **Vu-Topper RM**

A synchronous decade counter will have _____ flip-flops

A. 2
B. 3
C. 4
D. 10

Question No:141 **(Marks:1)** **Vu-Topper RM**

Karnaugh map is used in designing

A. a clock a counter
B. an UP/DOWN counter
C. All of the above

Question No:142 **(Marks:1)** **Vu-Topper RM**

_____ is said to occur when multiple internal variables change due to change in one input variable

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

A. Hold and Wait
B. Clock Skew
C. Race condition
D. Hold delay

Question No:143 (Marks:1) Vu-Topper RM

An Astablemultivibrator is known as a(n) _____

A. Oscillator
B. Booster
C. One-shot
D. Dual-shot

Question No:144 (Marks:1) Vu-Topper RM

_____occurs when the same clock signal arrives at different times at different clock inputs due to propagation delay.

A. Race condition
B. Clock Skew
C. Ripple Effect
D. None of given options

Question No:145 (Marks:1) Vu-Topper RM

The glitches due to "Race Condition" can be avoided by using a __

A. Gated flip-flops
B. Pulse triggered flip-flops
C. Positive-Edge triggered flip-flops
D. Negative-Edge triggered flip-flops

Question No:146 (Marks:1) Vu-Topper RM

An Asynchronous Down-counter is implemented (Using J-K flipflop) by connecting_____

A. Q output of all flip-flops to clock input of next flip-flops
B. Q' output of all flip-flops to clock input of next flip-flops
C. Q output of all flip-flops to J input of next flip-flops

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

VuTopper RM

D. Q' output of all flip-flops to K input of next flip-flops

Question No:147 **(Marks:1)** **Vu-Topper RM**

A decade counter is _____

A. Mod-3 counter
B. Mod-5 counter
C. Mod-8 counter
D. Mod-10 counter

Question No:148 **(Marks:1)** **Vu-Topper RM**

Don't care conditions are marked as _____ in the output column of the function table

X

Question No:149 **(Marks:1)** **Vu-Topper RM**

An example of SOP expression is

both (a) and (b)

Question No:150 **(Marks:1)** **Vu-Topper RM**

"1101" in signed representation is equivalent to _____

13

Question No:151 **(Marks:1)** **Vu-Topper RM**

In decimal value "275" the weight of the digit "7" is

100

Question No:152 **(Marks:1)** **Vu-Topper RM**

The decimal "10" will have an octal equivalent

12

Question No:153 **(Marks:1)** **Vu-Topper RM**

Caveman number system is Base _____ number system

A. 2

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

B. 5 **Page 11**

C. 10

D. 15

Question No:154 **(Marks:1)** **Vu-Topper RM**

When an Asynchronous sequential circuit changes two or more binary states variables a Condition occurs called _____

Race condition

Question No:155 **(Marks:1)** **Vu-Topper RM**

Time delay device is memory element of_____

Asynchronous circuits

Question No:156 **(Marks:1)** **Vu-Topper RM**

Boolean function must be brought into_____To perform product of max terms

OR terms

Question No:157 **(Marks:1)** **Vu-Topper RM**

The binary number 10101 is equivalent to the decimal number_____.

21

Question No:158 **(Marks:1)** **Vu-Topper RM**

The Boolean expression A BC D is—

Sum term

Question No:159 **(Marks:1)** **Vu-Topper RM**

The universal gate is_____.

NAND gate

Question No:160 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

According to Boolean algebra absorption law, which of the following is correct?

xy+y=x

Question No:161 **(Marks:1)** **Vu-Topper RM**

A Boolean function may be transformed into

logical diagram

Question No:162 **(Marks:1)** **Vu-Topper RM**

The inverter is _____

NOT gate

Question No:163 **(Marks:1)** **Vu-Topper RM**

The resulting circuit of a NAND gate are connected together is_____

NOT gate

Question No:164 **(Marks:1)** **Vu-Topper RM**

OR gate and _____ will form The NOR gate?

NOT gate

Question No:165 **(Marks:1)** **Vu-Topper RM**

The NAND gate is AND gate followed by ……

NOT gate

Question No:166 **(Marks:1)** **Vu-Topper RM**

Max terms are also called_____.

Standard sum

Question No:167 **(Marks:1)** **Vu-Topper RM**

By the repeated use of _____Digital circuit can be made

NAND gates

Question No:168 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

The only function of NOT gate is_____ of the following.
Invert input signal

Question No:169 (Marks:1) Vu-Topper RM
Boolean algebra is defined as a set of_____.
two values

Question No:170 (Marks:1) Vu-Topper RM
If S=1 and R=1, for negative edge triggered flip-flop then
A. Direct
B. **Invalid** **Page 233**
C. Valid
D. Indirect

Question No:171 (Marks:1) Vu-Topper RM
Adjacent 1s detector circuit will have active low output for the input
A. 1010
B. 1011
C. 0110
D. 1101 **Page 123** **ok**

Question No:172 (Marks:1) Vu-Topper RM
The 3-to-8 Decoder has active-low outputs and three extra ____ gates connected at the three inputs to reduce the four unit load to a single unit load.
Not **Page 160**
XOR
OR
AND

Question No:173 (Marks:1) Vu-Topper RM
Adjacent 1s detector circuit will have active high output for the input.
A. 0101

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

B. 0011 Page 123
C. 1010
D. 0001

Question No:174 (Marks:1) Vu-Topper RM
Modern information techniques are relying more on _____ transmission.
Digital

Question No:175 (Marks:1) Vu-Topper RM
Maxterm is the sum of _____ of the corresponding Minterm with its literal complemented.
A. Words
B. Terms
C. Nibble
D. Numbers

