

# **General Certificate of Secondary Education**

# Design and Technology (Textiles Technology) 3547

**Full Course Higher Tier** 

# **Mark Scheme**

2008 examination - June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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# QuNo Response to be awarded credit

Mark Total

NB 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**.

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 quide when assessing the quality of a candidate's response.

**Low** 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

**Intermediate** 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.

**High** 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.

1 Question 1 is about research to generate design ideas.

(a) You were asked to research hat fashions of the 20th century.

Describe one style of hat which was fashionable in this period.

You may use a diagram.

Candidate may respond through an annotated diagram and/or written description.

There should be clear information about one hat from the C20th, e.g. the style, methods of decoration, fabric used, designer, date when it was fashionable, colour.

#### Marks awarded as follows:

- Little information given, the candidate will provide only a sketchy description and may appear confused. 1 mark
- There is some sound information about a particular style of hat but there will be some omissions.
   2 marks
- Clear and detailed information about a particular style of hat that was popular in the C20th.
   3 marks

(3 marks)

(b) Describe one feature of the hat you have described in part (a) which you could use in the design of your product. Explain why it might be effective.

Features may include for e.g., decoration, shape, size. Plus explanation of why it would be suitable for a modern hat / product.

#### Marks awarded as follows:

- Little understanding, simplistic statements only, candidate typically gives little information about the style feature, which may not be related to the hat described in (a). Explanation of suitability will be simplistic.
- Candidate shows understanding of the way in which a feature may be used on a modern hat but there may be some lack of information; in the description or explanation of suitability.
   2-3 marks

# (c) The factors shown in the chart below should be considered when designing a product.

# (i) trend forecasts

e.g. to ensure product is up to date (1 mark), so it will sell (1 mark), to see what other designers are doing (1 mark), indication that a trend forecast relates to the future (1 mark), so that colours, fabrics, styles are up to date (1 mark).

# 3 points, 1 mark each

(3 marks)

## (ii) method of manufacture

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 (1 mark), may affect choice of fabrics and components (1 mark) machinery/labour requirements (1 mark)

# Any 3 points, 1 mark each

(3 marks)

# (iii) target market

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

# Any 3 points, 1 mark each

(3 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.
  - 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.
   1-2 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.
- High quality designs which are very different or very different interpretations of the same product, 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. Do not be swayed by colour in sketches as candidates are not required to colour initial ideas and the use of colour can make sketches look better than they actually are.

- Work presented lacks clarity and may lack care in presentation.
   Notes add little extra information, may be simple labelling.
   Graphical skills are immature
   1-2 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) Explain how the design idea you have chosen would appeal to the target market of young adults.

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.

# Marks awarded as follows:

- Simple statements, e.g. 'It looks special' 1 mark
- More detailed statements with example, e.g. 'using antique lace is fashionable and fits in with the historical theme.' 2-3 marks

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

Marks will be awarded for

- use of fabric 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 the 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 C20<sup>th</sup> 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 will be clear that the C20th hat theme has been used in some way.
- 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 indication that the C20th inspiration has been used to good effect.

#### 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.
- 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. 5-6 marks
- 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, weak graphical skills, 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

(3 marks)

# 3 Question 3 is about decorative and construction techniques used on your product.

# (a) (i) Name one decorative technique you have chosen.

e.g. appliqué, embroidery, printing, dyeing, decorative use of components, decorative weaving.

(1 mark)

## (ii) Explain why you think it is suitable for your product.

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

Marks awarded as follows:

- Simple statements, e.g. 'It looks nice'.
   1 mark
- More detailed statements, e.g. 'the embroidery gives a lot of surface texture to achieve the historical look so the design is in keeping with the theme'.
   2-3 marks

(3 marks)

# (b) (i) Name one construction technique you have chosen.

e.g. seam type, edge finish, manipulation/shaping technique. Must be construction technique.

(1 mark)

#### (ii) Explain why you think it is suitable for your product.

Marks can be awarded here even if (b)(i) is incorrect. Reference may be made to strength, neatness of finish, appropriateness for fabric and/or style.

#### Marks awarded as follows:

- Simple statements, e.g. 'It has a seam'.
   1 mark
- More detailed statements, e.g. 'the open seam gives a flat finish which will not spoil the embroidery decoration'. 2-3 marks

(c) Use notes and diagrams to explain how to work the decorative technique named in part (a) (i).
Include information about materials and equipment that will be needed.

