



General Certificate of Secondary Education

**Design and Technology
(Textiles Technology) 3547**

Full Course Foundation Tier

Mark Scheme

2008 examination - June series

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Qu No	Response to be awarded credit	Mark
NB	<p>This mark scheme is intended as a guide to the type of answer expected but is not intended to be exhaustive or prescriptive. If candidates offer other answers which are equally valid they must be given full credit.</p> <p>Many responses at this level are assessed according to the quality of the work rather than the number of points included. The following level descriptors are intended to be a guide when assessing the quality of a candidate's response.</p>	
Low	<p>The candidate has a basic but possibly confused grasp of the issues. Few correct examples are given to illustrate points made. This candidate does not have a clear idea of what s/he is writing about</p>	
Intermediate	<p>The candidate has some knowledge but there will be less clarity of understanding. Some correct examples given to illustrate points made. This candidate knows what s/he is writing about but is confused in part.</p>	
High	<p>The candidate has a thorough understanding of the issues and has provided relevant examples to support the knowledge shown. This candidate knows what s/he is writing about and provides clear evidence of understanding.</p>	

1 Question 1 is about research to generate design ideas.

- (a) The hat shown below was very fashionable at the beginning of the 20th century.
It is trimmed with a stuffed bird.**

- (i) Give two reasons why this hat would not be popular today.**

e.g. people are more aware of animal welfare issues, the hat would be very heavy for today's faster pace of life, stuffed birds are not fashionable today, very large hats are not so fashionable, dull colour.

Any 2 acceptable reasons, 1 mark each

(2 marks)

- (ii) Give one feature of this hat which could be used in modern designs.**

e.g. shape of hat/brim, feather decoration, colour range.

(1 mark)

- (b) Designers research hat fashions in many different places.
Give one advantage and one disadvantage of researching in each of the following ways:**

- (i) going to a museum**

Advantages of a museum include ability to see hats close up, often displayed with typical outfits of the time, description of materials used, can visit as often as necessary to see styles, range of hats displayed.
Disadvantages of museum include being unable to see them on a real person, museum may be some distance away, entry fees can be costly, may be at the back of a glass case or in a painting so difficult to see all details. Not accepting 'not in fashion'.

1 advantage and 1 disadvantage, 1 mark each

(2 marks)

- (ii) watching a film on DVD**

Advantages of film on DVD include ability to see hats as they are worn by people who move, see them in the context of the era when they were popular, can pause play to have a closer look at hat, can play as many times as necessary to see styles.

Disadvantages of film on DVD include not having description of materials used, hats may not be strictly authentic for era portrayed, may not be able to see detail clearly.

1 advantage and 1 disadvantage, 1 mark each

(2 marks)

(c) Give two reasons why a designer needs to think about each of the following.

(i) how the product will be manufactured

e.g. may need to keep design simple for mass manufacture (1 mark),
reference to decorative techniques (1 mark),
one-off production allows for more elaborate work (1 mark),
cost of manufacture/time taken/number to be made (1 mark),
machinery/labour requirements (1 mark),
may affect choice of fabrics and components (1 mark),
type of manufacture (1 mark).

Any 2 points, 1 mark each

(2 marks)

(ii) the target market

e.g. potential selling price (1 mark), styles worn by target market (1 mark), targeted retail outlet (1 mark), suitability for target market (1 mark), typical occasions for which consumer will buy product (1 mark).

Any 2 points, 1 mark each

(2 marks)

(iii) the selling price of the product

e.g. potential market (1 mark), money available for labour (1 mark),
money available for fabrics and components (1 mark),
money available for research and development (1 mark), profit (1 mark), similar to other items available/comparable price (1 mark),
value for money (1 mark).

Any 2 points, 1 mark each

(2 marks)

13 marks

2 Question 2 is about designing your product.

- (a) You have been asked to show your design ideas.
Use the information given in the design brief on page 3.**
- (i) Use pencil to draw and label two different design ideas for your product.**

Marks will be awarded for

- **quality of two different design ideas (2 x 3 marks)**
- **quality of notes and sketches. (2 x 2 marks)**

2 sketches to show **different** initial ideas for product. These may be completely different products or very different interpretations of the same product.