Question No:176 (Marks:1) Vu-Topper RM
Select the mode of programming in which GAL 16V8 cam be programmed.
All of the given option

Question No:177 (Marks:1) Vu-Topper RM
_____ has the fastest switching speed and low power requirements.
A. Fast TTL
B. Standard TTL
C. Schottky TTL
D. Advanced low power Schottky

Question No:178 (Marks:1) Vu-Topper RM
(A+B).(A+C)=
AC+B

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:179 **(Marks:1)** **Vu-Topper RM**
The minimum time for which the input signal has to be maintained at the input of flip-flop is called ___ of the flip-flop.
Hold time

Question No:180 **(Marks:1)** **Vu-Topper RM**
Each stage of Master-slave flip-flop works at ___ of the clock signal.
One half

Question No:181 **(Marks:1)** **Vu-Topper RM**
In Master-Slave flip-flop the clock signal is connected to slave flip-flip using ___
NOT

Question No:182 **(Marks:1)** **Vu-Topper RM**
The n flip-flops store ___ states.
2^n

Question No:183 **(Marks:1)** **Vu-Topper RM**
When the ___ Hz sampling interval is selected, the signal at the output of the J-K flip-flop has a time period of ___
1,2

Question No:184 **(Marks:1)** **Vu-Topper RM**
A positive edge-trigged flip-flop changes its state when ___
Low-to-high transition of clock

Question No:185 **(Marks:1)** **Vu-Topper RM**
Which of the following is the octal equivalent of 28 decimal number?
A. 32

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

B. 34
C. 30
D. 28

Question No:186 **(Marks:1)** **Vu-Topper RM**
The _____ input select/deselects both the decoders simultaneously.
Enable

Question No:187 **(Marks:1)** **Vu-Topper RM**
NAND and _____ gates are known as Universal Gates.
NOR

Question No:188 **(Marks:1)** **Vu-Topper RM**
The declaration section of ABEL generally includes the device declaration, _____ declarations and set declarations.
A. Pin **Page 207** **ok**
B. Cell
C. Model
D. System

Question No:189 **(Marks:1)** **Vu-Topper RM**
An SOP expression having a domain of 2 variables will have a truth table having _____combinations of inputs and corresponding output values.
A. 2
B. 4 **ok**
C. 6
D. 8

Question No:190 **(Marks:1)** **Vu-Topper RM**
In the 32-bit Single Precision Floating formation, the exponent value _____ is reserved to represent 0 exponents.
0

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:191 **(Marks:1)** **Vu-Topper RM**

CMOS technology is characterized by low power dissipation with ____switching speeds.

A. Slow
B. Fast
C. Medium
D. Average

Question No:192 **(Marks:1)** **Vu-Topper RM**

The complement of a variable is always

A. 1
B. 0
C. equal to the variable
D. The inverse of the variable

Question No:193 **(Marks:1)** **Vu-Topper RM**

A.(B + C) = A.B + A.C is the expression of _____

A. Distributive Law **ok**
B. Associative Law
C. Demorgan's Law
D. Commutative Law

Question No:194 **(Marks:1)** **Vu-Topper RM**

If the number 2025 is represented in floating point, then exponent is _____.

A. 1
B. 3
C. 5
D. 7

Question No:195 **(Marks:1)** **Vu-Topper RM**

Excess-8 code of -6 is _____.

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

0010

Question No:196 (Marks:1) Vu-Topper RM

A 3-variable Karnaugh map has

Eight cells

Question No:197 (Marks:1) Vu-Topper RM

To represent in digital value, the number of digit (0s and 1s) that represents a quantity is _____ to the range of values that are to be represented.

Proportional

Question No:198 (Marks:1) Vu-Topper RM

The expression F-A+B+C describes the operation of three bits___ Gate.

OR

Question No:199 (Marks:1) Vu-Topper RM

GAL Two 2-bit comparator circuits can be connected to form single 4bit comparator

True

False

Question No:200 (Marks:1) Vu-Topper RM

The output of the expression F=A+B+C will be Logic _____when A=0, B=1, C=1. the symbol"+" here represents OR Gate

One

Question No:201 (Marks:1) Vu-Topper RM

If an active-HIGH S-R latch has a 0 on the S input and a 1 on the R input and then the R input goes to 0, the latch will be _____.

SET

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

VuTopper RM

Question No:202 **(Marks:1)** **Vu-Topper RM**
3.3 v CMOS series is characterized by _____ and_____as compared to the 5 v CMOS series.
Fast switching speeds, very low power dissipation Page 61

Question No:203 **(Marks:1)** **Vu-Topper RM**
The binary value "1010110" is equivalent to decimal _____
86

Question No:204 **(Marks:1)** **Vu-Topper RM**
The _____ Encoder is used as a keypad encoder.
Decimal -to-BCD Priority

Question No:205 **(Marks:1)** **Vu-Topper RM**
The Quad Multiplexer has _____ outputs
4

Question No:206 **(Marks:1)** **Vu-Topper RM**
Demultiplexer has
Single input and multiple outputs.

Question No:207 **(Marks:1)** **Vu-Topper RM**
The 4-bits 2's complement representation of "7" is _____
1001

Question No:208 **(Marks:1)** **Vu-Topper RM**
The binary number 1011,101 has an Integer part represented by_____ and a fraction part ___ separated by a decimal point.
1011,101

Question No:209 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

The _____ description is used to simulate the logic circuit and verify its operation.

Test vector

Question No:210 (Marks:1) Vu-Topper RM

The implement the decoder circuit having inputs and outputs. Function tables have to be drawn which represent the output status of each Output line for or combinations of inputs

1 and 9

Question No:211 (Marks:1) Vu-Topper RM

This function table represents _____ Gate.

