



Leaving Certificate Examination, 2010

Technology

Ordinary Level

Friday, 25 June
Afternoon, 2:00 - 4:00

There are **three** sections in this paper. Attempt **all three** Sections.

Section A: Core - Short-answer questions.

Section B: Core - Long-answer questions.

Section C: Options - Long-answer questions.

Section A - Core (72 marks)

Instructions:

- (a) Answer **any nine** questions in the spaces provided.
All questions in Section A carry 8 marks.
- (b) Draw all sketches in pencil.
- (c) Hand up this booklet at the end of the examination.
- (d) Write your examination number in the box provided
and on all other pages used.

Centre Number

Section	Mark
Section A	
Section B	
Section C	
Total	
Grade	

Examination Number:

Section A. Answer **any nine** questions. All questions carry 8 marks.

1.

(i) Solder is an alloy of two metals. Which **two** metals are typically used to produce solder?

- 1. _____
- 2. _____

(ii) List **two** safety precautions you should observe when soldering.

- 1. _____
- 2. _____



2.

Methods of communication have evolved rapidly in recent years to include social networking. Briefly describe **one** positive impact and **one** negative impact of social networking sites.



Positive Impact: _____

Negative Impact: _____

3.

The graphics show a DC motor and a solar panel. Name **one** energy conversion which takes place in **each** component.

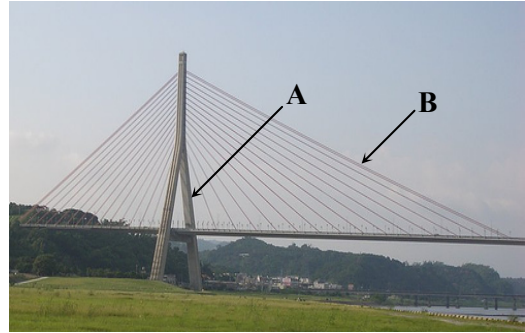
DC Motor
Energy conversion:

Solar Panel
Energy conversion:



4.

The image shows a cable-stayed bridge. Identify the type of **force** acting on the elements **A** and **B** of the bridge.



A: _____

B: _____

Give **one** advantage of this type of bridge when compared to a traditional arched bridge.

5.

What is the purpose of *Research and Investigation* in relation to project design?

List **two** methods that can be used to facilitate Research and Investigation.

1. _____

2. _____

6.

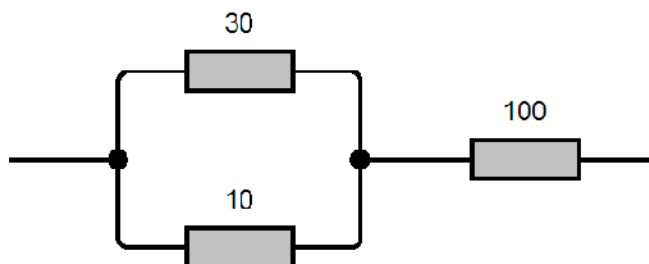


Outline the function of the gold band on the resistor shown.

Function: _____

Calculate the total resistance (**R**) in the following resistor arrangement.

R: _____

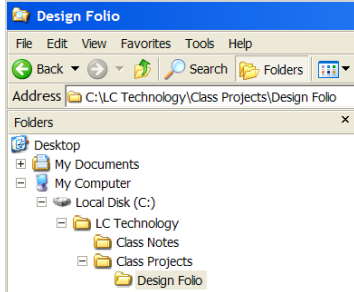


7.

File management is very important when saving files on a computer.
Outline **two** reasons why file management is important.

Reason 1. _____

Reason 2. _____



Identify the root folder and **one** sub folder in a student's *Leaving Certificate Technology* folder on the C drive.

Root Folder: _____

Sub-Folder: _____

8.

Wavebob is an Irish developed example of how wave energy can be harnessed to contribute to the future energy needs of this country.

Outline **two** other innovative technologies that can help reduce the demand for fossil fuels.

1. _____

2. _____



9.

In the box provided, make a well-proportioned 3D sketch of the electrical socket shown.



10.

Technology has been used to improve sports shoes and thereby enhance the performance of athletes.

Give **two** examples of how technology has improved sports shoes.

1: _____

2: _____



11.

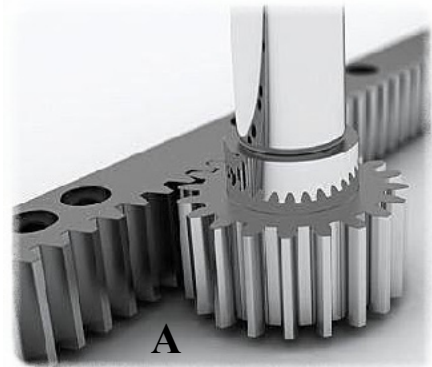
Name the gear arrangement at A.

A: _____

Give **two** examples of where this mechanism could be used.

1: _____

2: _____



12.

Use **two** graphic techniques to enhance the graphic representation of the games controller shown.



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