

Surname						Other Names					
Centre Number						Candidate Number					
Candidate Signature											

For Examiner's Use

General Certificate of Secondary Education
June 2008

**DESIGN AND TECHNOLOGY
(GRAPHIC PRODUCTS)
Written Paper
Foundation Tier**

**3543/F
F**



Thursday 19 June 2008 1.30 pm to 3.30 pm

For this paper you must have:

- a pen, a pencil, a ruler, an eraser, a pencil sharpener and coloured pencils.

You may also use marker pens and 45/60 degree set squares.

Time allowed: 2 hours

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- Answer the questions in the spaces provided.
- Show the working of your calculations.
- Detach the blue sheet from the back of this examination paper to use in between the sheets to prevent ink bleeding through to the next sheet.
- Do **not** hand in the blue sheet at the end of the examination.

Information

- The maximum mark for this paper is 125.
- The marks for questions are shown in brackets.
- All dimensions are given in millimetres unless otherwise stated.
- You are reminded of the need for good English and clear presentation in your answers.

Advice

- You are advised to answer the questions in this paper in the order in which they are written.

For Examiner's Use			
Question	Mark	Question	Mark
1		5	
2		6	
3		7	
4			
Total (Column 1)		→	
Total (Column 2)		→	
TOTAL			
Examiner's Initials			

This question is about the environment and evaluation and is worth 22 marks.

You are advised to spend about 20 minutes on this question.

1 Paper and board can be made from trees grown in *sustainable forests*.

(a) Explain, in detail, the term *sustainable forest*.

.....

.....

.....

.....

(3 marks)

(b) A logo on a product made of material from a *sustainable forest* is shown in **Figure 1**.

This design has **two** design features. Study each feature and comment on its suitability for this environmental logo.

Feature 1: arrows

.....

.....

.....

.....

(3 marks)

Feature 2: representation of trees

.....

.....

.....

.....

(3 marks)

(c) The logo in **Figure 1** is to be re-designed and simplified.

(i) In the space below, sketch **two** ideas for a new sustainable forest logo with similar features to those in **Figure 1**.

(5 marks)

(ii) Using your best ideas from part (c)(i) above, produce a final presentation drawing of your new logo in the space below.

(6 marks)

(iii) Explain why your design is an improvement on **Figure 1**.

.....

.....

.....

(2 marks)



Question 2 is about market researching and representing data and is worth 13 marks.

You are advised to spend about 10 minutes on this question.

2 A school wants to raise money by selling recordings of music performed by its students.

The Graphic Products department is to produce high quality packaging for the recordings.

To find out which recording format would be preferred, a questionnaire was sent to parents and students.

The results of the questionnaire are shown in the table opposite.

This data is to be shown as a pictograph.

(a) Give an advantage of using a pictograph to represent data.

.....

.....

.....

.....

(2 marks)

(b) Complete and colour the pictograph (**Figure 2**) using the data in the table below.

Each symbol in the pictograph represents 10%.

Marks will be awarded for:

- (i) accuracy of data(4 marks)
- (ii) use of symbols(4 marks)
- (iii) quality of colouring.(3 marks)





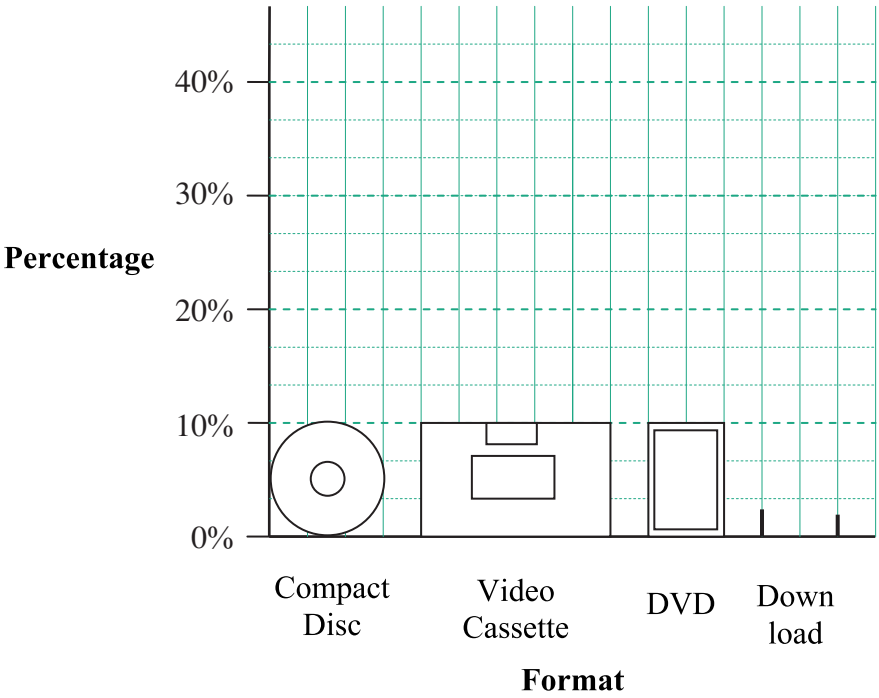
Key	Format	Percentage
	Compact Disc	40%
	Video Cassette	20%
	DVD	30%
	Download	10%