Or gate

Question No:212 (Marks:1) Vu-Topper RM

Suppose we want to transmit the data" 10001101", and an "Even-parity" bit scheme is used to detect errors the parity bit added to this data will be

0

Question No:213 (Marks:1) Vu-Topper RM

Which one of the following is not a valid rule of Boolean algebra?

A. A = Ā

B. AA = A

C. A + 1 = 1

D. A + 0 = A

Question No:214 (Marks:1) Vu-Topper RM

How many outputs can an integrated circuit comparator have?

A. One

B. Two **Google**

C. Five

D. Three

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:215 **(Marks:1)** **Vu-Topper RM**

Which of the following is not the correct method of grouping?

A. On corners

B. Diagonally ok

C. Along adjacent rows

D. Along adjacent columns

Question No:216 **(Marks:1)** **Vu-Topper RM**

The product of an XOR gate is zero(0), when _____All the inputs are zero

I and IV only

Question No:217 **(Marks:1)** **Vu-Topper RM**

----------methods are used to Convert Decimal fractions to Binary.

2

Question No:218 **(Marks:1)** **Vu-Topper RM**

To display the number ____ the BCD number 0010 representing the MSD is applied at the inputs of the BCD to 7-Segment display circuit connected to the MSD 7-Segment Display Digit.

A. 19

B. 29 Page 172

C. 39

D. 49

Question No:219 **(Marks:1)** **Vu-Topper RM**

A SOP expression is equal to I _____

When one or more product terms in the expression arc equal to 1

Question No:220 **(Marks:1)** **Vu-Topper RM**

The output A B is set to I when the input combinations is

A=01, B=10

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:221 **(Marks:1)** **Vu-Topper RM**
If we multiply “723” and “34” by representing them in floating point notation i.e. by first, converting them inflating point representation and then multiplying them, the value of mantissa of result will be _____
24.582

Question No:222 **(Marks:1)** **Vu-Topper RM**
Parts of logic gate identifies the switching
XX

Question No:223 **(Marks:1)** **Vu-Topper RM**
Sum term (Max term) is implemented using _____ gates.
A. OR **ok**
B. Not
C. Nor
D. And

Question No:224 **(Marks:1)** **Vu-Topper RM**
The output of the expression FA+B+C will be Logic _____represents OR Gate.
10(binary)

Question No:225 **(Marks:1)** **Vu-Topper RM**
The binary value “1010110” is equivalent to decimal _____
86 (According to Formula)

Question No:226 **(Marks:1)** **Vu-Topper RM**
In case of cascading Integrated Circuit counters, the enable inputs and RCO of the Integrated Circuit counters allow cascading of multiple counters together
True
False

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What’s app 03224021365

Question No:227 **(Marks:1)** **Vu-Topper RM**
A decade counter can be implemented by truncating the counting sequence of a MOD-20 counter.
True
False

Question No:228 **(Marks:1)** **Vu-Topper RM**
The terminal count of a modulus-13 binary counter is
0000
1101

Question No:229 **(Marks:1)** **Vu-Topper RM**
The Synchronous counters are also known as Ripple Counters:
True
False

Question No:230 **(Marks:1)** **Vu-Topper RM**
Design of state diagram is one of many steps used to design
a clock a truncated counter an UP/DOWN counter
Any counter

Question No:231 **(Marks:1)** **Vu-Topper RM**
Multiplexers are also known as _____.
A. Data Setters
B. Data Selectors **Page 167**
C. Data Distributors
D. Data Manipulators

Question No:232 **(Marks:1)** **Vu-Topper RM**
TTL based devices work with a dc supply of ____ Volts
A. +3
B. +5
C. 3.3

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

D. +10

Question No:233 **(Marks:1)** **Vu-Topper RM**
How many bits must each word have in one-to-four line de-multiplexer to be implemented using a memory?
1Bits

Question No:234 **(Marks:1)** **Vu-Topper RM**
The total amount of memory is depends upon _____
The size of the address bus of the microprocessor

Question No:235 **(Marks:1)** **Vu-Topper RM**
_____ can be determined the Instability condition.
logic diagram

Question No:236 **(Marks:1)** **Vu-Topper RM**
If we add an inverter at the output of AND gate, what function is produced?
NAND

Question No:237 **(Marks:1)** **Vu-Topper RM**
Which is also known as coincidence detector?
AND gate

Question No:238 **(Marks:1)** **Vu-Topper RM**
Transition table include _____
Squares

Question No:239 **(Marks:1)** **Vu-Topper RM**
For every possible combination of logical states in the inputs, which table shows the logical state of a digital circuit output?
Truth table

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:240 **(Marks:1)** **Vu-Topper RM**
Stack is an acronym for _____
LIFO memory

Question No:241 **(Marks:1)** **Vu-Topper RM**
Positive OR gate is also a negative
AND gate

Question No:242 **(Marks:1)** **Vu-Topper RM**
First operator precedence for evaluating Boolean expressions is
Parenthesis

Question No:243 **(Marks:1)** **Vu-Topper RM**
The output is_____ When an input signal 1 is applied to a NOT gate
0

Question No:244 **(Marks:1)** **Vu-Topper RM**
The value of n is _____when the resolution of an n bit DAC with a maximum input of 5 V is 5 mV.
10

Question No:245 **(Marks:1)** **Vu-Topper RM**
2's complement of binary number 0101 is _____
1011

Question No:246 **(Marks:1)** **Vu-Topper RM**
An OR gate has 4 inputs. The output is ……. When One input is high and the other three are low.
High

Question No:247 **(Marks:1)** **Vu-Topper RM**
convert BCD to seven segments _____device is used.

