

General Certificate of Education

Design and Technology: Product Design (5551/6551)

Unit 3 (Textiles) PD3T

Mark Scheme

2006 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.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Design and Technology: Product Design

Textiles (PD3T)

Quality of Written Communication

The following marks are allocated to the quality of the candidate's written communication. Make a separate assessment of the candidate's overall ability as demonstrated across the paper using the criteria given below.

Performance Criteria	Marks
The candidate will express complex ideas extremely clearly and fluently. Sentences and paragraphs will follow on from one another smoothly and logically. Arguments will be consistently relevant and well structured. There will be few, if any, errors of grammar, punctuation and spelling.	4
The candidate will express moderately complex ideas clearly and reasonably Fluently, through well-linked sentences and paragraphs. Arguments will be generally relevant and well structured. There may be occasional errors of grammar, punctuation and spelling.	3
The candidate will express straightforward ideas clearly, if not always fluently. Sentences and paragraphs may not always be well connected. Arguments may sometimes stray from the point or be weakly presented. There may be some errors of grammar, punctuation and spelling, but not such as to suggest a weakness in these areas.	2
The candidate will express simple ideas clearly, but may be imprecise and awkward in dealing with complex or subtle concepts. Arguments may be of doubtful relevance or obscurely presented. Errors in grammar, punctuation and spelling may be noticeable and intrusive, suggesting weaknesses in these areas.	1

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

(low mark range)

The candidate has a basic but possibly confused grasp of the issues. Few correct examples are given to illustrate points made. Description may be unclear.

(mid mark range)

The candidate has some knowledge but there will be less clarity of understanding. Some correct examples given to illustrate points made. Description better but unclear or confused in parts.

(high mark range)

The candidate has a thorough understanding of the issues and has provided relevant examples to support the knowledge shown. This candidate's answer shows clear evidence of understanding.

1 (a) (i) e.g. trend towards "one-stop" shopping/convenience factors, improved quality of goods, use of popular designers for supermarket ranges, prices lower than high street retailers/value for money, reference to 'disposable' fashions, fashion/homeware products brought to the attention of people shopping for everyday necessities/ease of availability, promotional features in media.

Marks awarded as follows:

Little understanding shown, candidate will tend to concentrate on lower prices and most of the response will be confused and disjointed. Few examples given.

(1-2 marks)

Candidate shows understanding of reasons for supermarkets' increasing popularity and gives examples to illustrate points made. There will be some lack of clarity of understanding.

(3 - 4 marks)

Candidate shows sound understanding of supermarkets' increasing popularity and provides clear examples to illustrate points made. Information will be coherent and logical.

(5-6 marks) (6 marks)

(ii) Candidate may argue for or against the use of packaging. e.g. packaging provides useful consumer information, adds to the appeal of product, colour may attract buyer, protects products, ease of shelf stacking, adds to cost of product, not environmentally friendly, more difficult to examine product prior to purchase.

Marks awarded as follows:

Little understanding shown, candidate will tend to concentrate on projection; some of the response will be confused and disjointed. Few examples given.

(1 mark)

Candidate shows understanding of reasons for packaging and gives limited range of examples to illustrate points made. Points will tend to be for one side only and there may be some lack of clarity of understanding.

(2-3 marks)

Candidate shows sound understanding of reasons for packaging and provides clear examples to illustrate points made. There may be points for and against.

Information should be coherent and logical.

(4-5 marks) (5 marks)

(b) e.g. use of different materials, different designs, more elaborate production methods, wider colour/size ranges.

Marks are awarded as follows:

Little relevant knowledge shown, candidate typically makes superficial comments without considering a range of methods. Few examples given. (1-3 marks)

Candidate shows some knowledge of the constraints and opportunities afforded by the different ranges and gives some examples to illustrate points made.

There may be some irrelevant or confused points.

(4-6 marks)

Candidate is knowledgeable about the opportunities to design for different ranges and gives a range of appropriate examples to illustrate the points made.