Figure 2

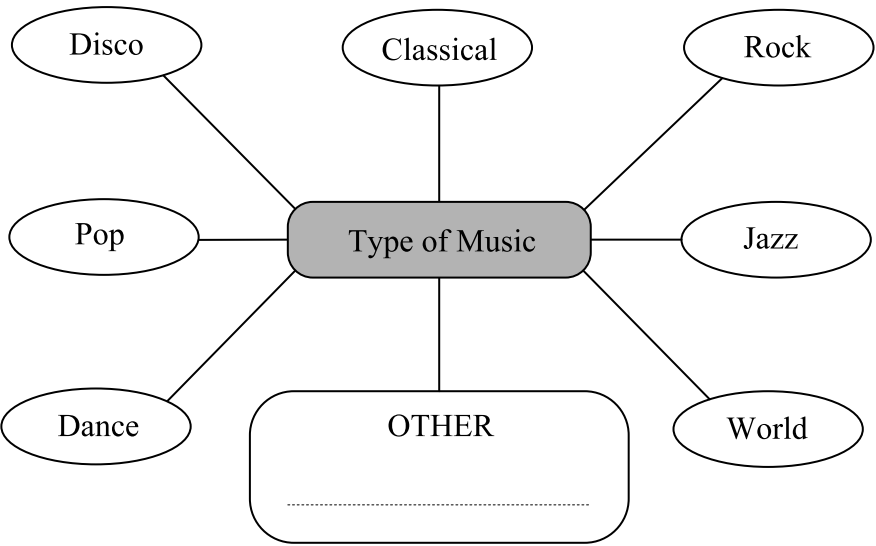


Question 3 is about typography and is worth 11 marks.

You are advised to spend about 10 minutes on this question.

3 The questionnaire showed that a Compact Disc (CD) was the preferred format for the school recording.

(a) Study the ideas web below showing different types of music.



(i) Choose a type of music to be included on the school’s CD.
(If your favourite music is not listed, add it under OTHER.)

.....
(1 mark)

(ii) Choose a suitable name for the school’s CD. The name should be one or two words long, and will be printed on the front of the CD cover.

.....
(1 mark)

(b) In the spaces below, sketch **three** different letter styles (fonts) for the name of your CD.

Letter style 1

Letter style 2

Letter style 3

(6 marks)

(c) My best letter style is number:

This letter style will be used in Question 4.

Explain why your best letter style is suitable for the CD.

.....
.....
.....
.....

(3 marks)

This question is about developing a design and a presentation drawing and is worth 25 marks.

You are advised to spend about 25 minutes on this question.

4 The CD is packaged in a card sleeve (**Figure 3**).

- (a)
 - (i) Sketch the development of a design for the sleeve which reflects the type of music chosen in Question 3 (**Figure 4** and **Figure 5**). (7 marks)
 - (ii) Comment on your development. (3 marks)
- (b)
 - (i) Produce a coloured presentation drawing of your final design (**Figure 6**). Include the name and letter style chosen in Question 3. (12 marks)
 - (ii) Evaluate your presentation drawing. (3 marks)