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Decoder

Question No:248 (Marks:1) Vu-Topper RM
Decimal number 10 is equal to binary number _____.
1010

Question No:249 (Marks:1) Vu-Topper RM
In 2's complement representation the number 11100101 represents the decimal number _____.
-27
+28

Question No:250 (Marks:1) Vu-Topper RM
BCD input 1000 is fed to a 7 segment display through a BCD to 7 segment decoder/driver. The segments which will lit up are_____.
All

Question No:251 (Marks:1) Vu-Topper RM
In asynchronous digital systems all the circuits change their state with respect to a common clock
False
True

Question No:252 (Marks:1) Vu-Topper RM
Which of the number is not a representative of hexadecimal system?
"1001"

Question No:253 (Marks:1) Vu-Topper RM
To get the answer "1" in Boolean addition of three variables, _____
One of the variables must be 1

Question No:254 (Marks:1) Vu-Topper RM
The 3-variable Karnaugh Map (K-Map) has _____ cells for min or max terms

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:255 **(Marks:1)** **Vu-Topper RM**
Consider A=1,B=0,C=1. A, B and C represent the input of three bit NAND gate the output of the NAND gate will be _____
Zero

Question No:256 **(Marks:1)** **Vu-Topper RM**
The Binary number 1011.101 has an Integer part represented by _____ and a fraction part ____ separated by a decimal point.
1011, 101

Question No:257 **(Marks:1)** **Vu-Topper RM**
Adding two octal numbers "36" and "71" result in _____
A. 127
B. 213
C. 123
D. 345

Question No:258 **(Marks:1)** **Vu-Topper RM**
The first Least Most digit in decimal number system has
Has position 0 and weight equal to 1

Question No:259 **(Marks:1)** **Vu-Topper RM**
NOR Gate can be used to perform the operation of AND, OR and NOT Gate
True
False

Question No:260 **(Marks:1)** **Vu-Topper RM**
The three fundamental gates are _____
A. NOT, OR, AND
B. OR, AND, NAND

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

C. NOT, NOR, XOR
D. AND, NAND, XOR

Question No:261 **(Marks:1)** **Vu-Topper RM**
For a Standard SOP expression, a _____ is placed in the cell corresponding to the product term (Minterm) present in the expression.
A. 1 **ok**
B. 0
C. X (don't care condition)
D. Any of given option depending on SOP term.

Question No:262 **(Marks:1)** **Vu-Topper RM**
The carry propagation delay problem in parallel binary adder can be solved by _____.
A. Using two full adders
B. Using look-ahead carry circuits
C. Using bridge circuit between two adders
D. Carry propagation problem can not be solved

Question No:263 **(Marks:1)** **Vu-Topper RM**
Two 2-input, 4-bit multiplexers 74X157 can be connected to implement a ____ multiplexer.
A. 2-input, 4-bit
B. 4-input, 8-bit
C. 8-input, 2-bit
D. 2-input, 8-bit **ok**

Question No:264 **(Marks:1)** **Vu-Topper RM**
The octal equivalent of the following binary number is _____
117

Question No:265 **(Marks:1)** **Vu-Topper RM**
A' is written in ABEL as_____.

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

A. #A
B. !A **ok**
C. @A
D. $A

Question No:266 **(Marks:1)** **Vu-Topper RM**
Which of the following is the hexadecimal equivalent of 28?
1C

Question No:267 **(Marks:1)** **Vu-Topper RM**
Function labels required to represent the input/output combinations for each segment in 7-segment display
7

Question No:268 **(Marks:1)** **Vu-Topper RM**
Which of the following gates has the output 1 if and only if at least one input is 1?
A. OR
B. NOR
C. AND
D. NAND

Question No:269 **(Marks:1)** **Vu-Topper RM**
Digital circuits operate with_____ voltage value(s)
2

Question No:270 **(Marks:1)** **Vu-Topper RM**
A sop expression can be implemented by on ___combination of gates.
AND-OR

Question No:271 **(Marks:1)** **Vu-Topper RM**
The between expression X-AB+CD represents
Two ANDs O Red together

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:272 **(Marks:1)** **Vu-Topper RM**
In the keyboard encoder, how many times per second does the ring counter scan the key board?
650 scans/second

Question No:273 **(Marks:1)** **Vu-Topper RM**
The FAST Model Page Access allows _____ memory read and access times when reading successive data values stored in consecutive locations on the same row.
Faster

Question No:274 **(Marks:1)** **Vu-Topper RM**
GAL can be reprogrammed as instead of fuses E2CMOS logic is used which can be programmed to connect a _____ with a _____.
A. row, row
B. row, column Page 191 ok
C. column, row
D. column, column

Question No:275 **(Marks:1)** **Vu-Topper RM**
Which of the following Output Equations determines the output of the State Machine?
MAX = Q0Q1EN

Question No:276 **(Marks:1)** **Vu-Topper RM**
The maximum value, represented by a single hexadecimal digit is _____
A. "F" ok
B. “H”
C. “E”
D. “G”

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What’s app 03224021365

Question No:277 **(Marks:1)** **Vu-Topper RM**
If the voltage drop across the active load is 0 volts due to absence of current the comparator output is a _____.
1

Question No:278 **(Marks:1)** **Vu-Topper RM**
The Static Ram (SRAM) is non-volatile and is not a _____ density memory as a latch is required to store a single bit of information.
High

Question No:279 **(Marks:1)** **Vu-Topper RM**
Dem organ's two theorems prove the equivalency of the NAND and _____ gates and the NOR and _____ gates respectively.
Negative-OR, Negative-AND

Question No:280 **(Marks:1)** **Vu-Topper RM**
Two signals _____ and _____ provide the timing inputs to the State Machine.
PTIME and QTIME

