



General Certificate of Secondary Education

Design and Technology Graphic Products 3553/H

Short Course: Higher Tier

Mark Scheme

2008 examination - June series

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1 Environment

- (a) **‘sustainable’ forest**, *e.g. managed, harvested and replanted, considerate of wild life and inhabitants, not using up natural resources, renewing or recycling the environment. Human intervention*

Good understanding, explicit, examples. Human intervention (replanting) (3 marks)

Satisfactory understanding, basic concept, no detail (2 marks)

An attempt, confused but within topic (1 mark)

Incorrect or not attempted (0 marks)

3 marks

- (b) **Logo – context, environment not sustainable forest**

Feature 1:

The Globe (aka Earth, planet, world)

Full understanding, clear meaning, examples. *e.g. universal, world wide.* (2 marks)

Satisfactory understanding, basic concept, no detail (1 mark)

Incorrect or not attempted (0 marks)

2 marksFeature 2:

The Leaves (aka twig, plant)

Full understanding, clear meaning, examples. *e.g. nature, related to trees/timber, growth, health, re-growth, renew.* (2 marks)

Satisfactory understanding, basic concept, no detail (1 mark)

Incorrect or not attempted (0 marks)

2 marksFeature 3:

A Hand

Full understanding, clear meaning, examples. *e.g. caring, looking after, protective, power (all-embracing)* (2 marks)

Satisfactory understanding, basic concept, no detail (1 mark)

Incorrect or not attempted (0 marks)

2 marks

1 (c)

(i) Logo design

Do not reward if different features or different logo unconnected with question. Must be in context.

Development

Strong direct evidence of development progression (3 marks)

Some evidence of development progression (2 mark)

Single sketch (1 mark)

Not attempted or incorrect (0 marks) **3 marks**

Quality:

Reward even if incorrect logo development

Neat sketches, informative (2 marks)

Adequate sketches, some general untidiness (1 mark)

Not attempted (0 marks)

2 marks

(ii) **Logo Sketch**

related to development, reward if wrong theme

Good, neat sketch, clear and conveys meaning (3 marks)

Adequate sketch, some untidiness, some confusion (2 marks)

Poor sketch, fails to convey meaning, very untidy (1 mark)

Not attempted (0 marks)

3 marks

TOTAL 17 marks

2 Representation of data

(a) **Advantage of pictograph**

Full explanation, with reason *e.g. easy to read and understand, quick intake of data, more interesting than bars* (3 marks)

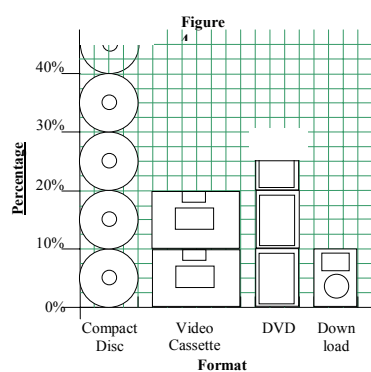
Partial explanation *e.g. attempt at reasoning* (2 marks)

An attempt, *e.g. not reasoning evident* (1 mark)

Incorrect, not attempted (0 marks)

3 marks

(b) **Pictograph** (be strict – one symbol per 10%)



- (i) **Accuracy:**
each pictograph bar correct – *height on line* (pro rata), up to 45%, 20%, 25%, 10% (4 marks)

4 marks

- (ii) **Symbols:** (maximum of 2 marks if generally poor reproduction of symbols)

each present and accurate representation (pro rata) (4 marks)

both half symbols correctly drawn (1 mark)

Other symbols used, not attempted (0 marks)

5 marks

- (iii) **Colour:**
Good quality, enhances drawing, visual impact (3 marks)

Adequate quality, some imperfections *e.g.* out of 'box', uneven colour (good monochrome max.) (2 marks)

An attempt, poorly executed, colours poorly used or incomplete (1 mark)

No colour – line drawings only, not attempted (0 marks)