Figure 4

(a) (i) First design

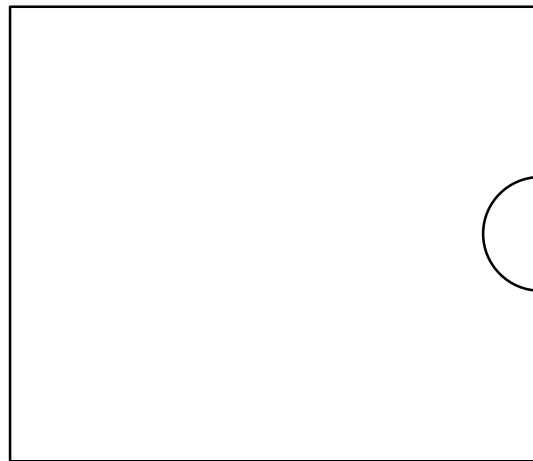
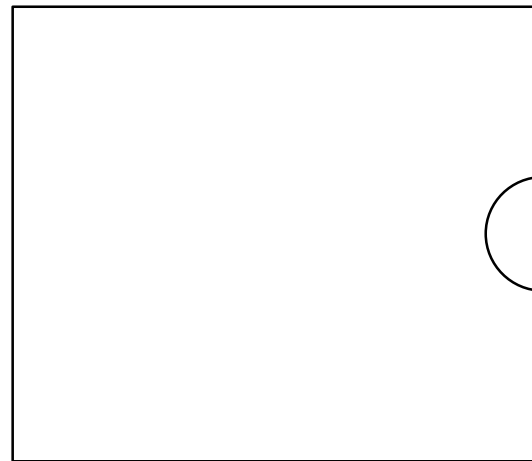


Figure 5

Improved design



(a) (ii) Comment on your development

Figure 3

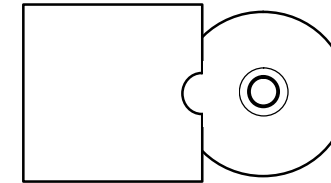
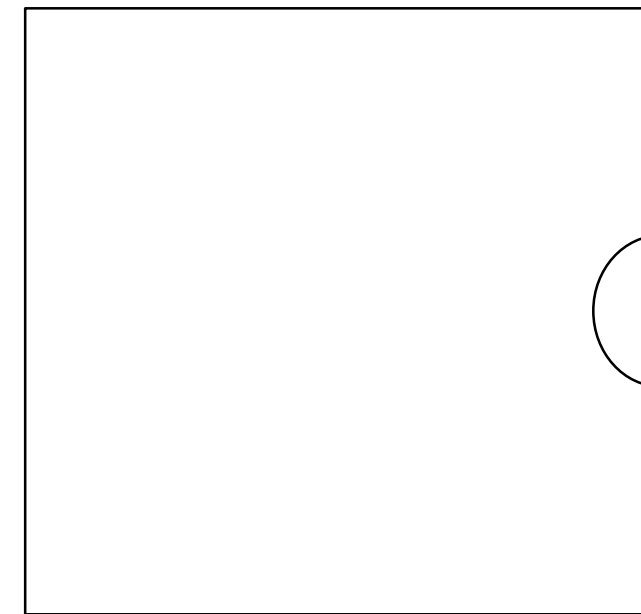


Figure 6

(b) (i) Presentation drawing



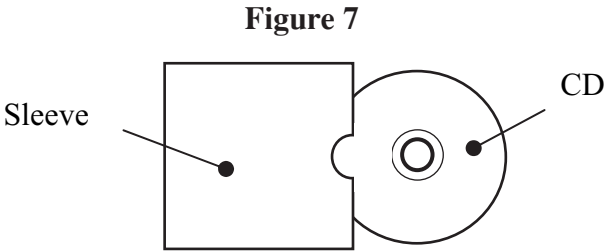
(b) (ii) Evaluate your presentation drawing

This image shows a single sheet of white paper with rounded corners. It features five horizontal dotted lines spaced evenly down the page, providing a guide for handwriting practice. The paper is otherwise blank, with no text or other markings.

This question is about surface development (net) and dimensioning and is worth 18 marks.

