University of Bejaia Department of Technology Second year Technical Science 2009/2010

## First term exam

Current moves from a point of high potential energy to one of low potential. It can only do so if there is a path for it to follow. This path is called an electric circuit. All circuits contain four elements: a source, a load, a transmission system and a control.

The source provides the electromotive force. This establishes the difference in potential which makes current flow possible. The source can be any device which supplies electrical energy. For example, it may be a generator or a battery.

The load converts the electrical energy from the source into some other forms of energy. For instance, a lamp changes electrical energy into light and heat. The load can be any electrical device.

The transmission system conducts the current round the circuit. Any conductor can be part of a transmission system. Most systems consist of wires. It is often possible, however, for the metal frame of a unit to be one section of its transmission system. For example, the metal chassis of many electrical devices are used to conduct current. Similarly the body of a car is part of its electrical transmission system.

The control regulates the current flow in the circuit. It may control the current by limiting it, as does a rheostat, or by interrupting it, as does a switch.

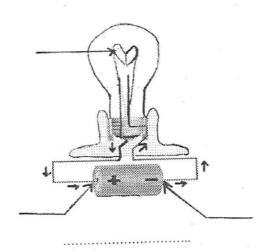
Department of Technology First Name:.... Second year Technical Science Group:..... 2009/2010 First term exam I) - Reading comprehension: Answer the following questions according to the text: A) - Say whether the following statements are: True/ False /Not mentioned (2 pts) 1) - Transmission systems must consist wires..... 2) - A rheostat may be used as a control..... 3) - Variable resistor varies the current in a circuit..... 4) - A difference in potential is required before current can flow in a circuit..... B)- Answer the following questions: (3pts) 1) - Give a suitable title to the text. ..... 2) - Quote the different elements of any electric circuit. ..... 3) - What does the source provide? ...... II) - Lexis: A)-Find in the text words that are similar in meaning to the following: (1,5 pts) - Flows: ..... -Controls: ..... -Changes: ..... B) - Find in the text words that are opposite in meaning to the following: (1,5 pts) -Low:..... - Continuing: ..... -Gloom: ...... III- Syntax: A)-Give the correct form to the verbs between brackets: (2 pts) 1- Jane ...... (not / drink ) tea very often. 2- I don't understand this word. What ...... (this word / mean)? 3- What .....( you /do)?

4- I still don't know what to do. I ..... (not / decide ) yet.

Surname: .....

University of Bejaia

- B) Fill in been or gone: (1,5 pts)
- 1) Hello! I've just ..... to the store. Look all the things I've bought.
- 2) Jane isn't here at the moment. She's ......to the store.
- 3) Tom is back from his vacation. He has .....to Italy.
- $\operatorname{IV-}$  Give the appropriate title to following figure and specify the names of its different parts:( 2pts)



## V)-Translate into French the following terms:

- Switch (0,5pt): - Path (1pt): - cancel (0,5pt): - frame (1pt): - Flashlight (1pt): - converted (0,5pt): - conver

All the best, your teachers.

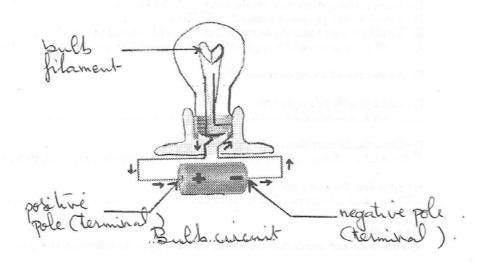
University of Bejaia Department of Technology Second year Technical Science 2009/2010

Surn	ame:				•	•		•		
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<u>First term exam</u>
I) - Reading comprehension: Answer the following questions according to the text:
A) - Say whether the following statements are : True/ False /Not mentioned (2 pts)
1) - Transmission systems must consist wires. False 2) - A rheostat may be used as a control. Thue
B)- Answer the following questions: (3pts)
1) - Give a suitable title to the text
2) - Quote the different elements of any electric circuit. Source transmission system control leaded.
3) - What does the source provide? The electron other force
II) - Lexis: A)-Find in the text words that are similar in meaning to the following: (1,5 pts)
- Flows: merits -Controls: regulates -Changes: contents
B) - Find in the text words that are opposite in meaning to the following: (1,5 pts)
-Low: high Continuing: intersupting -Gloom: light
III- Syntax:
A)-Give the correct form to the verbs between brackets: (2 pts)
1- Jane (not / drink ) tea very often.
2- I don't understand this word. What (this word mean)?
3- What(you/do)?
4- I still don't know what to do. I (not / decide ) yet.

- B) Fill in been or gone: (1,5 pts)
- 1) Hello! I've just . Lock all the things I've bought.
- 2) Jane isn't here at the moment. She's fond the store.
- 3) Tom is back from his vacation. He has ...been. to Italy.

IV- Give the appropriate title to following figure and specify the names of its different parts:(2pts)



V)-Translate into French the following terms:

- Switch (0,5pt): interruptem

- Load (1pt): Changl.....
- frame (1pt): Charses.

-copper wires (1pt): .fils...la cuive

- Path (1pt) ... chemin (senties)

-cancel (0,5pt):..amuller

-Flashlight (1pt): torche

- converted (0,5pt): Consider

All the best, your teachers.