computer knowledge-vlsi mcq questions-paper1

VLSI is an acronym for ____?

A Very large Scale Integration

B Varying large Scale Integration

C Varying large Scale Integrity

D None of the above

Answer : A

which below option is used form integrated circuit VLSI technology?

A diodes

B transistors

C switches

D triodes

Answer : B

MOSFETs possess _____.

A Low packing density

B High packing density

C Poor packing density

D None of the above

Answer : B

Which among the following is a process of transforming design entry information of the circuit into a set of logic equations?

A Simulation

B Optimization

C Synthesis

D Verification

Answer : C

Integrated chip with lesser than 10 transistors is known as _____.

A Small-scale integration

B Medium-scale integration

C Large-scale integration

D Very large-scale integration

Answer : A

_____ is the fundamental architecture block or element of a target PLD.

A System Partitioning

B Pre-layout Simulation

C Logic cell

D Post-layout Simulation

Answer : C

How many gates are present on each chip for Medium scale integration?

A 3-30

B 30-300

C 300-3000

D All the above

Answer : B

Logic design of VLSI is used_____

A LIFO

B FIFO

C LILO

D FILO

Answer : B

In VLSI design, which process deals with the determination of resistance & capacitance of interconnections?

A Floorplanning

B Extraction

C Placement & Routing

D Testing

Answer : B

Which type of MOSFET exhibits no current at zero gate voltage?

A Depletion MOSFET

B Enhancement MOSFET

C Both A & B

D None of the above

Answer : B

The metal preferred in VLSI for contacting is _____.

A Antimony

B Aluminum

C Germanium

D Silicon

Answer : B

Which type of simulation mode is used to check the timing performance of a design?

A Behavioural
B Switch-level
C Gate-level
D Transistor-level

Answer : C

Doping can also be done by using _____.

A Contact metallization
B Ion implantation
C Oxidation
D Diffusion

Answer : B

In the simulation process, which step specifies the conversion of VHDL intermediate code so that it can be used by the simulator?

A Compilation
B Elaboration
C Initialization
D Execution

Answer : B

MOSFET is a _____ device.

A Uni-polar
B Bipolar
C Complementary
D Supplementary

Answer : A

The VLSI design flow starts with:

A RTL synthesis
B Library mapping
C Product specifications
D None of the above

Answer : C

Register transfer level description specifies all of the registers in a design & _____ logic between them.

A Sequential
B Combinational
C Both a and b
D None of the above

Answer : B

Which model is used for scaling?

A constant electric and voltage scaling
B constant current model
C constant voltage scaling
D constant electric scaling

Answer : A

Which is the high level representation of VLSI design?

A Logic design
B Functional design
C HDL program
D Problem statement

Answer : D

Depletion mode n MOSFETs have _____ threshold voltage.

A Positive
B Negative
C Zero
D None of the above

Answer : B