



ASSESSMENT and
QUALIFICATIONS
ALLIANCE

Mark scheme

June 2003

GCSE

Design and Technology Textiles Technology

3547 (Full Course)

Foundation

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DESIGN AND TECHNOLOGY: TEXTILES TECHNOLOGY

Full 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, 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/ example. 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, Detail so 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:

Materials	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 component mentioned)	2-3 marks
	Good choice of materials, may not be a wide choice but used to develop theme effectively	4-5 marks 5 marks
Colours	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 4 marks

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:

Level 1	Lack of detail, unimaginative design which does not clearly relate to theme, poor use of space	1-2 marks
Level 1/2	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
Level 2	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
Level 2/3	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 8 marks

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 usually 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 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 colour, not cheaper unless justified.
3 reasons, 2 marks each 6 marks
7 marks
- c) e.g. check that pattern is 'straight', flaws in weave/ knit, fabric is not twisted, colour is even, printed pattern in not smudged or out of register.
Not correct width, quantity delivered, testing or just colour.
2 checks, 1 mark each 2 marks
2 marks
- d) i) e.g. threads, fastening, decorative trim, beads, sequins 1 mark
- ii) Appropriate reason for choice related to product
Not cheap. 2 mark
3 marks
- Total 17 marks**

Question 4

- a) e.g. fabrics and components needed, details of stitches/techniques, pattern pieces needed, tolerance levels, sub assembly lines, delivery dates, number of products to be made, drawing of product, type of machine to be used, care label, time.
Not pattern layout, cutting out or cost.
Any **four** acceptable items 1 mark each 4 marks
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 a 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
Total 14 marks

Question 5

- a) i) Produces goods which do not involve very large numbers (1 mark), batch may be repeated later (1 mark)
many skilled workers involved (1 mark)
2 points 1 mark each **or** one point in more detail 2 marks
- ii) Limited number to be made (1 mark), most economical (1 mark)
product may change according to market demand (1 mark),
workers may be able to specialise in a particular job (1 mark),
equipment and workers can be changed to different jobs
according to demand (1 mark)
2 points 1 mark each 2 marks
4 marks
- b) Candidates should identify three realistic ways in which costs
might be reduced, e.g. design of product, use of materials and
techniques, storage costs, avoiding waste.
Any three appropriate methods, 1 mark each 3 marks
3 marks
- c) i) Smaller sections of product - 1 mark
Put together before main assembly - 1 mark 2 marks
- ii) Workers become skilled at the process, flexible workforce, may
allow for product sections to be brought in from elsewhere,
efficient/quicker 2 marks
Any 2 advantages, 1 mark each
- iii) Any appropriate section of candidate's product 1 mark
5 marks
- d) i) 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
- ii) Candidate should identify a part of own product which could be
done on automated machine e.g. buttonholes, pocket setting,
making hems/ seams
Any appropriate part of product, 1 mark
Plus some detail of operation, 1 mark 2 marks
6 marks
- e) e.g. employment costs cheaper abroad, skill of workforce
abroad, materials may be cheaper/ easier to obtain, health and
safety legislation less strict so operational costs lower, better
technology
Any 2 points, 1 mark each - 2 marks 4 marks
Plus some detail about each of them – 2 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.

NOT jewellery, shoes unless clear reason given.

NOT concentrating or 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 6

- 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.

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) 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 weight of load.

Three reasons, 1 mark each

Plus some detail/explanation, 1 mark each

6 marks

6 marks

- c) 1 mark for component e.g. zip.
2 marks for descriptive comments

6 marks

6 marks

- d) i) Candidate should suggest an alternative component, e.g. poppers, buttons or Velcro instead of zips

1 mark

- ii) An explanation for the designer's use of the component should be given.

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

Total 20 marks

Total Marks on Paper 125