



## Cambridge O Level

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**FASHION AND TEXTILES**

**6130/01**

Paper 1 Written

**May/June 2021**

MARK SCHEME

Maximum Mark: 100

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**Published**

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

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This document consists of **25** printed pages.

**Generic Marking Principles**

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

**GENERIC MARKING PRINCIPLE 1:**

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

**GENERIC MARKING PRINCIPLE 2:**

Marks awarded are always **whole marks** (not half marks, or other fractions).

**GENERIC MARKING PRINCIPLE 3:**

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

**GENERIC MARKING PRINCIPLE 4:**

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

**GENERIC MARKING PRINCIPLE 5:**

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

**GENERIC MARKING PRINCIPLE 6:**

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

**Social Science-Specific Marking Principles  
(for point-based marking)****1 Components using point-based marking:**

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

- a** DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)
- b** DO credit alternative answers/examples which are not written in the mark scheme if they are correct
- c** DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require  $n$  reasons (e.g. State two reasons ...).
- d** DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
- e** DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities
- f** DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).
- g** DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

**2 Presentation of mark scheme:**

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

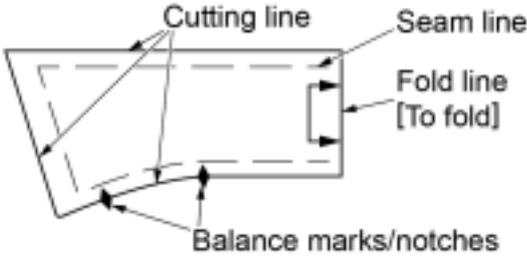
**3 Calculation questions:**

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

**4 Annotation:**

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

Question	Answer	Marks
<b>Section A</b>		
1(a)(i)	<p><b>Corduroy fabric is suitable for the ladies' jacket in Fig. 1.1. Describe corduroy fabric.</b></p> <p><b>Construction:</b> woven/plain weave, pile weave, three sets of threads, warp, weft and pile</p> <p><b>Appearance:</b> right side surface has lines of pile, parallel to selvedge edges, size of pile varies e.g. 3 mm or 5 mm, smooth ridges</p> <p><b>Feel/handle:</b> soft right side, ridged surface due to lines of pile, wrong side smooth, quite stiff/firm</p> <p>1 mark for each correct point in each section</p>	<b>3</b>
1(a)(ii)	<p><b>State two reasons why corduroy fabric is suitable for the ladies' jacket in Fig.1.1</b></p> <ul style="list-style-type: none"> <li>• comfortable, soft surface</li> <li>• firm fabric, tight weave</li> <li>• keeps its shape well due to its medium weight</li> <li>• durable</li> </ul> <p>1 mark for each correct point</p>	<b>2</b>
1(a)(iii)	<p><b>State one type of interfacing which could be used in the construction of the collar on the ladies' jacket in Fig.1.1.</b></p> <p>Fusible/Iron-on interfacing, woven interfacing/nonwoven interfacing, Vilene/Visalene</p>	<b>1</b>
1(a)(iv)	<p><b>State two reasons why interfacing is used in parts of the ladies' jacket in Fig.1.1</b></p> <ul style="list-style-type: none"> <li>• To stiffen/stabilise the fabric/make firm/harder</li> <li>• to shape better in use/give support.</li> <li>• strengthen/reinforce.</li> </ul> <p>1 mark for each correct point</p>	<b>2</b>

Question	Answer	Marks
1(a)(v)	<p><b>Fig.1.2 is a drawing of a pattern piece for the back of a collar. Draw the following pattern symbols on Fig.1.2.</b></p> <p><b>Cutting line, seam line, balance mark, fold line.</b></p>  <p>One mark for each correctly placed symbol with or without labels.</p>	4
1(b)(i)	<p><b>Explain how to lengthen the paper pattern for the sleeve of the ladies' jacket in Fig.1.1. You may use diagrams to support your answer.</b></p> <ul style="list-style-type: none"> <li>• find lengthening and shortening/alteration line (2 parallel lines across the pattern)</li> <li>• cut between the two lines</li> <li>• Measure the amount to be lengthened/draw lines on the paper showing the required distance/increase in length</li> <li>• insert paper between the two pieces of the pattern and fix with pins, glue or sticky tape</li> <li>• Smooth the cutting line and seam line if necessary</li> </ul> <p>1 mark for each correct point. Give credit for points in labelled diagrams. 2 marks max if the pattern is extended at the bottom.</p>	4
1(b)(ii)	<p><b>Explain what is meant by 'with nap' when using corduroy fabric</b></p> <ul style="list-style-type: none"> <li>• nap is a raised pile</li> <li>• The pile is brushed so that it lays one way.</li> <li>• The fabric colour appears different when viewed from each direction.</li> <li>• pattern pieces must all be cut in the same way so that the pile goes the same way when the garment is worn/causes colour change and less hard wearing if pile is upwards</li> </ul> <p>1 mark for brief explanation, 2 marks for detailed explanation.</p>	2

