

Duration – 1 hour and 30 minutes

Fill in these boxes and read what is printed below.

Full name of centre

\_\_\_\_\_

Forename(s)

Surname

Date of birth



Scottish candidate number

Town

Total marks – 60

Attempt ALL questions.

All dimensions are in mm.

All technical sketches and drawings use 3<sup>rd</sup> angle projection.

You may use rulers, compasses or trammels for measuring.

Use blue or black ink.

Before leaving the examination room you must give this booklet to the invigilator.

If you do not, you may lose all the marks for this paper.

Mark

## Graphic



Number of seat



- a) What type of alignment is used in the poster above? (1 mark)
- b) Name the effect indicated by the letter A. (1 mark)
- c) What effect does this type of layout technique cause? (1 mark)

d) Unity is used in the presentation above. Explain how it is achieved and the effect it gives. (2 marks)



- e) What type of alignment is used in the layout above? (1 mark)
- f) What type of effect is shown by the letter B? (1 mark)

2. A group of school pupils were asked about their social habits. They were invited to answer questions on 2 topics; how they communicated with their friends and when they felt more awake during the day.

The answers they gave are shown below.

## **QUESTION 1**

## How do you communicate with your friends?

Texting – 1300 pupils

Social media – 1000 pupils

Talking on the phone – 300 pupils.

Talking in person – 1500 pupils

While playing video games – 500 pupils

## **QUESTION 2**

 At what time during the day do you feel more awake?

 10% - 9am - 11am

 15% - 11am - 1pm

 25% - 1pm - 4pm

 10% - 4pm - 7pm

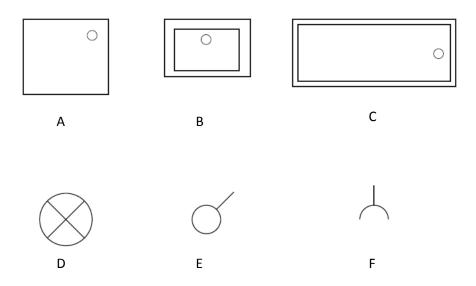
 40% - 7pm - 11pm

Based on the answers given to **QUESTION 1**, How do you communicate with your friends?

- a) State the best type of graph to use when representing the information in the answers to **QUESTION 1**. (1 mark)
- b) State one reason for using this type of graph. (1 mark)

Based on the answers given to QUESTION 2, At what time during the day do you feel more awake?

- c) State the best type of graph to use when representing the information in the answers to **QUESTION 2**. (1 mark)
- d) State one reason for using this type of graph. (1 mark)

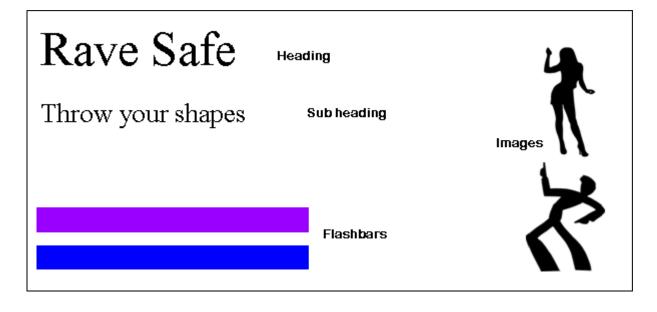


a) Above is a selection of building symbols.

According to British Standards, name each of the symbols shown. (6 marks)

Α.			В	C
D			Ε	F
	b)	What is a CAD library? (1 ma	rk)	
	c)	What is the difference betwe	een computer animation and computer s	

d) Why do we use symbols in Graphic Communication to convey information? (1 mark)