Question No:281 **(Marks:1)** **Vu-Topper RM**
PLDs have In-System Programming (ISP) capability that allows the _____ to be programmed after they have been installed on a circuit board.
A. PALs
B. PLAs
C. PLDs Page 194 ok
D. EPROM

Question No:282 **(Marks:1)** **Vu-Topper RM**
The CONSTATE.CLK = Clock is used to indicate that the _____ state variables change on a clock transition.
CONSTATE

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:283 **(Marks:1)** **Vu-Topper RM**
Two types of memories namely the first in-first out (FIFO) memory and last in first out (LIFO) are implemented using _____.
Shift Registers

Question No:284 **(Marks:1)** **Vu-Topper RM**
The normal data inputs to a flip-flop (D, S and R, J and K, T) are referred to as _____ inputs.
Synchronous

Question No:285 **(Marks:1)** **Vu-Topper RM**
The Synchronous SRAM also has a Burst feature which allows the Synchronous SRAM to read or write up to _____ location(s) using a single address.
Four

Question No:286 **(Marks:1)** **Vu-Topper RM**
In NAND based S-R latch, output of each _____ gate is connected to the input of the other _____ gate.
NAND, NAND

Question No:287 **(Marks:1)** **Vu-Topper RM**
The _____ input overrides the _____ input.
Asynchronous, synchronous

Question No:288 **(Marks:1)** **Vu-Topper RM**
The 64-cell array organized as 8 x 8 cell array is considered
8-byte memory

Question No:289 **(Marks:1)** **Vu-Topper RM**
Memory is arranged in _____.
Two-dimensional manner

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:290 **(Marks:1)** **Vu-Topper RM**

Subtractors also have output to check if 1 has been_____

A. Shifted
B. Primed
C. Borrowed ok
D. Complemented

Question No:291 **(Marks:1)** **Vu-Topper RM**

The Test Vector definition defines the test vectors for all the three counter inputs and _____ counter output/outputs.

Three

Question No:292 **(Marks:1)** **Vu-Topper RM**

A multiplexer with a register circuit converts

Parallel data to serial

Question No:293 **(Marks:1)** **Vu-Topper RM**

The S-R latch has two inputs, therefore _____ different combinations of inputs can be applied to control the operation of the S-R latch.

Four

Question No:294 **(Marks:1)** **Vu-Topper RM**

Why demultiplexer is called a data distributor?

Single input to Single Output

Question No:295 **(Marks:1)** **Vu-Topper RM**

When the transmission line is idle in an asynchronous transmission

It is set to logic high

Question No:296 **(Marks:1)** **Vu-Topper RM**

UVERPROM is stands for

Ultra-Voilet

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:297 **(Marks:1)** **Vu-Topper RM**
In memory write cycle, the time for which the WE signal remains active is known as the _____.
Write pulse width

Question No:298 **(Marks:1)** **Vu-Topper RM**
The outputs of SR latches in elevator state machine are feed back to the _____ gate array for connection to the D-flipflops.
AND

Question No:299 **(Marks:1)** **Vu-Topper RM**
PALs tend to execute _____ logic.
A. SPD
B. SAC
C. SOP
D. SAP

Question No:300 **(Marks:1)** **Vu-Topper RM**
The ROM used by a computer is relatively _____ as it stores few buyers of code used to Boot the Computer system on power up.
Small

Question No:301 **(Marks:1)** **Vu-Topper RM**
Which signal must remain valid in memory write cycle after data is applied at the data input lines and must remain valid for a minimum time duration towed?
WE

Question No:302 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

You have to choose suitable option when your timer will reset by considering this given code:
TRSTATE.CLK = clk;
TMRST: = (TRSTATE = = NSY2) # (TRSTATE = = EWY2);
NSY2 or EWY2

Question No:303 (Marks:1) Vu-Topper RM
A NOR based S-R latch is implemented using _____ gates instead of _____ gates.
NOR, NAND

Question No:304 (Marks:1) Vu-Topper RM
Implementation of Latch is required almost _____ transistor.
Six

Question No:305 (Marks:1) Vu-Topper RM
In distributed mode, for a 1024 x 1024 DRAM memory and a refresh cycle of 8 msec, each of the 1024 rows has to be refreshed in _____ when Distributed refresh is used.
7.8 microsec

Question No:306 (Marks:1) Vu-Topper RM
The NOR logic gate is the same as the operation of the _____ gate with an inverter connected to the output.
NAND

Question No:307 (Marks:1) Vu-Topper RM
The next state table for REQ1, FLOOR1 and OPEN inputs indicates that the _____ can be pressed at any time either on the first floor or the second floor in elevator.
REQ1

Question No:308 (Marks:1) Vu-Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Consider A=1, B=0, C=1. A, B and C represent the input of three bit NAND gate, the output of the NAND gate will be _____.
One

Question No:309 **(Marks:1)** **Vu-Topper RM**
The ABEL Input file can use a _____ instead of the equation to specify the Boolean expressions.
Truth Table

Question No:310 **(Marks:1)** **Vu-Topper RM**
In DRAM read cycle R /W^- signal is activated to read data which is made available on the _____ data line.
D(OUT)

Question No:311 **(Marks:1)** **Vu-Topper RM**
Implementation of the FIFO buffer in _____ is usually takes the form of a circular buffer.
RAM

Question No:312 **(Marks:1)** **Vu-Topper RM**
As data values are written or read from the RAM Stack Pointer Register increments or decrements its contents always pointing to the stack __.
Top

Question No:313 **(Marks:1)** **Vu-Topper RM**
Which one flip-flop has an invalid output state?
SR

Question No:314 **(Marks:1)** **Vu-Topper RM**
The Transition table is very similar to the _____ table.
State

Question No:315 **(Marks:1)** **Vu-Topper RM**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Consider the sum of weight method for converting decimal into binary value, _____ is the highest weight for 411.
256

Question No:316 (Marks:1) Vu-Topper RM
Cin is part of _____ Adder.

