



ASSESSMENT and  
QUALIFICATIONS  
ALLIANCE

# Mark scheme

# June 2003

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## GCSE

### Design and Technology Textiles Technology

3557 (Short Course)

### Foundation

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## DESIGN AND TECHNOLOGY: TEXTILES TECHNOLOGY

**Short Course – Foundation Tier****Response to be awarded credit**

**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 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 guide when assessing the quality of a candidate's response.

**Quality of Written Communication**

The published criteria for the marking of spelling, punctuation and grammar are not applied to these papers.

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.

- Level 1** 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 talking about
- Level 2** 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 talking about but is confused in part.
- Level 3** This 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 talking about.

Question 1

- a) e.g. books, magazines, videos, CD-Rom, museum, TV, Internet, in habitat.  
Any two appropriate ways 1 mark each 2 marks  
**2 marks**
- b) i) e.g. for colour in product, markings on parts of body, contrast between main part of product and decoration, colours on body, colour relating to insect, insects vary in colour and shade techniques. 3 marks
- ii) e.g. for decoration. e.g. shape of insect bodies, used for shape of product or decoration. 3 marks
- iii) e.g. for decoration e.g. embroidery, print, to provide interest on insect body, different markings.  
Any three appropriate uses 1 mark each  
Or fewer uses with some detail/ explanation/ examples. 3 marks  
**9 marks**
- Total 11 marks**

Question 2

- a) e.g. tells designer what must be included, avoids wasting time, ensures that product will be appropriate for target market, may give indication of product shape/ size.

**NOT** check you are doing it right

Any two appropriate points 1 mark each

**2 marks**

- b) i) 2 sketches to show different initial ideas for product.  
2 sketches, 4 marks each.  
N.B. Candidates are not to be penalised if they do not use pencil.

**Marks awarded as follows:**

Weak sketch with little detail shown 1 mark each

Good clear sketch showing some detail, may be same product with different styling decoration 2 marks each

Clear sketch which shows some detail and is different to other or is a modification of other 3 marks each

Detailed sketches showing 2 different products clearly. It is clear what is intended 4 marks each

**8 marks**

- iii) Candidates should evaluate selected design for intended end use.  
Marks awarded as follows:

Simple statement, e.g. 'I like the shape' – **not** 'I like it' 1 mark

More detailed statement with example e.g. 'the shape allows the decoration to be seen from all sides or 2 separate points 2 marks

**2 marks**

- c) Area for development may include shape, decoration, fastening or other as appropriate to product.

**Marks awarded as follows:**

Part of product to be developed identified 1 mark

**Plus**

Simple change which has little impact 1 mark

Clearly shown change which is different 2 marks

**3 marks**

d) **Final design** for product to include:

<b>Materials</b>	Poor choice of fabric/ inappropriate components, do not reflect theme	1 mark
	Sound choice of fabrics/ other materials but will not be used to advantage (Cut off point 3 marks max. if only fibre/fabric or components mentioned)	2-3 marks
	Good choice of materials, may not be a wide choice but used to develop theme effectively	4-5 marks <b>5 marks</b>
<b>Colours</b>	Colour indicated but immature and not used to effect	1 mark
	Choice is pedantic, does not make product exciting	2 marks
	Used effectively/ imaginatively, mature and sensitive choice	3-4 marks <b>4 marks</b>

#### **Quality of design**

The following should be considered:

Modern, original and imaginative design, balanced composition / effective use of space, effective use of theme, proportions appropriate for intended use, ability of product to be manufactured.

#### **Marks awarded as follows:**

<b>Level 1</b>	Lack of detail, unimaginative design which does not clearly relate to theme, poor use of space	1-2 marks
<b>Level 1/2</b>	Unimaginative design with little thought given to intended end use, relates to theme but may not be clear, overall balance weak. Product may not be easy to manufacture in quantity.	3-4 marks
<b>Level 2</b>	Sound design related to theme with clear detail about product and end-use - this may be inappropriate in places. Design lacks imagination. Overall composition may be weak. Product may not be easy to manufacture in quantity.	5-6 marks
<b>Level 2/3</b>	Clear detailed design related to spec. Good quality and imaginative design for product suitable for end use. Space used effectively. Product will be able to be manufactured in quantity.	7-8 marks  <b>8 marks</b>

**Quality of presentation**

Lack of care in presenting work, candidate will not communicate clear 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 product clearly which will include information about back view, labelling is used to communicate what is intended. 3 marks