(7 – 9 marks) 9 marks **Total 20 marks**

2 (a) Range of initial ideas

The candidate should show a range of initial ideas for products using the specification given. The range may include many different ideas for a similar product, or many ideas for different products, but not simple variations on one or two products.

Look for variety of colour, shape, decoration, use of fabrics and components, originality and interest, appropriateness for end use. There should be annotation to explain thinking.

Marks awarded as follows:

Limited range of ideas which are very similar. Little annotation to indicate potential for development. Design theme has not been explored fully with the result that the ideas are immature and limited. These ideas will generally be worthy of 1 mark per drawing.

(1 - 4 marks)

Range of appropriate ideas which are adequate but lack interest and novelty. The candidate has tried to use the design theme in a variety of ways but this may well show as an un-coordinated array of ideas. Products would sell well in a supermarket but are quite ordinary and similar to existing products.

(5-7 marks)

Range of appropriate ideas with some ideas for development. Design will tend to be based on a limited number of ideas but will show some originality. Although small in number, there will be some variety in ideas with alternative design features. The work is sound but 'safe'. Ideas will generally be worth up to 3 marks per drawing.

(8-11 marks)

Wide range of ideas with thoughts for development. Designs will show originality and will be for different products. There is evidence that the design theme has been explored fully and applied in the widest sense. Ideas will generally be worth 3-4 marks per drawing.

Candidates with fewer ideas but ones that are of very good quality should be able to access this mark band.

(12 - 15 marks) (15 marks)

(b) (i) Quality of Communication.

Assessed across both initial and final ideas.

This is about quality of graphical skills and the use of annotation. Are style details shown? Is the work clean and tidy? Have colour and shading been used to enhance the quality of the work? Has the candidate enlarged some sections to show detail more clearly? Do notes add to the detail and possibly compensate for weaknesses in graphical skills?

Marks awarded as follows:

Weak, untidy work, mainly 2D, with limited annotation to explain both initial and final design ideas. Limited communication techniques so that it is difficult to understand what is intended and see all aspects of design. Style details will be omitted.

(1-3 marks)

Weak but tidy work, annotation explains some of what is intended for initial and final ideas, work is limited but reasonably clear with 2D and some 3D drawings. The work is pedantic and there may be evidence that the candidate is nervous about drawing. A range of techniques has been attempted, e.g. pencil drawing, shading, colour.

(4-6 marks)

Neat and tidy work using a range of techniques, it is clear what the candidate intends. Annotation explains much of what is intended and style details are clear. There are sound attempts to explain thinking and ideas for development. The candidate shows confidence but lacks some flair in presenting work.

(7 - 9 marks)

Clear communication about what is intended, this candidate has some artistic ability and is able to communicate ideas with some flair using a range of techniques. Annotation adds further explanation to candidate's thinking in initial and final ideas. Style details will be clearly shown.

(10 - 12 marks) (12 marks)

(ii) Originality/innovation of product.

This is based on the final product.

Consider the shape and style of the product. Are the original and interesting features or is it very similar to an existing product?

Have fabrics and components been used innovatively?

Does the design have a 'wow' factor? Will it appeal to the target market?

Marks are awarded as follows:

Limited and uninspiring design which may be inappropriate for intended end-use and will have little appeal to target market. Design may be a copy of existing product with little modification.

(1-3 marks)

The design is weak and immature; lacks interest and flair but would probably be appropriate for intended end-use. Design has limited appeal to target market and is probably a copy of existing design with minor modification.

(4-6 marks)

Candidate has attempted to produce imaginative designs but product lacks interest and design is not wholly relevant to the situation given. Fabrics and components have not been explored fully with the result that the final design lacks flair although there will probably be 2/3 examples of innovative features/use of materials. Work is sound, probably based on existing product with some modification to add interest.

(7 - 9 marks)

Sound idea with several examples of originality in product shape and/or use of fabrics and components. Design is relevant and there has been a strong attempt to be creative; product will have a lot of appeal to target market. Design moves away from safety of existing products.