Marks awarded as follows:

Quality of ideas

Look for originality and different features in terms of shape of the product and decoration.

- Immature and unimaginative ideas presented. Idea may show decoration or product shape only. Simple copied ideas, may be inappropriate. 0-2 marks
- Sound ideas with some attempt to be imaginative. Designs may be similar in style with some minor differences. May be a 'tried and tested' design with attempt to give it a new twist. 3-4 marks
- High quality designs which are very different and with strong evidence of originality. It will be clear what is intended. 5-6 marks

Quality of notes and sketches

Look for clarity of notes, good graphical skills.

- Work presented lacks clarity and may lack care in presentation. Notes add little extra information, may be simple labelling. Graphical skills are immature 0-2 marks
- Work presented with care, notes will add clarity to sketches. Strong graphical skills show clearly what is intended. 3-4 marks

(10 marks)

(ii) Give two reasons why young adults would like your design idea.

Candidate is expected to evaluate suitability of selected design idea for target market of young adults. Reference may be made to style, use of decoration, fabrics, components as appropriate.

Not 'cost'.

Any 2 reasons related to the design and target market, 1 mark each

(2 marks)

- (b) Use sketches, labels and notes to present a final design for your product.**

Marks will be awarded for

- **use of fabrics and components (4 marks)**
- **use of 20th century inspiration (3 marks)**
- **originality and quality of the design including the decoration (8 marks)**
- **use of colour (3 marks)**
- **presentation of final idea (3 marks)**

Final design for product to include:

Use of fabrics (F) and components (C)

Marks awarded as follows:

To access full marks, the main fabric must be indicated.

- Little or no indication of fabric type, it may be used inappropriately.
May give only limited range of fibre types, e.g. 'cotton'.
Components may be inappropriate or over-used. 1 mark
- Clear indication of fabric and/or components, some of which may be interesting or appropriate for product. Fabrics will tend to be basic or used in an uninspired way.
Components clearly used but may lack sparkle 2-3 marks
- Thoughtful and/or imaginative selection of fabric and components, probably more than one, which are totally appropriate for product. Work will have evidence that candidate has tried to use fabric and components in an innovative way.
4 marks

Use of C20th inspiration

Marks awarded as follows:

In order to access the top mark range, it must be apparent, from the design or annotation, where the C20th inspiration has come from.

Look for evidence of more than one hat shape, different styles, a range of fabrics and components, decorative techniques, and other different elements of hats which reflect the C20th.

- Little evidence of historical influence. Product may be a copy of a present-day product and/or look like a hat, with little adaptation made.
1 mark
- Clear use of theme but may not be most interesting or appropriate for product. Candidate will not have explored possibilities and products will tend to be close copy or theme used in an uninspired way. It should be clear how the hat theme has been used but this may not be explained.
2 marks
- Clear and original use of theme which is appropriate for product. Candidate will have explored possibilities and used them to produce an exciting and original new product. There will be clear reference to the C20th inspiration.
3 marks

Originality and Quality of design including decoration (D)

The following should be considered:

Modern, original and imaginative design, balanced composition/effective use of space, effective proportions, appropriate for intended use, will the design work?

Use of decorative techniques and components which are in keeping with the fabrics selected - use of components may be functional and/or decorative. Suitability of product for exclusive shop specializing in hats.

Marks awarded as follows:

- Lack of detail, unimaginative design which may not be appropriate, may not clearly relate to spec, poor use of space, design is unco-ordinated 0-2 marks
- Unimaginative design with some thought given to intended end use. Relates to most areas of spec but this may not be clear, overall balance weak. May be close copy of existing product. Decoration/components added as an afterthought. 3-4 marks
- Sound design related to all aspects of spec with clear detail about product – this may be inappropriate in places. Design lacks some imagination but is likely to be popular. Overall composition may be weak. There may be some lack of clarity about decoration or components. Product may have some weaknesses. 5-6marks
- Product will be modern and likely to sell well. Design clearly relate to all aspects of spec. High quality and imaginative design for product, suitable for sale in exclusive shop. 7-8 marks

Use of colour

This is not about colouring in of the design idea. The following should be considered:

How has colour been used? Are the colours toning, contrasting, complementary? Do they work for the product? Do they promote a feeling of nostalgia?