**3 marks****20 marks****Total 35 marks**

Question 3

- a) i) e.g. use of database, use of Internet to find information about fabrics use of image mapping or virtual prototype  
2 methods, 1 mark each 2 marks
- ii) e.g. fibre/ fabric properties, information about texture, pattern and drape, new fabrics on market, uses of fabric, care of fabric, how it is made, what it is made from  
Any three points, 1 mark each or one/ two points in more detail 3 marks  
**5 marks**
- b) i) Appropriate fibre or blend, e.g. silk, polyester/ cotton 1 mark
- ii) Reasons for choice as appropriate to product. It is expected that the candidate will give a fabric property and relate this to the end use of the product.  
**Not** cost or colour  
3 reasons, 2 marks each 6 marks  
**7 marks**
- c) i) e.g. check that pattern is 'straight', flaws in weave/ knit, fabric is not twisted, colour is even, printed pattern is not smudged or out of register, tears, stains, no faults. **NOT** fraying.  
**Not** correct width or quantity. **Not** testing or just colour  
2 checks, 1 mark each 2 marks  
**2 marks**  
**14 marks**

Question 4

- a) e.g. fabrics and components needed, decoration to be used, design/drawing of product, details of stitches/techniques, pattern pieces needed, tolerance levels, sub assembly lines, delivery dates, number of products to be made, type of machine to be used. Care label  
**NOT** pattern layout, cutting out or cost. 4 marks  
 Any **four** acceptable items 1 mark each  
**4 marks**
- b) 3 improvements and reasons:  
 1 pattern piece not on straight grain, will cause fabric to twist in use or fabric pattern will be skewed;  
 2 pattern pieces overlapped, section of product will be missing or excessive seam allowance will be needed so product will be incorrect size;  
 3 fabric used uneconomically, will cause wastage or will add to costs.  
 3 correctly identified improvements, 1 mark each **plus** 1 mark for each problem 6 marks  
**6 marks**
- c) i) Specify required accuracy of product/made to certain standard - 1 mark  
 within upper and lower limits - 1 mark **2 marks**
- ii) Candidates should identify one part of own product and explain what tolerance level would be required  
**Marks awarded as follows:**  
 Simple statement, e.g. 'seams must be same width' with no detail 1 mark  
 Some detail of appropriate check related to own product e.g. 'must match up but can be 1-3mm out'. 2 marks  
**2 marks**
- d) e.g. accuracy of manufacture, speed of manufacture, all products the same, better quality of finish, reduction in labour costs.  
 Any 2 points, 1 mark plus some detail, 1 mark each 4 marks  
**4 marks**
- e) e.g. employment costs cheaper abroad, skill of workforce abroad, materials may be cheaper/ easier to obtain, cost effective, health and safety legislation less strict so operational costs lower, better technology  
 Any 2 points, 1 mark each - 2 marks  
 Plus some detail about each of them – 2 marks 4 marks  
**4 marks**



- f) e.g. use of dangerous materials/ processes, working environment with respect to health, ergonomics of work station, ventilation, heating and lighting, guards on machines, conditions, protective clothing as required, adequate staff training, able to stop machine quickly, no slippery floors, no food or drink  
**NOT** tie hair back, jewellery, shoes unless clear reason given.  
**NOT** concentrating  
**NOT** switch off machines after use  
Any 3 points, 1 mark each – 3 marks  
Plus some detail about each of them – 3 marks

6 marks

**6 marks****Total 28 marks**

Question 5

- a) e.g. shape of bag with gusset gives room for various items, internal pocket for security, external pocket gives extra space, size of bag allows for carrying of larger items, straps are strong so hold heavy load, reference to zip

Do not accept repeated information from design.

**Marks awarded as follows:**

Candidate may give a list of four points, 1 mark each or

Give fewer points with some detail about each

4 marks

**4 marks**

- b) i) Candidate should suggest an alternative component, e.g. poppers, buttons or Velcro instead of zips
- ii) An explanation for the designer's use of the component should be given.

1 mark

**Marks awarded as follows:**

Simple explanation, e.g. 'it's strong'

1 mark

More detailed explanation with possibly some comparison made with suggested alternative

2-3 marks

**4 marks**

- c) e.g. nylon fabric is very hardwearing so will take wear and tear, is washable and quick drying so product can be easily cleaned, lightweight so does not add to weight of load, doesn't stain easily, low absorbency, resistant to abrasion
- Any two appropriate reasons – 1 mark each
- Plus some expansion/eplanation of point – 1 mark each

4 marks

**4 marks**

**Total 12 marks**

**Total Marks on Paper 100**