3 marks

TOTAL 15 marks

3 Letter-styles*Accept any type of music.*

(a)			
(i)	Type of music offered, must be given in figure 4	(1 mark)	
	Not attempted	(0 marks)	1 mark
(ii)	Name offered (Minimum 2 letters)	(1 mark)	
	<i>No penalty if more than two words long – self penalising in Q3</i>		
	No name offered	(0 marks)	1 mark
(b)	Two distinctly different letter-styles (<i>pro rata</i>)	(2 marks)	2 marks
	<i>Both single line lettering, max. 1 mark.</i>		
	<i>Best evidence</i>		
	Evidence of development: e.g. progression of idea	(2 marks)	
	Minimal development little progression, minor detail	(1 mark)	
	Confused, not attempted	(0 marks)	2 marks
(c)	Reasoned explanation, logical and complete.	(3 marks)	
	Simple, elementary, mainly descriptive, self -congratulatory	(2 marks)	
	An attempt, superficial e.g. 'it's the best', 'I like it'	(1 mark)	
	Confused, not attempted	(0 marks)	3 marks
	TOTAL		9 marks

4

Design Development & Presentation Drawing

(Accept any sketch as starting point, with or without text)

- | | | | |
|-----|---|-----------|----------------|
| (a) | Related to all response panels inc. Presentation. | | |
| | Strong direct evidence of developmental progression | (3 marks) | |
| | Development evident, some very similar major features | (2 marks) | |
| | No development, discrete ideas | (1 mark) | |
| | No development or not attempted | (0 marks) | 3 marks |
| | Clearly related to type of music e.g. instruments | | |
| | Images related to music type stated in Q3 | (2 marks) | |
| | Limited references to music | (1 marks) | |
| | Confused, unclear, not attempted | (0 marks) | 2 marks |
| | Quality of communicating design | (2 marks) | |
| | Satisfactory sketches | (1 mark) | |
| | Confused, unclear, not attempted | (0 marks) | 2 marks |

4 (b) Presentation Drawing of Inset Card**Use of information**

Use or information (from Question 2) (1 mark)

Different name or letter style (0 marks)

1 mark**Quality of sketching**

Good quality, easily recognisable drawings (3 marks)

Adequate quality, some confusion or imperfections (2 marks)

An attempt, lacks precision e.g. use of felt tip pens (1 marks)

Sketch does not match stated stage (confused) (0 marks) **3 marks****Colour rendering**Very good quality, enhances drawing, visual impact
e.g. very good tonal control, even cover (5 marks)

Good quality, higher skills attempted (4 marks)

Satisfactory quality, some imperfections e.g. out of
'box' uneven colour. No higher skills (*good grey
pencil and/or not finished or predominantly white,
max. 3 marks*) (3 marks)

An attempt, poorly executed, colour poorly applied (2 marks)

Poor, no attempt at quality, heavy handed, scribble (1 mark)

No colour – line drawings only, not attempted (0 marks)

5 marks**Layout of features**

Good visual impact, e.g. effective use of space (3 marks)

Satisfactory, some sense of composition (2 marks)

Poor, no sense of composition (1 mark)

Very poor, not organised or not attempted (0 marks)

3 marks**(c) Evaluation of CD design**

Critical, relevant, related to design, reasoned (3 marks)

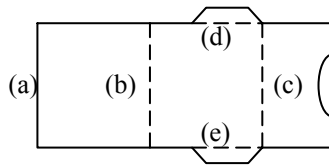
Descriptive, some relevance implied (2 marks)

An attempt, superficial, labels (1 mark)

3 marks**TOTAL 22 marks**

5 Surface Development (Nets) and British Standards

Surface Development (Net)



Overall length & width (<i>guide - three squares in</i>)	(1+1 mark)	2 marks
Vertical & fold lines (<i>correct position and length</i>)		
one full (a) and four broken (b,c,d,e)	(5 marks)	
any four correct	(4 marks)	
any three correct	(3 marks)	
any two correct	(2 marks)	
one correct	(1 mark)	
not attempted	(0 marks)	
		5 marks
Cut out – ellipse/elliptical		
Complete, good proportion, inc. verticals (e)	(2 marks)	
Less accurate, out of position	(1 mark)	
Wrong edge, not attempted	(0 marks)	
		2 marks
Glue tabs		
Correct, in all aspects inc. mitres	(1 mark)	
Not attempted	(0 marks)	
Line quality		1 marks
Consistently dark, sharp, neat corners	(2 marks)	
Some imperfections	(1 mark)	
Untidy, freehand, blunt pencil	(0 marks)	
		2 marks
TOTAL		12 marks

6 Creating an Image

Mark either A or B. If both attempted mark both and record the higher mark. Read response and assess completeness of process.