Clear details of how to work **either** the decorative technique named in (a) **or** the construction technique named in (b). Notes and/or diagrams may be used.

#### Marks awarded as follows:

- Very basic detail with little explanation of process. Explanation is confused. This candidate displays little knowledge and is unable to explain method.
- Basic detail, explanation of process adequate and would mostly achieve desired effect. This candidate has a good grasp of the method.
   3-4 marks
- Detailed explanation of process which would achieve desired result. Candidate understands and can clearly explain method. Accurate information about materials and equipment needed.
   5-6 marks

(6 marks)

- 4 Question 4 is about consumer choice in relation to your product.
  - (a) Describe two ways in which changes in society can affect design for textile products.

e.g. changes in the role of women, attitudes to fashion such as use of fur or other animal products, changes in composition of society such as immigration, age profile, attitudes to health and fitness, changed leisure time and pursuits, global economic issues.

#### Marks awarded as follows:

- Simple statements, e.g. 'Women's jobs have changed'.1 mark
- More detailed statements, e.g. 'women now go out to work so elaborate fashions which restrict movement would be impractical in today's world'.
   2-3 marks

2 changes, 3 marks each

(6 marks)

# (b) Your product is to be sold in a specialist shop. Describe and evaluate two different ways in which it could be advertised.

Specialist shop may be a specialist chain, designer shop, shop that sells hat products only.

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, internet websites, billboards, fashion shows, in-store promotions.

#### Marks awarded as follows:

- Very basic detail, candidate will possibly give 2 similar or inappropriate methods of advertising, and the explanation may be confused. There will be little evaluation; this may be concerned with only 1 or 2 simplistic and one-sided points.
   1-2 marks
- Appropriate methods selected and adequate explanation.
   Sound attempts to evaluate their effectiveness and possibly some examples given, but this will tend to be one-sided.
   3-4 marks
- Detailed explanation of methods, it is likely that examples will be given. Candidate provides a true evaluation of their likely effectiveness for situation given.

(6 marks)

(c) How might the advertising be different if the product was to be sold in a chain of supermarkets?

e.g. advertising would be national rather than local (1 mark), supermarkets would have more money to spend on advertising (1 mark), may have dedicated newspapers/magazines (1 mark). **Any 2 appropriate points, 1 mark each** 

(2 marks)

- 5 Question 5 is about fabrics and components used in textile products for a baby.
  - (a) The pages in the activity book are made from a plain weave cotton fabric.

Explain 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.

**Plain weave** is strong, is smooth for printing on, has no distinct pattern to distract, holds its shape well so book will stay in good condition. Not 'cheap, easily available, safe'.

#### Marks awarded as follows:

- Very basic detail with limited number of fibre qualities but probably no reference to fabric construction. Explanation is confused and there will be many inaccuracies. Points raised will possibly not relate to book.
- Sound detail of a range of qualities which is mostly accurate.
   Points tend to relate to fibre but there will probably be some attempt to refer to fabric qualities and use of book. 3-4 marks
- Sound and accurate detail of a range of fibre and fabric qualities. These will be clearly related to use of book. 5-6 marks

(6 marks)

(b) The flower on the left-hand page of the activity book is made from polyester satin fabric.

Evaluate the use of this fabric.

e.g. the **satin** is shiny and smooth so represents lily well and provides a change in texture for the child to touch. The **polyester** makes the fabric lightweight, washable and adds strength. However, the satin weave is not resistant to abrasion and may 'pull' and snag after some use.

#### Marks awarded as follows:

- Simple statements, e.g. 'It is soft and shiny and strong'. Little thought about the negative side of the fabric.
   1-2 marks
- More detailed statements, e.g. 'the satin is smooth and shiny so will have a different texture to the pages but the satin will snag after awhile because of the loose weave'.

(4 marks)

(c) The activity book is fastened with Velcro.

Compare the use of Velcro with press studs for this product.

e.g. **Velcro** is soft and easy to fasten, it is safe for a child, interesting sound effect.

**Poppers** are not so easy to fasten and can fall off posing a danger of swallowing for a child.

# Marks awarded as follows:

- Simple statements, may concentrate on only one of the fastenings with little effective comparison.
   1-2 marks
- More detailed statements with effective and accurate comparisons between the two fasteners in relation to book.
   3-4 marks

(4 marks)

- Question 6 is about the industrial manufacture of the activity book shown on the insert sheet.
  - (i) Name two different techniques which could be used to apply the lettering to the pages.

e.g. embroidery, printing. Not appliqué. 2 types of printing (1 mark only) 2 techniques, 1 mark each.