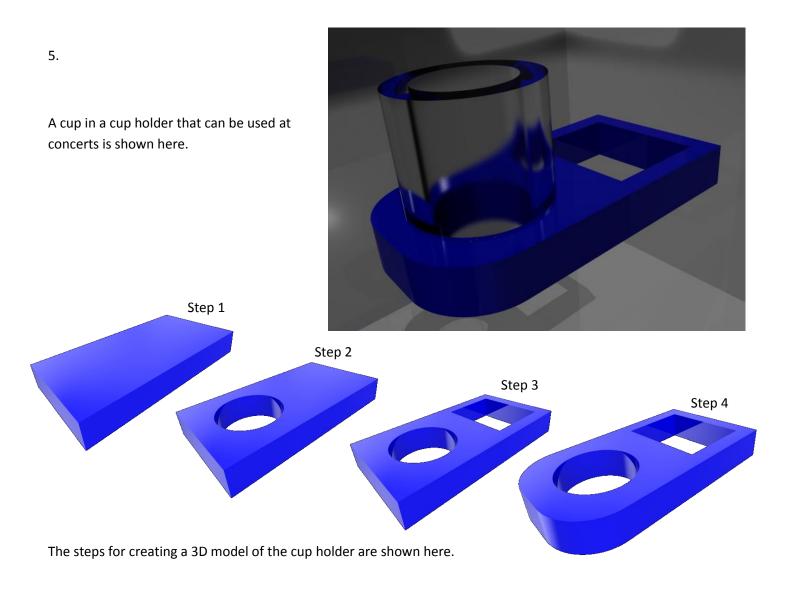
This example shows the design of a flier for a nightclub event. The original images and ideas are shown in the top example.

- a) Name the DTP command used for the following areas. **Do not** name the same command more than once.
  - i) Detail A The effect added to the heading. (1 mark)
  - ii) Detail B The changes to the images. (1 mark)
  - iii) Detail C The format added to the sub heading. (1 mark)

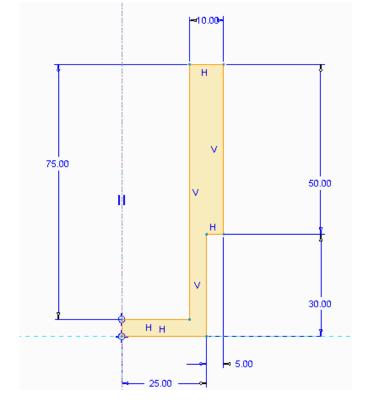
- b) Give reasons for the following design features of the flier:
  - i) Why was the font for the heading changed? (1 mark)
  - ii) Why was **Detail A** added to the heading? (1 mark)

iii) Why was Detail C added to the sub heading? (1 mark)

- c) What is the reason the colours chosen for the flash bars? (1 mark)
- d) What is the purpose of using flash bars in the flier? (1 mark)

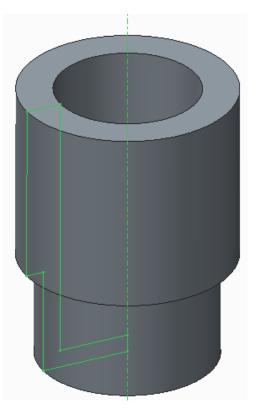


- a) State the 3D command used to create the hole at stage 2. (1 mark)
- b) Describe how you would create the cup holder from step 3 to step 4. You can use sketches to support your answer. (3 marks)



Stage 1 of the command.

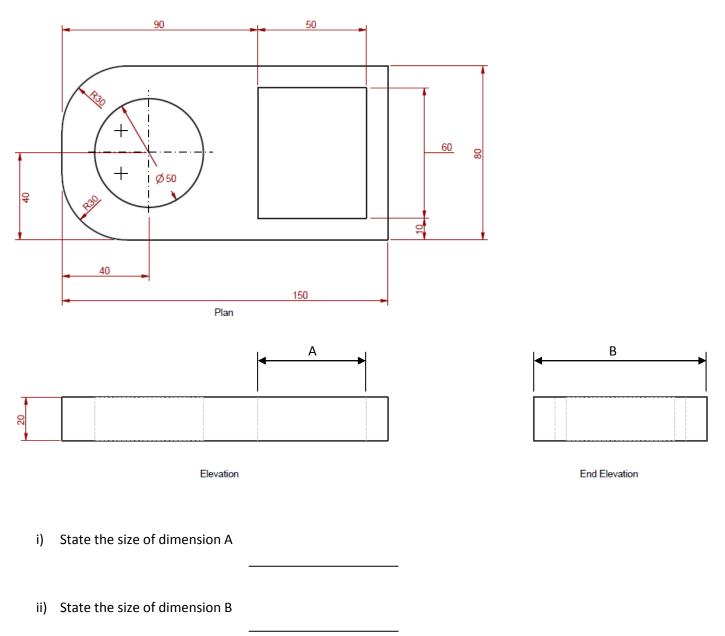




Stage 2 of the command.