A. **Full ok**
B. Half
C. Single
D. Double

Question No:317 (Marks:1) Vu-Topper RM
Flash memories Operation are classified into _____ different operation.
Two

Question No:318 (Marks:1) Vu-Topper RM
A Product term is 0 when_____
Any one literal is 0

Question No:319 (Marks:1) Vu-Topper RM
Device dissipate varying amount of power depending upon the frequency of operation.
CMOS

Question No:320 (Marks:1) Vu-Topper RM
A standard POS from has ____ ters that have all the variables in the domain of the expression.
Sum

Question No:321 (Marks:1) Vu-Topper RM
Which of the following is the example of comparator?
XNOR

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:322 **(Marks:1)** **Vu-Topper RM**

In CMOS 5 Volt series, Input voltage of Logic high signal (VIH) with a ranges from ____ to _____ volts.

A. 0,5

B. 3.5,5 **Google**

C. 0,3.5

D. 4.5,5

Question No:323 **(Marks:1)** **Vu-Topper RM**

The Adjacent 1 S Detector accepts 4-bits input. If ____ adjacent 1S are detected in the input, the output is set to high.

4

Question No:324 **(Marks:1)** **Vu-Topper RM**

DE Morgan's two theorems prove the equivalency of the NAND and _____ gates and the NOR and _____ gates respectively.

Negative-AND, Negative-OR

Question No:325 **(Marks:1)** **Vu-Topper RM**

Consider A=1, B=0,C=1 B and C represent the input of three bit NAND gate, the output of the NAND gate will be.

No output as input is invalid

Question No:326 **(Marks:1)** **Vu-Topper RM**

Sequential circuit memory elements are connected with____.

Clock

Question No:327 **(Marks:1)** **Vu-Topper RM**

In the 32-bit Single Precision Floating Point format, the exponent value _____ is reserved to represent infinity exponents.

A. 98

B. 99

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

C. 255 **ok**
D. 256

Question No:328 **(Marks:1)** **Vu-Topper RM**
The Gray code is different from the unsigned binary code because _____

A. Gray Code is positional code
B. Gray Code ranges from “0” to “9”
C. Gray Code does not support negative values
D. Successive value of Gray code by only one bit

Question No:329 **(Marks:1)** **Vu-Topper RM**
Portable devices that run on batteries use _____circuits that have low power dissipation.

A. Series
B. Parallel
C. Electric
D. Integrated **Page 65** **ok**

Question No:330 **(Marks:1)** **Vu-Topper RM**
The domain of the expression AB’CD+B is
B only

Question No:331 **(Marks:1)** **Vu-Topper RM**
_____ is a single input gate
OR

Question No:332 **(Marks:1)** **Vu-Topper RM**
BCD code of 16 is____.
00010001

Question No:333 **(Marks:1)** **Vu-Topper RM**
The measurable values generally change over a

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What’s app 03224021365

Vu Topper RM

Continuous range

Question No:334 **(Marks:1)** **Vu-Topper RM**
What is the output expression of segment ‘b’ implementation in BCD to 7-segment decoder?

A. B’+C’D’+CD
B. B’ + C’D’ + CD’
C. B + C’D’ + C’D
D. B + C’D’ + CD

Question No:335 **(Marks:1)** **Vu-Topper RM**
It is more suitable to use _____ method in order to simplify the Boolean expression having more than 4 variables.

A. Karnauph map
B. Quin McClusky **Google**
C. De Morgan’s theorem
D. Boolean algebra and Laws

Question No:336 **(Marks:1)** **Vu-Topper RM**
System having memory elements are called_____ circuits.
Sequential circuits **Google**

Question No:337 **(Marks:1)** **Vu-Topper RM**
Demultiplexer is also called _____
Data router
Data selector
Data encoder
Data Distributor **Page 178**

Question No:338 **(Marks:1)** **Vu-Topper RM**
For a 3-to-8 decoder how many 2-to-4 decoders will be required?
Decoders **Google**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What’s app 03224021365

Vu Topper RM

Question No:339 **(Marks:1)** **Vu-Topper RM**

"The complement of a product of variables is equal to the sum of the complements of the variables." is known as:

A. Boolean Expression
B. Boolean Algebra Rule
C. Demorgan's First Theorem **Page 74**
D. Demorgan's Second Theorem

Question No:340 **(Marks:1)** **Vu-Topper RM**

The_____ output has the output of the OR gate connected through an XOR gate to the tri-state buffer.

A. PLA
B. Combinational
C. Combinational input/
D. Programmed Polarity **Page 18**

Question No:341 **(Marks:1)** **Vu-Topper RM**

Quine-McCluskey and K-Map methods are used for _____ of Boolean expression.

A. Addition
B. Subtraction
C. Multiplication
D. Simplification **Page 111**

Question No:342 **(Marks:1)** **Vu-Topper RM**

The series of TTL chips are characterized by their____.

Switching Speed only **Page 61**

Question No:343 **(Marks:1)** **Vu-Topper RM**

When two or more sum terms are multiplied by Boolean multiplication, the result is a _____ expression.

Product-of-sums **POS**

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:344 **(Marks:1)** **Vu-Topper RM**

The logical sum of two or more logical product terms is called _____.

A. POS
B. SOP ok
C. OR Operation
D. NAND operation

Question No:345 **(Marks:1)** **Vu-Topper RM**

-------has fastest switching speed and low power requirements

Advanced low power socket

Question No:346 **(Marks:1)** **Vu-Topper RM**

The multiplexer circuit has …….input (s) and…..output (s)

Multiple, signal

Question No:347 **(Marks:1)** **Vu-Topper RM**

Which of the following 4 bit has five function select inputs?

