



Leaving Certificate Examination, 2011

Technology

Ordinary Level

Friday, 24 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) Modern mobile phones have become multifunctional devices. Name **two** functions they offer other than making phone calls.



- (ii) Recently the mobile phone has developed into the Smart Phone. Name **two** applications (apps) that can be used with a Smart Phone.

1. _____

2. _____

2.



- (i) Concrete is a *composite* material. State the meaning of this term.

- (ii) Many *precast concrete* garden and building products can be purchased. Give **two** examples of such products.

1. _____

2. _____

3.

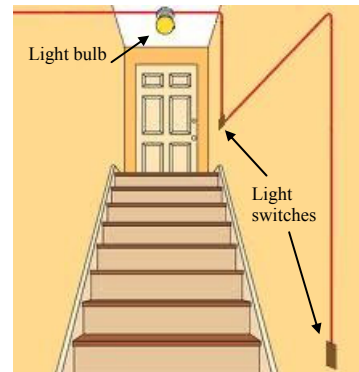
In the box provided, draw the symbol for an **OR** gate suitable to activate the hall light from either switch.



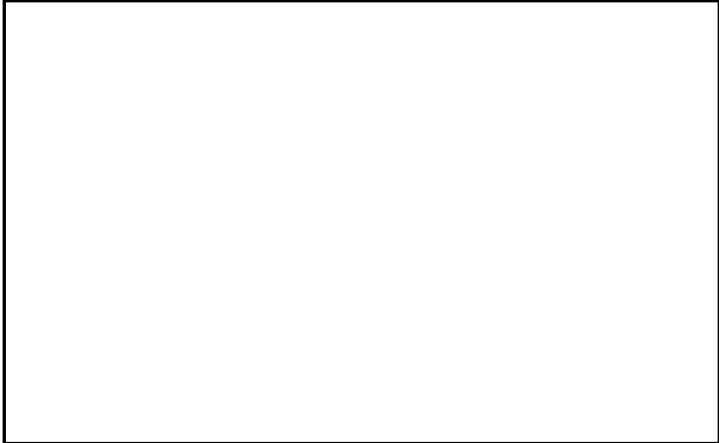
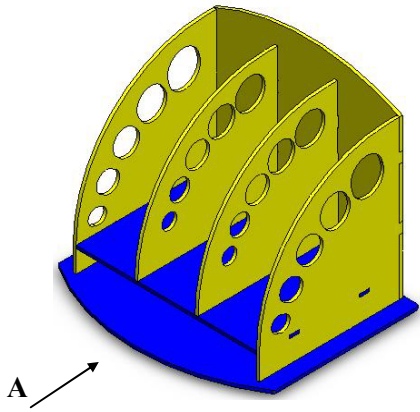
OR gate

Complete the truth table for this logic gate.

Switch A	Switch B	Light Bulb
0	0	0



4.



In the box provided, make a well-proportioned 2D sketch of the storage unit when viewed in the direction of arrow A.

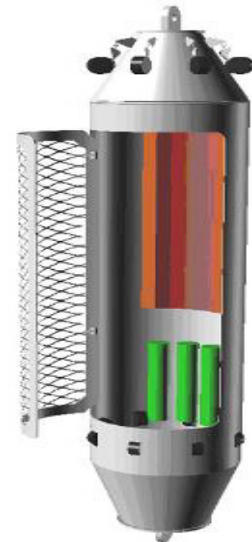
5.

The image shows the rescue pod used in the Chilean mining rescue.

Suggest **two** questions that might be asked during the design stage of this rescue pod.

Question 1:

Question 2:



6.

Name the class of lever shown in each of the graphics A and B.

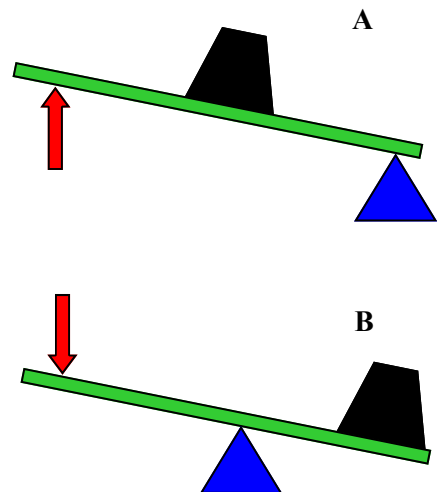
A: _____

B: _____

Give **one** everyday example of each class of lever.