Marks awarded as follows:

- Colour is immature and not used to effect. 1 mark
- Colour used well but does not make product exciting. 2 marks
- Used effectively/imaginatively, mature and sensitive choice 3 marks

Presentation

This is about the way in which the candidate communicates ideas using graphical and written communication. Look for clarity of detail, neatness, obvious care taken, extra detail shown. Does not have to include other views, e.g. of back or side, to be awarded full marks.

Marks awarded as follows:

- Lack of care in presenting work, candidate will not communicate detailed information about product 1 mark
- Candidate has taken care with presentation and labelling and most information about product is clear. 2 marks
- Well presented showing detail of product which will include extra information, e.g. 'blown up' sections or other, labelling is clear and there is clear communicated what is intended. 3 marks

(21 marks)

33 marks

3 Question 3 is about developing your ideas for your product.

- (a) Name three ways ICT (Information Communication Technology) could be used when coming up with ideas.**

e.g. internet research, use of scanner to collect images, use of paint and design programmes, ability to manipulate designs/colours, 'virtual reality' samples, design taken direct from computer to print small fabric samples, collecting public opinion though for example, questionnaires.

Any 3 appropriate methods, 1 mark each

(3 marks)

- (b) (i) Name one method of decoration you have chosen for your product.**

e.g. appliqué, embroidery, printing, dyeing, decorative use of components, decorative weaving, 3-D paints, bows.

(1 mark)

- (ii) Give two reasons why you have chosen this method for your product.**

Reference may be made to style of product, suitability for fabric used, appeal to target market, safety issues, relates to theme, quick and easy.

Not 'decoration'.

2 acceptable reasons, 1 mark each

(2 marks)

- (iii) Describe how you could test if the fabric is suitable for this method of decoration.**

e.g. produce a small sample (1 mark), on the fabric to be used (1 mark)

(2 marks)

- (c) (i) Give four costs of manufacturing a textile product.**

Cost of materials: e.g. fabrics, components, storage costs, packaging.

Labour costs: e.g. designers/machinists.

Energy costs: e.g. heating and lighting, powering machinery, transport

Production methods, e.g. one-off, batch, mass.

Any 4 appropriate costs, 1 mark each

(4 marks)

- (ii) Explain one way a designer could help keep manufacturing costs down.**

e.g. selecting fabrics and components which are less costly, ensuring that manufacturing techniques selected are within budget, considering need for expensive packaging. Not recycling.

1 method (1 mark) with expansion or example (1 mark)

(2 marks)

14 marks

4 Question 4 is about consumer choice in relation to your product.

- (a) Your product is to be sold in a specialist shop.
Give two different methods by which it could be advertised.
Give one advantage and one disadvantage of each method.**

e.g. **fashion magazines** show latest fashions but are not read by everyone, also they are national so it may not be possible for interested consumers to visit the shop, **local newspaper** bring shop to attention of local people but not everyone reads it and it may not reach consumers outside of the local area, **shop window** attracts people to go into the shop but will only be seen by those passing by, **television** can reach a wide audience but many people do not watch advertisements, **radio** will be heard by many but the product cannot be seen, **flyers** can be delivered to homes in selected areas but many people ignore them, **use of celebrities** as many people want to wear the same but many may not like the person or their lifestyle, **internet websites** can reach many people especially young people but not everyone has access to internet, **billboards** can reach many people but many people do not look at them, **fashion shows** can reach a targeted audience and may be reported in press but few people attend them, **in-store promotions** will reach existing and new customers but not those who do not visit the shop.

**2 named methods of advertising, 1 mark each, plus
1 advantage and 1 disadvantage of each method selected, 1 mark each**

(6 marks)

- (b) Your product will be packaged before it is sent to the shop.
Give three reasons why your product needs to be packaged.**

e.g. to protect it (1 mark), because it is delicate (1 mark), to keep it clean (1 mark), as it is transported to shop (1 mark), to provide information to consumer (1 mark), such as care, price (1 mark), to make it easier to handle in shop (1 mark), so it can be stored and put out for sale (1 mark), to protect those who may be allergic to the product, e.g. feathers (1 mark).