74XX181

Question No:348 **(Marks:1)** **Vu-Topper RM**

NAND gate is form by connecting _____

A. AND Gate and then OR Gate
B. OR Gate and then AND Gate
C. NOT Gate and then AND Gate
D. AND Gate and then NOT Gate

Question No:349 **(Marks:1)** **Vu-Topper RM**

…..occur when the same clock signal arrive at different at different clock input due to propagation delay

Clock skew

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:350 **(Marks:1)** **Vu-Topper RM**

A non shot mono stable device contain……

NOR gate resister,capacitor and NOT gate

Question No:351 **(Marks:1)** **Vu-Topper RM**

"74ALS" stands for _____

A. Advanced low power Schottky TTL

B. Advanced Low-frequency Schottky TTL

C. Advanced Low-dissipation Schottky TTL

D. Advanced Low-propagation Schottky TTL

Question No:352 **(Marks:1)** **Vu-Topper RM**

Which one is true

A. Powe consumption of TTL is higher from CMOS

B. Power consumption of CMOS is higher than TTL

C. Both TTL and CMOS have same power consumption

D. Power consumption of both CMOS and TTL depends on no. of gates in circuit.

Question No:353 **(Marks:1)** **Vu-Topper RM**

The complement of product of variable is equal to the sum of complement of variable is known as

DeMorgan's second theorem

Question No:354 **(Marks:1)** **Vu-Topper RM**

The below are Integrated Circuit Technologies except _____.

A. TTL

B. ECL

C. PMOS

D. ETMOS

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Question No:355 **(Marks:1)** **Vu-Topper RM**
Which of the following is not correct method of grouping
On corners

Question No:356 **(Marks:1)** **Vu-Topper RM**
The minimum time required for the input logic levels to remain stable before the clock transition occurs is known as the
Set- up time

Question No:357 **(Marks:1)** **Vu-Topper RM**
A one- shot mono-stable device contains=
NOR gate, Resistor, capacitor and NOT Gate

Question No:358 **(Marks:1)** **Vu-Topper RM**
Two 2-input ,4-bit multiplexers 74x157 can be connected to implement a…multiplexer.
2- input,8bit

Question No:359 **(Marks:1)** **Vu-Topper RM**
Canonical from is a unique way of representing
Boolean Expression

Question No:360 **(Marks:1)** **Vu-Topper RM**
The 4-variable K-Map has _____ rows and _____ columns of cells.

A. 2,4
B. 4,4 **ok**
C. 2,2
D. 4,2

Question No:361 **(Marks:1)** **Vu-Topper RM**
Modern information transmission techniques are relying more on _____ transmission.

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

A. Digital **Page 5**
B. Analogue
C. None of given
D. Both Digital and Analogue

Question No:362 **(Marks:1)** **Vu-Topper RM**
Which number is added for correction purpose to an incorrect result obtained in BCD addition?
A. 0001
B. 0110 **Page 35**
C. 1001
D. 0011

Question No:363 **(Marks:1)** **Vu-Topper RM**
The switching speed of CMOS is now _____.
A. Slower than TTL
B. Twice that of TTL
C. Three times that of TTL
D. Competitive with TTL

Question No:364 **(Marks:1)** **Vu-Topper RM**
Gray code of 8 is:
A. 1100 **Google**
B. 1000
C. 0000
D. 0100

Question No:365 **(Marks:1)** **Vu-Topper RM**
The number "1259" may belong to _____ number system.
A. Binary number system
B. Octal or Decimal system.
C. Binary or Hexadecimal system
D. Decimal or Hexadecimal system

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

Question No:366 **(Marks:1)** **Vu-Topper RM**

The _____ Gate is used in applications where the output signal is a 1 when any one input is a 1.

A. OR **Page 43**

B. XOR

C. AND

D. NOT

Question No:367 **(Marks:1)** **Vu-Topper RM**

_____ and _____ Gates are used to detect dissimilar and similar inputs respectively.

A. OR, XOR

B. OR, Inverter

C. NOT, XNOR

D. XOR, XNOR **Page 53**

Question No:368 **(Marks:1)** **Vu-Topper RM**

The boolean expression X = AB + CD represents

A. an exclusive-Or

B. a 4-input AND gate

C. two ORs ANDed together

D. two ANDs ORed together **ok**

Question No:369 **(Marks:1)** **Vu-Topper RM**

The range of Excess-8 code is from _____ to _____

A. +8 to -7

B. +9 to -8

C. +7 to -8

D. -9 to +8

Question No:370 **(Marks:1)** **Vu-Topper RM**

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

If two numbers in BCD representation generate an invalid BCD number then the binary _____ is added to the result.

A. 1001
B. 1000
C. 1111
D. 0011

Question No:371 (Marks:1) Vu-Topper RM

A function represented by an expression in _____ form can be readily programmed.

A. Boolean
B. Standard SOP Page 85
C. Non-standard SOP

Question No:372 (Marks:1) Vu-Topper RM

The output of an exclusive-OR gate is HIGH if _____.

A. All inputs are LOW
B. All inputs are HIGH
C. All inputs are unequal
D. All inputs are DON'T care

Question No:373 (Marks:1) Vu-Topper RM

Which of the following is the hexadecimal equivalent of 39?

A. 27 Google
B. 28
C. 29
D. 30

Question No:374 (Marks:1) Vu-Topper RM

In 15 digit decimal floating point format, the biased exponent value _____ can be used to represent the number zero whatever the value of the mantissa.