Question	Answer	Marks
1(b)(iii)	<p><b>Explain why it is necessary to follow the straight grain lines on pattern pieces when preparing the layout of corduroy fabric</b></p> <ul style="list-style-type: none"> <li>• Pattern pieces should be placed so that the straight grain line follows the warp or weft threads/is parallel to the selvedge</li> <li>• If pattern pieces are not placed correctly on the grain line a garment will not hang properly/be distorted</li> <li>• Corduroy fabric has a raised pile/nap.</li> <li>• Pattern pieces of corduroy fabric must all be cut in the same way so that the pile goes the same way when the garment is worn</li> <li>• causes colour change and less hard wearing if pile is upwards</li> </ul> <p>1 mark for brief explanation, 2 marks for detailed explanation</p>	<b>2</b>
1(c)(i)	<p><b>State the two types of seam visible on the back of the ladies' jacket in Fig. 1.1</b></p> <ul style="list-style-type: none"> <li>• centre back seam</li> <li>• princess line/curved seams on both sides of the jacket back.</li> <li>• Sleeve seam</li> </ul> <p>1 mark for each correct point.</p>	<b>2</b>
1(c)(ii)	<p><b>Explain how to make sure the curved seam on the back of the ladies' jacket in Fig.1.1 is pressed correctly.</b></p> <ul style="list-style-type: none"> <li>• Clip the seam,</li> <li>• Use a damp cloth.</li> <li>• Open seam and press.</li> </ul>	<b>2</b>
1(d)	<p><b>Identify two components that can be used to achieve the finish shown on the collar, front and hem edges of the ladies' jacket shown in Fig .1.1.</b></p> <ul style="list-style-type: none"> <li>• Bias binding</li> <li>• braid</li> <li>• ribbon</li> </ul>	<b>2</b>

Question	Answer	Marks
1(e)	<p><b>Explain how to work a machined buttonhole for a 3 cm button. You may use notes and labelled diagrams in your answer.</b></p> <ul style="list-style-type: none"> <li>• Mark position of buttonhole on fabric,</li> <li>• Measure the size of button/buttonhole e.g. (3 cm and 0.5 mm extra for both ends = 4 cm total)</li> <li>• Attach buttonhole foot to machine</li> <li>• Select appropriate buttonhole setting (depending on fabric) on machine with automatic buttonhole function.</li> <li>• Select width and length of stitch settings for manual button hole stitching</li>   <li>• For semi automatic buttonhole follow instructions on machine display</li>   <li>• Fully automatic buttonhole – stitch.</li>   <li>• Manual machined buttonhole - stitch first long side of buttonhole with zigzag/ satin stitch, then end bar with a wider stitch, then second long side same stitch as first side, finally second short end with wider stitch, finish with small stitches to secure</li>   <li>• Cut through centre of buttonhole with small embroidery scissors /seam ripper/</li> </ul> <p>1 mark for each correct point.</p>	<b>5</b>
1(f)(i)	<p><b>Batch production would be used to make the ladies' jacket in Fig1.1. Explain the term 'batch production'.</b></p> <ul style="list-style-type: none"> <li>• a specific number of identical garments is made to order.</li> <li>• Fashion garments so will only be made while there is a demand</li> <li>• Seasonal demand</li> <li>• Batches of garments could be made in different colours</li> <li>• a team of workers work on an assembly line to make the garments.</li> </ul> <p>1 mark for each point</p>	<b>2</b>