Any 3 appropriate reasons, 1 mark each.

(3 marks)

- (c) Give two reasons why it would be better not to package your product.**

e.g. packaging adds to costs (1 mark), it is not environmentally friendly (1 mark), it may prevent consumers from examining product (1 mark), spoils product (1 mark), time consuming (1 mark), trying on (1 mark).

Any 2 appropriate reasons, 1 mark each

(2 marks)

11 marks

5 Question 5 is about fabrics and components used in textile products for a baby.

- (a) The pages of the activity book are made from a plain weave cotton fabric.
Give four reasons why the manufacturer has chosen this fabric.**

e.g. **Cotton** is strong and hardwearing so it will last, is absorbent so it can be easily printed on and is non-static, is washable for hygiene, does not cause allergies so suitable for young child, is pleasant to touch, relatively cheap.

Woven fabric is strong, holds its shape well so book will stay in good condition.

Not 'harmful to baby'.

Any 4 appropriate reasons, 1 mark each

(4 marks)

- (b) (i) The flower on the left hand page is made from a polyester satin fabric.
Give two reasons why this is a good fabric to use for the flower.**

e.g. the **satin** is shiny and smooth so represents lily well and provides a change in texture for the child to touch, is eye-catching.

The **polyester** makes the fabric lightweight, washable and adds strength.

NB 'cheap' may be accepted but not if it has been accepted in (a).

Any 2 appropriate reasons, 1 mark each

(2 marks)

- (ii) Give one reason why it is not a good fabric to use for the flower.**

e.g. satin snags easily, polyester attracts dirt easily.

Any 1 appropriate reason.

(1 mark)

- (c) The activity book is fastened with Velcro.
Give two reasons why this is a good fastening to use on this product.**

e.g. **Velcro** is soft, easy to fasten, easy to attach to product, safe for a child, noise attracts child, does not break.

Not 'cheap'.

Any 2 appropriate reasons, 1 mark each

(2 marks)

- (d) Some of the pages make a noise when they are touched.
Explain two ways in which the pages can be made to make a
sound / noise.**

e.g. adding a squeaker between the 2 sides of the page, putting a
paper-like material which will rustle between 2 sides of page, using a
small bell.

**Any 2 appropriate methods, 1 mark each, plus
explanation of method, 1 mark each**

(2 marks)

13 marks

6 Question 6 is about the industrial manufacture of the activity book shown on the insert sheet.

- (a) (i) Name two different techniques which could be used to put the lettering on the pages.**

e.g. embroidery, various methods of printing such as bubblejet, heat transfer, paints, appliqué, CNC (method of printing).

Not 'CAD, CAM'

2 techniques, 1 mark each.

(2 marks)

- (ii) Explain how computer technology could help with one of the techniques you have named in part (a) (i).**

e.g. design taken direct from computer to printer, digital printing, computerized control of screen making, accurate placement of colour blocks. How ICT can help.

Simple statement (1 mark) More detail (2 marks)

(2 marks)

- (b) These activity books are manufactured in quality to sell in shops. It will be important that they are made to a high standard. Three faults were found in a batch of the book.**

- (i) Explain how the manufacture can make sure that all the pages have neat square corners.**

e.g. accurate cutting, accurate stitching so seams are same width on both sides, use of stitching guides, ensure right angle when turning corner, trimming / pushing out corners. Not QC check

Any 2 methods, 1 mark each

or one method with mark for expansion/explanation of method.

(2 marks)

- (ii) Explain how the manufacturer can make sure that all the sewn edges are neat with no fraying.**

e.g. ensure sufficient seam allowance, avoid trimming/snipping too close to stitching, avoid too much pressure on stitching when pushing seam out, double sewing, overlocking/zig zag stitch, use of iron-on/fusible interfacing. Not 'QC check'.

Any 2 methods, 1 mark each

or one method with mark for expansion/explanation of method

(2 marks)

- (iii) Explain how the manufacturer can make sure that the flower will stay firmly sewn to the page.**

e.g. ensure stitching is fastened off at both ends, ensure stitching reaches both ends of base of lily, make sure stitching is strong, reversing. Not 'QC check'.

