

Department of technology

Grade : third year students (electrical engineering)

full name: .....

Module: English

### Text

In the engineering and technical communities, the terms electrical and electronic are often conflated due to the poor understanding of the subtle yet significant distinctions between them. Understanding the difference is important not only because the two terms have differing meanings, but because of the tendency to abstract or abbreviate very particular language during technical conversation. A misunderstanding or miscommunication to an engineer could mean the difference between building an electrical toaster or an electronic toaster.

Electrical devices take the energy of electrical current, the flow of electrons in a conductor, and transform it in simple ways into some other form of energy—most likely light, heat, or motion. An electric device is one that directly uses electrical energy to perform a task. In contrast, electronic devices do much more. Instead of just converting electrical energy into light, heat, or motion, electronic devices are designed to manipulate the electrical current in ways that adds meaningful information to the current. For example, an electronic toaster uses the same heating elements, springs, and bread racks as an electric toaster, but may include a variety of more complex components such as an electronic display panel that shows you the progress of your toasting, or an electronic thermostat that attempts to keep the heat at just the right temperature. Electronics refers to technology that works by controlling the motion of electrons in ways that go beyond electrodynamics properties like voltage and current.

Typically, if something uses electricity merely as energy, it is electrical. If it uses electricity as the medium for manipulating information, it is almost surely electronic. Electrical and Electronic devices are comprised of different but overlapping categories but, in short, all electronic devices are also electrical devices, it is a subset.

adopted and adapted

part one:

1/ say whether the following sentences are true/ false (3pts)

a/ there is a trivia difference between electronic and electrical engineering.....

b/ monitoring the motion of electrons in voltage and current.....

c/ all electronic devices are subfields of electrical devices.....

2/ based on your background knowledge answer the first question from your own and the second question from the text (2pts)

a/ name other important subjects that you study within electrical engineering?

.....

b/ what is the difference between electrical and electronic devices?

.....  
.....  
3/ find in the text words that are close/ opposite in meaning to the following words (2pts)

Combined=.....

Apparatuses =.....

plain=/=.....

general=/=.....

Part two:

1/ complete the following sentence (4pts)

a/ Dad said to Pankaj, "I will not give you pocket money."

.....  
b/ He said to me, "How much money do you have?"

.....  
c/ The teacher said to Rahman, "Stand up right now and don't make noise."

.....  
d/ He said to us, "Will you come for the meeting?"

.....  
2 translate the following words (4pts)

1/conductors and insulators.....

2/amplifier operational .....

3/static resistance.....

4/spectrum.....

3/ fill in the gaps (5pts)

Force- static- charges- sign- insulators- application- signals

..... electricity is a familiar electric phenomenon in which charged particles are transferred from one body to another. For example, if two objects are rubbed together, especially if the objects are ..... and the surrounding air is dry, the objects acquire equal and opposite ..... and an attractive force develops between them. The object that loses electrons becomes positively charged, and the other becomes negatively charged. The ..... is simply the attraction between charges of opposite .....

Best of luck

Correction of the second English exam

( third year students electrical engineering)

part one:

1/ say whether the following sentences are true/ false (3pts)

A/ false                      b/ true                      c/ true

2/ based on your background knowledge answer the first question from your own and the second question from the text (2pts)

a/ Any complete answer is considered correct

b/ Electrical devices take the energy of electrical current, the flow of electrons in a conductor, and transform it in simple ways into some other form of energy—most likely light, heat, or motion. An electric device is one that directly uses electrical energy to perform a task. In contrast, electronic devices do much more. Instead of just converting electrical energy into light, heat, or motion, electronic devices are designed to manipulate the electrical current in ways that adds meaningful information to the current.

3/ find in the text words that are close/ opposite in meaning to the following words (2pts)

Combined=.....conflated  
general=/=.....particular

Apparatuses=devices

plain=/=...complex

Part two:

1/ complete the following sentence (4pts)

a/ Dad said to Pankaj that he would not give his pocket money.

b/ He asked me How much money I had.

c/ The teacher ordered Rahman to Stand up right then and not to make noise

d/ He asked us if we would come for the meeting.

2 translate the following words (4pts)

1/conductors and insulators      النوافل والعوازل

2/amplifier operational      المضخم/ المكبر العملياتي

3/static resistance      مقاومة ثابتة

4/spectrum      مطياف

3/ fill in the gaps (5pts)

static<sup>1</sup> - charges<sup>3</sup> - Force<sup>4</sup> - insulators<sup>2</sup> - sign<sup>5</sup>