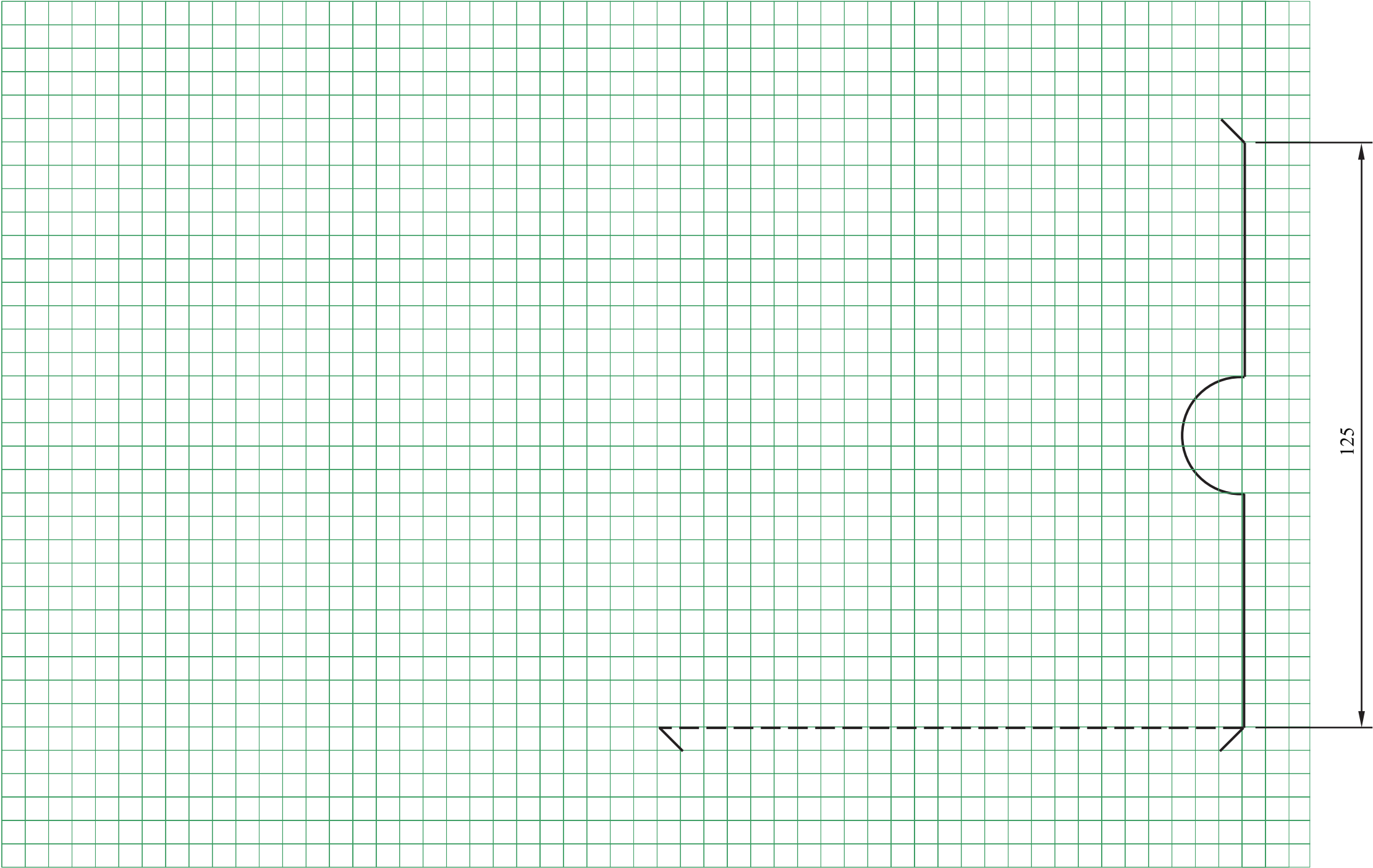
You are advised to spend about 20 minutes on this question.

- 5 The CD is packaged in a folded card sleeve (**Figure 7**).
The sleeve is cut from one piece of thin board measuring 250 mm by 155 mm.



- (a) Complete the *full size* surface development (net) of the sleeve (**Figure 8**) using the given key. Include glue tabs 15 mm wide. (12 marks)
- (b) Using the same style as the given dimension add **two** more sizes to the surface development. (5 marks)
- (c) Complete the scale (**Figure 9**). (1 mark)

Figure 8



Key	
—————	Cut line
- - - - -	Fold line

Figure 9

Scale _____ : _____

This question is about the order of making and is worth 20 marks.

You are advised to spend about 20 minutes on this question.

6 The CD’s card sleeve is to be made in the school’s graphics studio.

(a) Study the stages (A to F) for making a prototype sleeve. They are **not** in the correct order.

Stages		Stages	
A	Cut out the shape	D	Apply glue
B	Crease the fold lines	E	Assemble the sleeve
C	Apply coloured image	F	Draw surface development

(i) Complete the table below to show the correct order for making a successful model. (4 marks)

(ii) Name a tool **or** piece of equipment used at each stage in the order of making. (4 marks)

Order of Making	Stage	Tools or Equipment Used
1	F	<i>A pencil</i>
2		
3		
4		
5		
6	E	<i>Paper clips to hold glued surfaces</i>

(b) (i) After which stage would you do a Quality Control check?