A. 0

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

B. 00 **Google**
C. 000
D. 0000

Question No:375 **(Marks:1)** **Vu-Topper RM**
To implement the decoder circuit, having _____ inputs and _____outputs, function tables have to be drawn which represent the output status of each output line for all combinations of inputs.
A. 1 and 9
B. 4 and 7 **Page 104** **ok**
C. 3 and 8
D. 5 and 6

Question No:376 **(Marks:1)** **Vu-Topper RM**
The output of an AND gate with three inputs, A, B, and C, is HIGH when _____.
A=1, B=0, C=1
A=1, B=1, C=1
A=1, B=1, C=0
A=0, B=0, C=0

Question No:377 **(Marks:1)** **Vu-Topper RM**
To represent the signal digitally the signal is sampled at _____ and _____ intervals.
A. Fixed, Equal **Google**
B. Unfixed, Equal
C. Fixed, Un-equal
D. Unfixed, Un-equal

Question No:378 **(Marks:1)** **Vu-Topper RM**
In 32-bit Single-Precision Floating Point format representation the range of exponent value is from _____ to _____
A. +127 to -126

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

B. +255 to – 254
C. +256 to -255
D. +128 to -254

Question No:379 (Marks:1) Vu-Topper RM
In 15 digit decimal floating point format, the biased exponent value _____ can be used to represent the number infinity whatever the value of mantissa.
A. 99 ok
B. 98
C. 256
D. 255

Question No:380 (Marks:1) Vu-Topper RM
The values that exceed the specified range can not be correctly represented and are considered as _____
A. Carry
B. Parity
C. Overflow
D. Sign value

Question No:381 (Marks:1) Vu-Topper RM
A + B = B + A is _____
A. Distributive Law
B. Associative Law
C. Demorgan's Law
D. Commutative Law Google

Question No:382 (Marks:1) Vu-Topper RM
NOR gate is form by connecting _____
A. OR Gate and then AND Gate
B. AND Gate and then OR Gate
C. NOT Gate and then OR Gate

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

D. OR Gate and then NOT Gate

Question No:383 (Marks:1) Vu-Topper RM

The digital circuits operate with which combination of values given below?

A. 0 volts, 0 volts
B. -5 volts, 0 volts
C. +5 volts, 0 volts
D. -5 volts, +5 volts

Question No:384 (Marks:1) Vu-Topper RM

Demorgan's two theorems prove the equivalency of the NAND and _____ gates and the NOR and _____ gates respectively.

A. Positive-OR, Positive-AND
B. Negative-AND, Positive-OR
C. Positive-OR, Negative-AND
D. Negative-OR, Negative-AND Page 74 ok

Question No:385 (Marks:1) Vu-Topper RM

Karnaugh Map Array is considered to be wrapped around where all sides are _____ to each other.

A. Serial
B. Parallel
C. Opposite
D. Adjacent Page 90

Question No:386 (Marks:1) Vu-Topper RM

The Boolean expression (AB'CD')is_____

A. a sumterm
B. a maxterm
C. a literal term
D. a product term

Question No:387 (Marks:1) Vu-Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper PM

Which circuit is used in 7-segments display?

A. BCD code ok

B. Gray code

C. Binary code

D. Excess code

Question No:388 (Marks:1) Vu-Topper RM

2-Input, 8-bit Multiplexer, by setting the S input to logic ____ the __ inputs of both the multiplexers are selected.

A. Low, B

B. High, C

C. High, B

D. Low, C

Question No:389 (Marks:1) Vu-Topper RM

A 5-variable karnaugh map has

A. Eight cells

B. Sixteen cells

C. Sixty four cells

D. Thirty two cells ok

Question No:390 (Marks:1) Vu-Topper RM

Demultiplexer can also be used as

A. Encoder

B. Decoder Google

C. Deselector

D. Inverse multiplexer

Question No:391 (Marks:1) Vu-Topper RM

Addition of two BCD digits requires two ____ Parallel Adder Circuits.

A. 2-bit

B. 4-bit Page 141 ok

C. 8-bit

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

Vu Topper RM

D. 16-bi

Question No:392 (Marks:1) Vu-Topper RM

Which logical gate is used to connect the two active-low enable inputs of the two 4-input multiplexers to form the C input of the 8-input multiplexer?

A. OR gate
B. Xor gate
C. Not gate Page 170 ok
D. And gate

Question No:393 (Marks:1) Vu-Topper RM

The multiplexer has a/an _____ enable signal that enables/disables the four AND gates.

A. Dependent active-low
B. Dependent active-high
C. Independent active-high
D. Independent active-low Page 168 ok

Question No:394 (Marks:1) Vu-Topper RM

2's complement of 5 is

A. 1101
B. 1011 Page 44 ok
C. 0101
D. 100

Question No:395 (Marks:1) Vu-Topper RM

In iterative circuit implementation of A=B function, If input A0 is equal to input B0, the ____ gate output in Module 0 is a 1 which is passed on to Module 1 through its Cascading input.

A. OR
B. NOR
C. XOR

Vu Topper RM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365

D. XNOR Page 155 ok

Question No:396 (Marks:1) Vu-Topper RM

Which statement below best describes the function of decoder?

A. Decoders are used to prevent improper operation of digital systems
B. Decoders make it possible for one brand of computer to talk to another
C. A decoder will convert a decimal number into the proper binary equivalent Google ok
D. A decoder will convert a binary number into a corresponding output representing something meaningful

Question No:397 (Marks:1) Vu-Topper RM

ABEL is an acronym for

A. None of the given options
B. Advanced Boolean Equation Language
C. Advanced Boolean Expression Language Page 203
D. Advanced Broadband Enabled Longitude

Visit My YouTube Channel
For More Important Notes
Channel Name = #VuTopperRM

بری صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

For More Help Contact What's app 03224021365