

سری سوال: یک ۱

زمان آزمون (دقیقه): تستی: ۷۰ تشریحی: ۰

تعداد سوالات: تستی: ۳۰ تشریحی: ۰

عنوان درس: زبان تخصصی

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1-what is the meaning for the word "electronics"?

1. the branch of science and technology that manage the flow of power
2. electronics deals with digital circuits
3. the branch of science and technology that deals with conductor or superconductor
4. the branch of science and technology that deals with the use of component to control the flow of information

2-what is the meaning of "node" in this sentence: " the sum of the currents into any node of circuit is zero"?

1. closed path or circuit
2. junction point within a network
3. intersection
4. loop

3-Which of the following sentences defines KVL?

1. The sum of the voltage drops around any loop is zero.
2. The sum of the currents into any node of a circuit is zero.
3. The sum of the voltage drops around any circuit is zero.
4. The sum of the currents drops around any loop is zero.

4-Which one is NOT a basic, linear analog circuit component?

1. Resistor
2. Capacitor
3. Inductor
4. Diode

5-What is multimeter?

1. It is an electrical measuring instrument which is capable of measuring impedance.
2. It is an electrical measuring instrument which is capable of measuring electrical power, capacity.
3. It is an electrical measuring instrument which is capable of measuring voltage, current and resistance.
4. It is an electrical measuring instrument which is capable of measuring capacity, impedance.

6-The basic measuring devise in a digital multimeter is an electronic circuit which converts ..... Into .....

1. An input DC voltage – a digital waveform
2. An input AC voltage – a digital waveform
3. A digital waveform – an input dc voltage
4. A digital waveform – An input AC voltage

7-When an electron jumps to the conduction band a vacancy is called .....

1. A cavity
2. A hole
3. A fossa
4. A puddle



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8-The process that increases the number of current carriers is called .....

1. Concentration
2. Doping
3. Purity
4. Condensation

9-A large expose surface area on one layer of the semiconductive material permits the ..... to be emitted as visible light. This process is called .....

1. Diodes – electroluminescence
2. LEDs – electroconductive
3. Photons – electroluminescence
4. Photons –electroconductive

10- What is the meaning of “gain” in “the collector current is much larger than the base current. This is the reason transistors exhibit current gain”?

1. Stretch
2. Development
3. Amplification
4. Decrease

11-In what manner does the MOSFET differ from the JFET?

1. JFET has no pn junction structure.
2. MOSFET use both electron and hole current.
3. JFET use both electron and hole current.
4. MOSFET has no pn junction structure

12-Common emitting amplifiers exhibit ..... gain and ..... gain.

1. High voltage – high current
2. Low voltage – high current
3. High voltage – low current
4. Low voltage – low current

13-Which one is NOT a BJT amplifier?

1. The common – emitter amplifier
2. The common – drain amplifier
3. The common – collector amplifier
4. The common – base amplifier

14-What is “op-amp” (an operational amplifier)?

1. A very low gain differential amplifier with low input impedance and high output impedance.
2. A very high gain differential amplifier with low input impedance and high output impedance.
3. A very low gain differential amplifier with high input impedance and low output impedance.
4. A very high gain differential amplifier with high input impedance and low output impedance.

15-The resulting output signal in common-mode operation .....

1. Will be zero
2. Will be high
3. Is opposite
4. Is complete

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16-Integrated circuits are divided into two main groups according to the way they are built, they are?

1. Monolithic and analog
2. Monolithic and hybrid
3. Analog and digital
4. Analog and hybrid

17-Which of the following devices does not make use of analog ICs?

1. Signal generator
2. Voltage regulator
3. Test increment
4. Communication switching

18-What are the basic operation gates?

1. AND, OR, NOT
2. AND, OR, NOT and FLIP-FLOP
3. AND, OR and NOR
4. OR, NOR and FLIP-FLOP

19-A bubble on the output side of the NAND gate denotes .....

1. NAND operation, inversion or realization
2. NOT operation, inversion or complementation
3. Sufficient realization of any logical expression
4. Inversion in digital and analog circuits

20-Synchronous circuits are also known as :

1. Asynchronous circuits
2. System clocks
3. Clocked-sequential circuits
4. Combinational circuits

21-Sequential circuits are categorized.....

1. According to timing of the their signals
2. Based on their quality
3. Into preset, set and postset
4. Regarding their feedback in operation

22-Which one is named as a second industrial revolution?

1. Integrated circuits
2. Transistors
3. Amplifiers
4. Diodes

23-Some MSI and LSI packages are made of ceramic because they have better ..... dissipation capabilities.

1. Electrical
2. Thermal
3. Chemical
4. Physical

24-What is NOT the meaning of "defect" in this sentence: "in such large sizes there is a significant probability of defects"?

1. Fault
2. Destruction
3. Deficiency
4. Problem

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25- MOS RAM cells are suitable to be used in large RAM IC's due to .....

1. Adaptable bits used in the circuit
2. Their simplicity and small size
3. Logic levels transferred in the circuit
4. Processing dynamic and static manner

26- What is the meaning of the word "increment" in this sentence: "the basic arithmetic instructions are thread, subtract, increment and decrement instructions."?

1. A regular decrease
2. A sudden increase
3. A regular increase
4. A sudden decrease

27- Each microprocessor manufacturer has its own unique architecture for the register section, which one is NOT a common and widely used register?

1. Instruction register
2. Program counter
3. System clock
4. Accumulator

28- what is the meaning of the word "constitute" in this sentence: "multivibrator constitute an important class of plus and switching circuit"?

1. Sequential
2. Start
3. Set up
4. Trigger

29- Multivibrators can be constructed in ..... configurations

1. Three
2. Four
3. Two
4. Six

30- Television contains both electrical ..... and .....

1. components - circuits
2. circuits - systems
3. components - systems
4. circuits - loops