

ΤΕΙ-Α
ΣΤΕΦ
ΤΜΗΜΑ ΗΛΕΚΤΡΟΝΙΚΗΣ
ΜΑΘΗΜΑ: ΑΓΓΛΙΚΑ ΕΙΔΙΚΟΤΗΤΑΣ
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ΚΑΘΗΓΗΤΡΙΑ: Ε. ΚΑΠΕΛΛΟΥ

ΟΝΟΜΑΤΕΠΩΝΥΜΟ ΣΠΟΥΔΑΣΤΗ/ΡΙΑΣ:.....

A.M.:.....

I. Combine the half statements in Column A with those in Column B to form correct and complete sentences.

Column A

1. To extract required information from a set of signals, the observer,
2. A combinational circuit consists of logic gates
3. In the extreme, the control signal can be used to cause the current in the third terminal to change from zero to a large value,
4. Most practical amplifiers are alternating-current amplifiers
5. The frequencies that separate the pass and attenuation bands are the cut-off frequencies,

Column B

- a. _____ whose outputs at any time are determined directly from the present combination of inputs.
- b. _____ be it a human or a machine, invariably needs to process the signal in some predetermined manner.
- c. _____ thus allowing the device to act as a switch, which is the basis for the realization of the logic inverter, the basic element of digital circuits.
- d. _____ which have the symbols f_c if there is only one cut-off frequency or f_1, f_2 if more than one.
- e. _____ and consist of several small-gain amplifier stages coupled together to produce a substantial overall gain.

II. Match the terms with their definitions.

1. Comparator
 2. Transmittance
 3. Energy levels
 4. Scaler
 5. Gain
- a. _____ A device, commonly used in counting circuits, that produces an output pulse whenever a designated number of input pulses have been received
 - b. _____ A measure of the ability of an electronic circuit to increase the magnitude of a given electrical input parameter
 - c. _____ A digital circuit or module used to compare the values of two binary numbers
 - d. _____ The possible values of energy of an atom or molecule
 - e. _____ The state of conduction through a switch network

III. Give the question form of the following sentences.

Example: Logical circuits had their beginning well over one hundred years ago.

Answer: Did logical circuits have their beginning well over one hundred years ago ?

1. The addition of a transistor to an IC increases the cost by less than 50 cents.
2. The basic material for building an integrated circuit is a silicon crystal.
3. The oldest technology for realizing filters made use of inductors and capacitors.
4. A linear-circuit filter can be represented by the general two-port network.
5. The preamplifier in the home stereo system has been an example of a voltage amplifier.

1. _____
2. _____
3. _____
4. _____
5. _____

IV. Turn the following sentences into the Passive Voice.

1. At the present time, we perform more and more of the signal processing functions digitally.
2. A CMOS logic circuit has used complementary MOS field-effect transistors to provide the basic logic functions.
3. The choice of number system to represent the signal samples affected the type of digital signal produced.
4. Fan out specifies the number of standard loads that the output of a gate can drive.
5. The impurity atoms can easily release these excess electrons.

1. _____
2. _____
3. _____
4. _____
5. _____

V. Give the full names of the following abbreviations.

ECL = _____

BJT = _____

MSI = _____

Op-Amp = _____

TTL = _____