(2 marks)

(ii) Explain how the use of computer technology could help with this part of the manufacture.

e.g. design taken direct from computer to printer, digital printing, computerized control of screen making, accurate placement of colour blocks, speed up process, not just 'quicker'.

Not 'CAD, CAM'.

Any 3 points, 1 mark each.

An expansion of a point may count for a mark.

(3 marks)

(b) These activity books are manufactured in quantity to sell in shops.

It will be important that they are made to a high standard.

Explain how the manufacturer can ensure that all of the pages are the same size.

e.g. accurate cutting, straight and accurate stitching, keeping an even seam allowance, using a stitching guide on a machine.

Any 3 points, 1 mark each.

An expansion of a point may count for a mark.

# (c) Explain why product and manufacturing specifications are important in ensuring that high quality goods are manufactured.

e.g. specifications will be used for different parts of the design and manufacture to ensure that all goods are produced to a common standard. They will include planned quality control checks to ensure that goods meet the standards set. They ensure that every worker involved in the process understands what is required and will incorporate any feedback provided as a result of quality checks to make necessary modifications.

#### Marks awarded as follows:

- Very basic detail with little explanation beyond 'everyone knows what to do'. Explanation may be confused. This candidate displays little knowledge and is unable to explain the need for specifications clearly or to give examples.
   1-2 marks
- Sound knowledge and clear explanation of specifications. This
  candidate has a good understanding and is able to give
  examples to illustrate some of the points made.
   3-4 marks

(4 marks)

# (d) The label shown below is attached to the activity book.

# Explain in detail what the symbols tell the consumer.

**CE symbol** is the European safety conformity mark, indicates that the book has been manufactured to essential safety standards which can be sold throughout Europe (2 marks).

Safety symbol only (1 mark)

Reference to Europe (1 mark)

The **lion mark** is the British toy and hobby association mark (1 mark), of toy safety and quality for the consumer (1 mark), product has been tested (1 mark).

(4 marks)

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

(a) (i) It is made from a 100% polyester fleece fabric. Explain why this fabric is suitable for the bag.

e.g. strong and hardwearing 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, has thickness to give depth to features, not absorbent so will dry quickly.

#### Marks awarded as follows:

- Simple statements, e.g. 'It is soft and strong'. Little thought given to the end use of the fabric. Points will tend to be only about the fibre or fleece and will show some confusion 1-2 marks
- More detailed statements, e.g. 'the fabric is fluffy so gives depth to the embroidered features'. There will be consideration of the qualities of fibre and fabric in relation to the end use 3-4 marks

(4 marks)

(ii) The bag is lined with a knitted fabric Explain why a kitted fabric has been chosen.

The fleece fabric has stretch (1 mark), so lining needs to stretch (1 mark), the knitted lining will stretch (1 mark), lining provides some 'give' to prevent lining splitting when things are put in the bag (1 mark). **Any 3 points, 1 mark each** 

(3 marks)

(b) The information shown below was on the label attached to the bag.

Explain why the consumer is advised to keep the bag away from fire.

Safety warning (1 mark), polyester fabrics melt and drip when burnt (1 mark), this can cause serious burns (1 mark), air trapped in fleece fabric can cause 'flash' effect (1 mark). **Any 3 points, 1 mark each.** 

A well reasoned explanation of a point may count for a mark.

# (c) Many textiles products are made overseas.

Discuss the moral and environmental issues associated with this.

#### Moral issues:

e.g. cheaper labour, cheap transport to get finished goods to where they are needed, lower costs of building factories abroad, possible lack of control over manufacture, less legislation about working conditions, global economy should be supported, loss of jobs in UK, cheaper products allow more people to enjoy better lifestyles.

#### **Environmental issues:**

e.g. transportation of goods across continents, less legislation about pollution from dyestuffs and other chemical treatments, cheap goods encourage purchase of short life products and therefore more thrown away

#### Marks awarded as follows:

- Very basic information with limited number of points.
   Explanation is confused with many inaccuracies.
   0-2 marks
- Sound information covering a range of issues and which is mostly accurate. Points may cover a number of areas superficially or may cover a few in some detail.
   3-5 marks
- Sound and accurate information covering a range of issues, including positive and negative points. Candidate will be informed and information will be accurate and up-to-date.
   6-8 marks

(8 marks)