Any 2 methods, 1 mark each

or one method with mark for expansion/explanation of method

(2 marks)

- (c) Give two reasons why quality control is important when making textile products.**

e.g. ensures that products are fit for intended market, produces high quality goods, products will sell with fewer returns, safety issues.

Any 2 methods, 1 mark each.

(2 marks)

- (d) The label shown below is attached to the activity book.
Explain what each symbol means.**

- (i) CE symbol** is the European safety conformity mark (1 mark), the book has been manufactured to essential safety standards (1 mark), and can be sold throughout Europe (1 mark), a safety mark (1 mark).

Any 1 point.

(1 mark)

- (ii) The lion mark** (1 mark), product is tested (1 mark), child friendly (1 mark), is the British toy and hobby association mark (1 mark), of toy safety and quality for the consumer (1 mark) Safety mark (1 mark but only if not accepted in (d)(i).

Any 1 point.

(1 mark)

- (e) Safety in the factory is important.
Give four ways a manufacturer can make a factory a safe place to work.**

e.g. points related to electrical safety, guards and stop buttons, prevention of fire, clear escape routes, 1st aid provision, appropriate safety wear, training in use of machinery, clean/tidy environment, safety rules, machine maintenance.

Any 4 appropriate conditions, 1 mark each

(4 marks)

18 marks

7 Question 7 is about the design and manufacture of a bag for a child.

- (a) It is made from 100% polyester fleece fabric.
Give three reasons why this fabric is suitable for the bag.**

Points relevant to bag, e.g. strong/hardwearing/durable so bag will last and cope with daily wear, easy to clean, soft for a child, fluffy to give 'doll' effect, not easy to set alight for safety, thickness gives depth to features, not absorbent so will dry quickly, cheap.

Any 3 reasons, 1 mark each

(3 marks)

- (b) The bag is lined.
Give two reasons why the bag has been lined.**

e.g. to neaten inside of bag, to add strength, to prevent damage to inside of bag, so that an inside pocket can be included, better quality product.

Any 2 reasons, 1 mark each.

(2 marks)

- (c) Name and describe two components which will be needed for this bag.**

e.g. pink/silver metallic embroidery thread, pink polyester sewing thread, pink/silver sequins, yellow/blue/black polyester embroidery thread, pink/white beads, fastening (named).

Name of component (1 mark)

Some detail of component or explanation of need for component (1 mark)

2 components, 2 marks each

(4 marks)

- (d) The information shown below was on the label attached to the bag.**

Give two reasons why the bag should be kept away from fire.

Safety warning/safety of child (1 mark), bag is flammable (1 mark) polyester fabrics melt and drip when burnt (1 mark), this can cause serious burns (1 mark), burning polyester gives off dangerous smoke (1 mark) air trapped in fleece fabric can cause 'flash' effect (1 mark).

Any 2 reasons, 1 mark each.

(2 marks)

(e) Many textiles products are made overseas.

(i) Explain three different advantages of this.

e.g. skilled / specialist labour overseas, cheaper labour, use of computers for instant communication about designs and manufacturing, cheap transport to get finished goods to where they are needed, lower costs of building factories abroad, less legislation about working conditions, modern machinery which is able to produce high quality goods in a short time.

Any 2 reasons, 1 mark each.

(6 marks)

(ii) Explain two different disadvantages of overseas manufacture.

e.g. possible lack of control over manufacture, loss of UK jobs, global issues relating to transportation of goods across continents, unethical use of labour, less legislation about pollution from dyestuffs/chemical treatments, shipping costs.

Not 'takes a long time'

**2 disadvantages of overseas manufacture, 1 mark each,
plus 1 mark for expansion/explanation**

(4 marks)

**(f) The selling price of the bag was reduced from £4 to £2.
Give two reasons why this reduction might have been made.**

e.g. end of range/season (1 mark), product was not selling (1 mark), to clear stock to make way for new ranges (1 mark), store closing (1 mark) shop soiled (1 mark), may be a 'loss leader' to entice consumers to buy other products (1 mark).

Not 'poor quality'.

Any 2 reasons, 1 mark each.

(2 marks)

23 marks