A: _____

B: _____



7.

METER NO.	METER READINGS	ELECTRICITY USED	METER READING TYPES
2000001234	6010	945	<ul style="list-style-type: none"> ▲ Actual reading ● Customer reading ■ Estimated reading

Description	Units	Rate	AMOUNT €
Discount Tariff - Urban Day			
Standing Charge	61 days	25.20 cent/day	15.42
24 hour Units	945	14.10 cent/kWh	133.25
Direct Debit Discount		12%	15.99 CR
Total excluding V.A.T.			132.86
V.A.T. @ 13.5%			17.94
Invoice Total			150.82

Electricity used for domestic purposes is measured in **kWh**. Explain the abbreviation **kWh**.

kWh: _____

On a monthly bill, a customer used 777 units of electricity at 14.10 cent/kWh. If there is a standing charge of €21.50, calculate the total amount due for payment excluding VAT.

Total: _____

8. Students can enhance their project work by carefully selecting appropriate materials. Give **two** benefits of choosing acrylic as a material for project work.

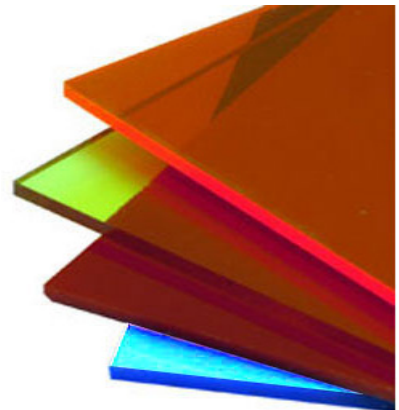
1. _____

2. _____

Outline **two** Health and Safety precautions you should observe when polishing the edge of a piece of acrylic.

1. _____

2. _____



9.

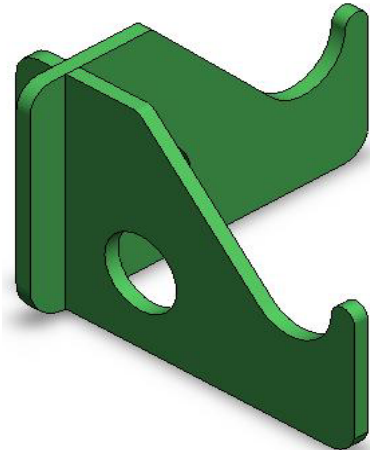
Explain the meaning of this label when it is displayed on a product.



10.

The iPhone Holder shown is to be manufactured from acrylic.
List **four** main steps required to manufacture this item.

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



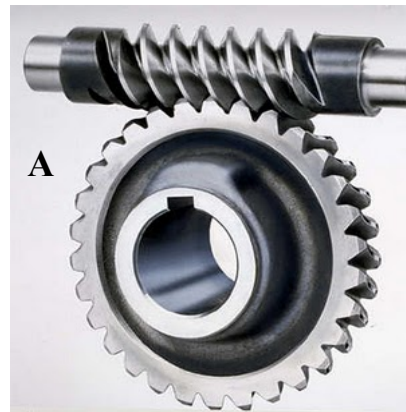
11.

Name the gear arrangement shown at A.

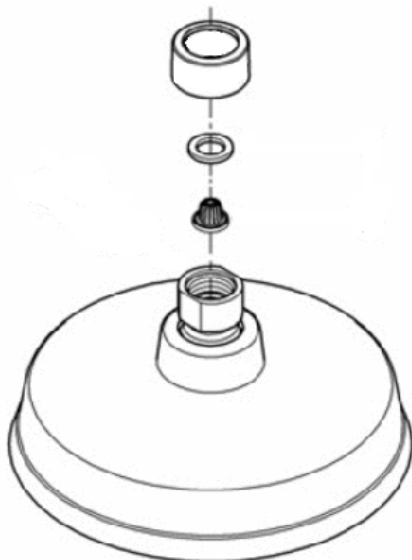
A: _____

Outline **one** advantage of using this arrangement in project work.

Give **one** everyday application of this gear arrangement.



12.



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

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