c) State the name of this command. (1 mark)

d) The orthographic views of the cup holder are shown below. (6 marks)

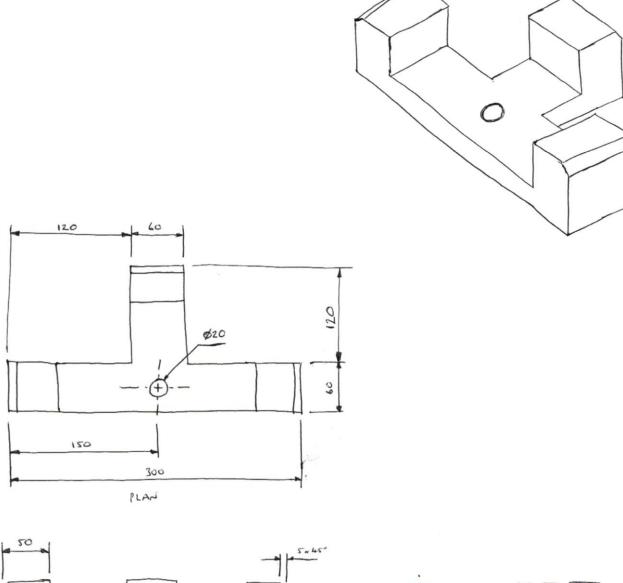


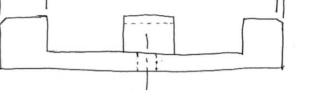
iii) There are 4 mistakes with the dimensions on the Plan of the cup holder. Circle each of these mistakes.

e) Sketch the 3<sup>rd</sup> angle symbol in the space below. (1 mark)

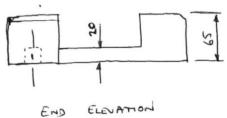
f) The company that produced the cup holder want to introduce a handle to help people carry 3 drinks at a time.

The preliminary sketches for one of the attachments that fit on top of this handle are shown below.

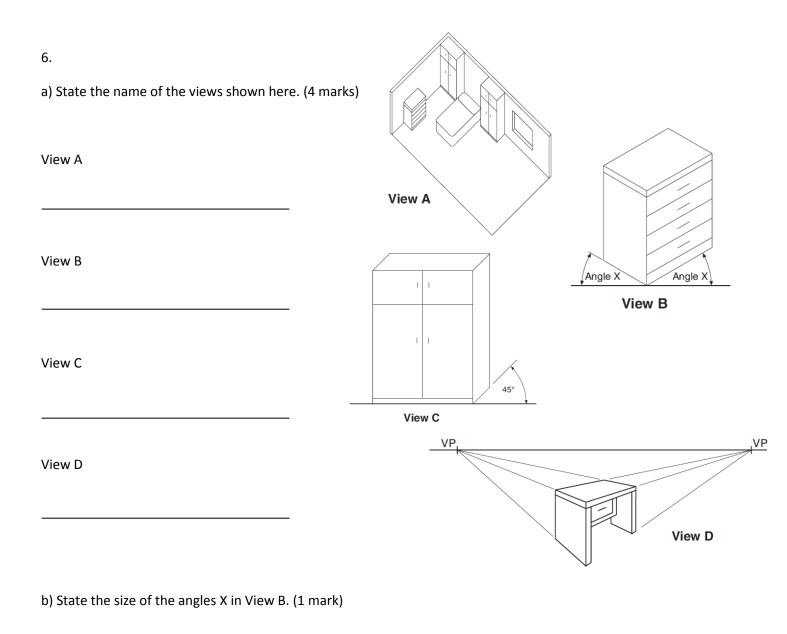








Describe how you would use 3D modelling software to create this handle. You may use sketches to help illustrate your answer. (6 marks)