(10 - 12 marks)

Highly original ideas which exploit use of fabrics and components and theme. There will be numerous occasions where the candidate has shown innovative design features and use of fabrics and components. Design is very relevant to situation and will have strong appeal to target market.

(13 - 15 marks) (15 marks)

(iii) Appropriateness of fabrics and components.

Assess across both initial and final designs.

Look for a variety of fabrics. Should include natural fabrics and colours. Includes main fabrics, trimmings, fastenings, interfacings, threads, linings. There should be some reference to weight, colour, fabric finish, fibre content and fabric type.

Marks are awarded as follows:

Limited range of fabrics and components across designs with little clear detail, e.g. "cotton". May not be most appropriate for product. Little indication of how they are to be used. May not show clear use of natural fabrics.

(1-2 marks)

Range of appropriate fabrics and components with some indication of how they will be used in both initial and final designs.

Basic detail given of a limited range of materials, e.g 'lightweight cotton'. Use of natural fabric but this may not have been clearly thought through and there will be a lack of clear detail, e.g 'fabric breathes'.

There will be some repetitive use of fabrics.

(3-5 marks)

Good range of appropriate fabrics and components with clear indication of how they will be used. Natural fabrics are used appropriately and there is clear detail, e.g 'fabric is made from organically grown cotton in a cream colour'. Fibre content and indication of fabric type, e.g 'lightweight woven cotton'. Use of trimmings and other components sound but there will typically be a lack of detail and/or variety.

(6-7 marks)

Wide range and variety of appropriate fabrics and components used in initial and final designs with sound detail and clear explanation of how they will be used. e.g 'lightweight knitted cotton fabric gives flexibility and drape'. Clear and detailed explanation of how natural fabric will be used.

(8-10 marks) (10 marks)

(iv) Methods of construction.

Methods of making the product, not the fabric. e.g seam type, shaping, edge finish, decorative techniques used as part of the **product** construction, e.g. appliqué, beading, specialised embroidery effects, padding and quilting. This does **not** include decoration which forms part of the fabric manufacture, e.g. printing, dyeing, all-over embroidery. Candidate may include shapes of pattern pieces and size/dimensions of product and/or components.

Marks awarded as follows:

Limited information about how the **product(s)** will be constructed. This will typically be limited to one or two basic methods given as simple labels, e.g. seam type.

(1-3 marks)

Minimal information about **product** construction methods, (two to three). These may not always be most appropriate for product and may not take batch manufacture into consideration.

At least one construction/manufacturing method sketched and explained. Some detail of dimensions and/or sizes.

(4-6 marks)

Some information about **product** construction methods. These will generally be most appropriate for product but will take batch manufacture into consideration. Some large scale diagrams to show what is intended. At least one construction/manufacturing method explained in some detail with brief noted on at least one other.

Some details of dimensions and/or sizes.

(7-9 marks)

Clear information about appropriate construction techniques to be employed in at least two areas. These techniques will be suitable for batch production and for the **product(s)** shown. Detail of a number of dimensions and overall sizing.

(10 - 12 marks) (12 marks)

(v) Specification criteria met.

Has the nature theme been fully explored and developed?

Is there evidence of ideas being developed throughout the paper?

Is the work exciting and vibrant?

Are the products appropriate for the summer season?

Are the products appropriate for a supermarket range?

Has a range of fabrics and components been used to enhance the design work?

Have natural colours been used tastefully and effectively?

Is the product appropriate for batch production?

Marks awarded as follows:

Specification point	Just met	Met well
Has the nature theme been fully	1 mark	2 marks
explored and developed?		
Are the products appropriate for	1 mark	2 marks
the summer season?		
Are the products appropriate for a	1 mark	2 marks
supermarket range?		
Has a range of natural fabrics and	1 mark	2 marks
colours been used?		
Has an appropriate range of	1 mark	2 marks
components been used?		
Is the product appropriate for batch	1 mark	2 marks
production?		

(12 marks)

Total 76 marks

Question 1	20 marks
Question 2	76 marks
Quality of written communication	4 marks
Paper total	100 marks