Stage (1 mark)

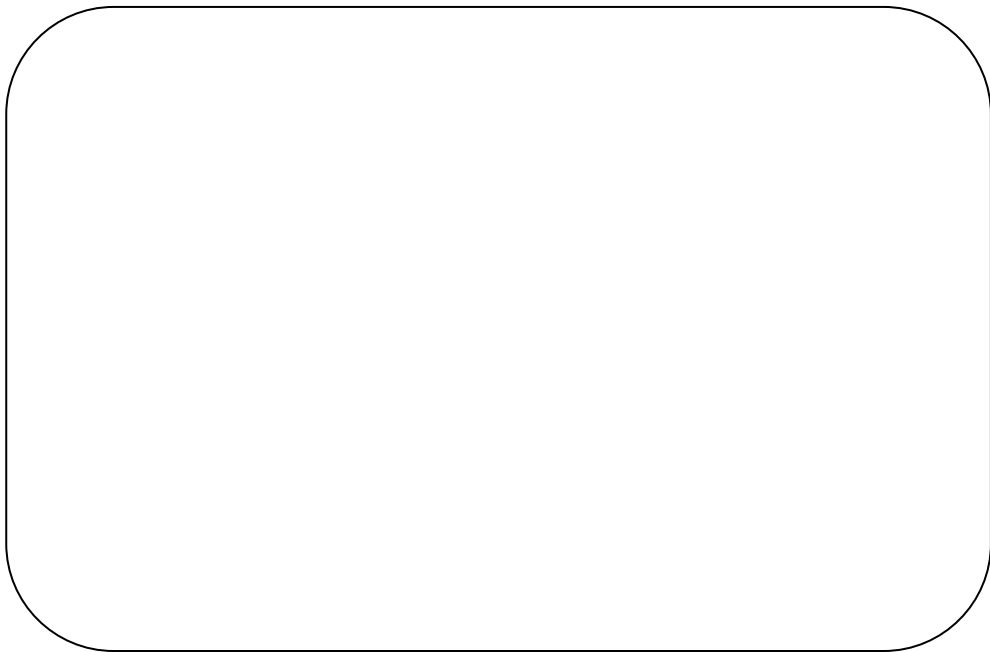
(ii) What would you check and why would you check this?

.....
.....
..... (3 marks)

(iii) How would you do this check?

.....
.....
..... (2 marks)

(c) Explain ‘Stage A – Cut out the shape’ with sketches and notes.



(6 marks)

This question is about materials and is worth 16 marks.

You are advised to spend about 15 minutes on this question.

7 A *mock up* CD sleeve can be made in a school’s graphics studio.

(a) What is a *mock up*?

.....

.....

.....

.....

(3 marks)

(b) The CD sleeve is made from 200 gsm thin board.

(i) Give the full meaning of 200 gsm.

.....

.....

.....

.....

(3 marks)

(ii) What would be the effect of using recycled board for the CD sleeve?

.....

.....

.....

(2 marks)

(iii) When felt-tip pens are used on some kinds of paper the colour can ‘bleed’.
Explain the term ‘bleed’.

.....

.....

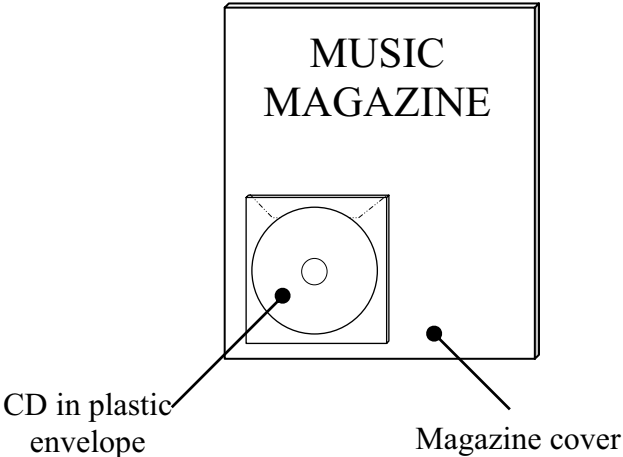
.....

(2 marks)

(c) CDs are often given away with magazines.

The diagram opposite shows a CD in a plastic envelope which is fixed to a magazine cover.

Using notes and sketches show how the CD could be attached to the magazine.



(6 marks)

END OF QUESTIONS