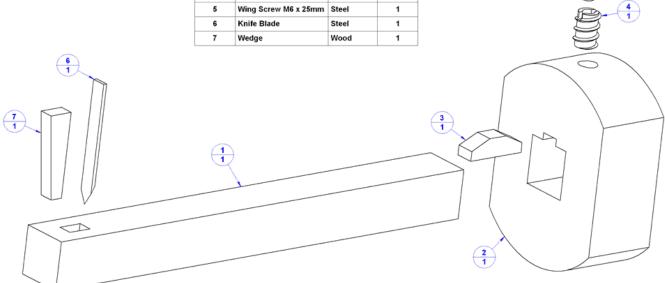



c) What is meant by a scale of 1:2? (1 mark)

A pictorial view and a parts list of a cutting gauge is shown below.

ltem Number	Title	Material	Quantity
1 Stem		Wood	1
2	Fence	Wood	1
3	Shoe	Wood	1
4	4 Threaded Inserts		1
5	Wing Screw M6 x 25mm	Steel	1
6	Knife Blade	Steel	1
7	Wedge	Wood	1

5



(a) State the name of this type of view. (1 mark)

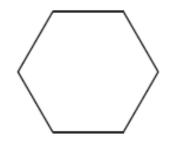
(b) State the name of part 2. (1 mark)

(c) State the material the knife blade if made from. (1 mark)

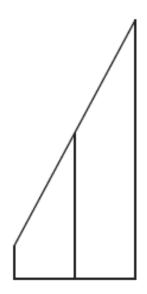
(d) State the part number of the wing screw. (1 mark)

(a) Below are orthographic views of a cut hexagon with the elevation missing. State the correct view from the choices below. (1 mark)

View \_\_\_\_\_

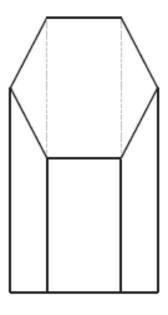


Plan

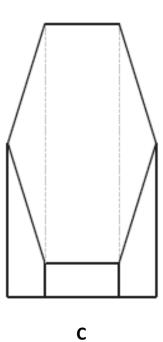


EndElevation

Elevation



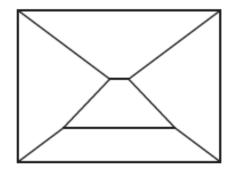
В



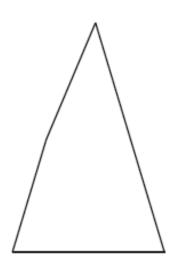
8.

(b) Below are orthographic views of a cut pyramid with the elevation missing. State the correct view from the choices below. (1 mark)

View

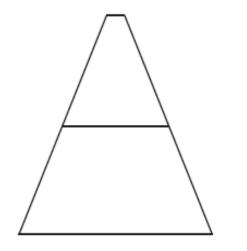


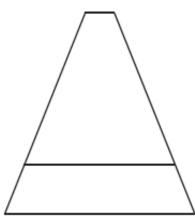
Plan



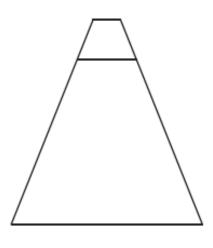
Elevation

End Elevation





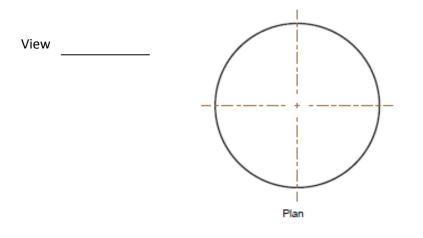
В

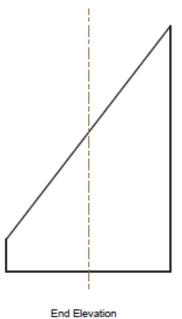


Α

С

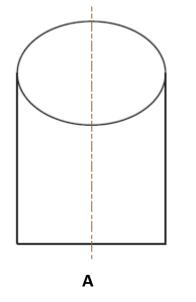
(c) Below are orthographic views of a cut cylinder with the elevation missing. State the correct view from the choices below. (1 mark)

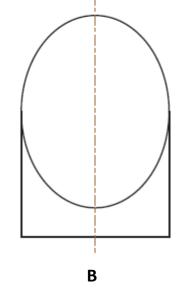


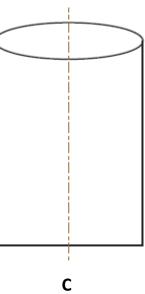


Elevation









[END OF QUESTION PAPER]