PART A: BY HAND

- (a) Process will ensure a perfect outcome (4 marks)
- Process is sufficient for a successful outcome, minor errors (3 marks)
- Process is likely to result in a recognisable outcome, some errors (2 marks)
- An attempt basic process, many errors, important stages omitted (1 mark)
- Confused, unsuccessful out come, not attempted (0 marks)

4 marks

- (b) **Tools, equipment** (*beware generic names e.g. knife*)
Match to process even if incorrect process above

- All tools/equipment appropriate for stage & correctly named (4 marks)
- Most tools/equipment appropriate for stage & correctly named (3 marks)
- Some tools/equipment named but could be at wrong stage (2 marks)
- An attempt many incorrect items OR generic names through out (1 mark)
- Confused, incorrect or not attempted (0 marks)

4 marks

e.g.

No	Description	Tools, equipment etc
1	Cut out guitar from fig 5.	e.g. Scissors, craft knife, Stanley
2	Apply glue to cut out.	e.g. PVA, Pritt-stick, spray-glue
3	Position cut out on background.	e.g. ruler

- (c) **Sketch** of tool / equipment
- Name of tool matches representation in sketch (from table) (1 mark)
- A good representation of the named tool / equipment (2 marks)
- Adequate attempt, some imperfections e.g. proportion (1 mark)
- An attempted, not recognisable (0 marks)

3 marks

PART B: BY CAD

- (a) **Computer Aided Design Program**
- Process will ensure a perfect outcome (4 marks)
- Process is sufficient for success, minor errors (3 marks)
- Process result in a recognisable outcome, some errors (2 marks)
- An attempt basic process, many errors (1 mark)
- Confused, unsuccessful out come, not attempted (0 marks) **4 marks**
- (b) **Toolbar icons**
- All commands appropriate for stage & correctly named (4 marks)
- Most commands appropriate for stage & named (3 marks)
- Some commands named but could be at wrong stage (2 marks)
- An attempt incorrect stages OR generic names through out (1 mark)
- Confused, incorrect or not attempted (0 marks) **4 marks**
- e.g.
- | | | |
|---|--|----------------------|
| 1 | Trace (high-light) around guitar | e.g. 'cut out tool |
| 2 | Save cut out / export. | e.g. disc, save icon |
| 3 | Open fig 6, paste guitar cut out. | e.g. open command |
| 4 | Position cut out on background & save. | e.g. disc, save icon |
- (c) **Sketch** computer icon
- A good representation of the named icon (3 marks)
- Adequate attempt, some imperfections e.g. proportion (2 marks)
- A recognisable representation of icon (1 mark)
- Confused, unrecognisable, incorrect not attempted (0 marks) **3 marks**
- TOTAL 11 marks**

7 Materials

(a)

- | | | | |
|-------|---|-----------|----------------|
| (i) | 200 gsm e.g. 200 grams per square metre | (3 marks) | |
| | Correct interpretation, all factors explained | | |
| | Two factors correctly explained | (2 marks) | |
| | One factor identified | (1 mark) | |
| | Incorrect, not attempted | (0 marks) | 3 marks |
| (ii) | 'A' series | | |
| | Only answer is 4 | (1 mark) | |
| | Incorrect, not attempted | (0 marks) | 1 mark |
| (iii) | <u>'Bleeding'</u> e.g. <i>ink spreads as liquid is drawn by capillary action of fibres.</i> | | |
| | Full reasoned understanding e.g. effect and cause | (2 marks) | |
| | Some understanding but no reasons given
e.g. ink spreads | (1 mark) | |
| | Not attempted, or incorrect | (0 marks) | 2 marks |
| (iv) | <u>Safety:</u> e.g. <i>ventilation, face mask, spray booth</i> | | |
| | Full reasoned understanding e.g. effect and cause | (2 marks) | |
| | Some understanding but no reasons given | (1 mark) | |
| | Not attempted, or incorrect | (0 marks) | 2 marks |

7 (b)

(i) **Texture**



Good attempt at texture, even & consistent (3 marks)

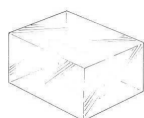
An attempt at showing some texture, not very successful (2 marks)

Flat shading, no discernable texture (1 mark)

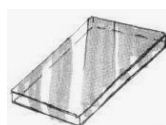
Incorrect, not attempted (0 marks)

3 marks

(ii) **Clear Plastic**



or



Good representation of material, shows flair
e.g. good transparent effect, reflective lines, colour (3 marks)

Could be clear plastic, satisfactory representation
e.g. poor use of colour lines (2 marks)

An attempt. hardly represents a transparent material
e.g. scribble, inappropriate use of colour (1 mark)

Not attempted, obviously wrong material shown (0 marks)

3 marks

TOTAL 14 marks