Question	Answer	Marks
1(f)(ii)	<p><b>Identify and briefly describe two type of retail outlet that could sell ladies jackets.</b></p> <p><b>Department stores/supermarkets</b> – large stores selling many different types of product. May contain franchises.</p> <p><b>High street retailer</b> – may be part of a chain or an independent. Will sell different brands. May specialise in one type of fashion e.g. childrenswear.</p> <p><b>Catalogue/mail order</b> – may be online or paper catalogue. May sell different brands or just one named brand. Payment can be by instalments/credit given.</p> <p><b>internet shopping</b> – buying online – can see pictures of product. Delivered to your door. Direct payment methods.</p> <p><b>Designer shops/boutique.</b> May stock a single brand or a lot of niche brands. Usually more expensive. Usually strong fashion input. Unique products, one off, Designer brands, small numbers of products made. Exclusive.</p> <p><b>Street market</b> – Cheap. May be imported goods, fakes, seconds or made by local seamstresses.</p> <p><b>Outlets/factory shops</b> – seconds and end of lines. Out of town.</p>	4
1(f)(iii)	<p><b>State three advantages to the manufacturer of selling ladies' jackets in one of the retail outlet types in (f)(ii)</b></p> <p><b>Department stores/high street retailer/supermarket</b> doesn't have to advertise, regular customers, high turn over, own brands, higher profit.</p> <p><b>Catalogue/mail order</b> May be selling direct to the public so less overheads/costs and more profit. Credit widely available so may sell more.</p> <p><b>internet shopping</b> May be selling direct to the public saving on costs/increasing profit. Very wide customer base not restricted by geographical area.</p> <p><b>Designer shops/boutiques</b> Selling direct, own brand image. Prices may be high because seen as high end. Bigger profit margin</p> <p><b>Street market</b> Local, can take orders, low overheads, so bigger profit margin, can develop a local reputation.</p> <p>One mark for each advantage for selling in any type of store identified in 1fii.</p>	3

Question	Answer	Marks
<b>Section B</b>		
2(a)(i)	<p><b>State the origin of acrylic fibres.</b></p> <p>Petrochemical/acrylonitrile/(propylene and ammonia)</p>	<b>1</b>
2(a)(ii)	<p><b>Identify three methods of spinning acrylic fibres</b></p> <p>Wet - chemicals used            Dry - uses air or inert gas            Melt – heat used to melt – gives sparkle            Gel – mix of wet and dry spinning</p> <p>One mark for each correct name <b>or</b> description of spinning.</p>	<b>3</b>
2(b)(i)	<p><b>Explain how to apply a brushed finish to a fabric made from acrylic yarn.</b></p> <p>Brushing (raising) is carried out with a roller (cylinder) covered in small wires which pluck the fibres from the surface of the fabric causing them to stick up and make a pile;</p> <p>1 mark for a brief explanation, 2 marks for a detailed explanation.</p>	<b>2</b>
2(b)(ii)	<p><b>State two reasons to apply a brushed finish to acrylic fibres or fabrics.</b></p> <ul style="list-style-type: none"> <li>• To make fabric softer</li> <li>• Make fabric warmer</li> <li>• Make fabric look more like a natural fibre fabric</li> </ul>	<b>2</b>

Question	Answer	Marks
2(c)	<p><b>Discuss the advantages of using a knitted acrylic fabric instead of a knitted woollen fabric for clothing.</b></p> <p><b>Acrylic</b></p> <ul style="list-style-type: none"> <li>• Cheaper</li> <li>• Lighter in weight</li> <li>• Easy to wash/machine washable</li> <li>• Won't stretch out of shape/shrink</li> <li>• Dries quickly</li> <li>• Soft and fluffy for insulation if brushed.</li> <li>• Brighter colours</li> <li>• Readily available</li> <li>• Good for children's' clothes because easy care</li> <li>• Available in many different textures</li> <li>• Hard wearing</li> <li>• Not affected by moths.</li> </ul> <p><b>Woollen</b></p> <ul style="list-style-type: none"> <li>• Liable to shrink unless treated with chemicals</li> <li>• Has a better/softer finish</li> <li>• Subtle colours</li> <li>• Expensive</li> <li>• Warmer to wear because of natural hairiness</li> <li>• Can be combined with other fibres to provide different characteristic</li> <li>• May wear out more easily with friction e.g. .socks</li> </ul> <p>5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of all properties of both knitted and acrylic fabrics and the advantages of using knitted acrylic fabric. Shows a high level of skill in selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.</p> <p>3–4 marks Good attempt, wide knowledge of some acrylic and woollen fabrics. May have detailed knowledge of one fabric with minimal or no information about the other. Selects most advantages with minimal examples. Shows knowledge of technical textile terms with good organisation and presentation skills.</p> <p>1–2 marks Valid, satisfactory attempt, fair knowledge of one fabric. Competent selection of some relevant advantages. May not give any examples. Moderate organisation with some use of technical textile terms.</p>	<b>6</b>

Question	Answer	Marks
2(d)	<p><b>Discuss the points to consider when selecting fabrics for childrenswear.</b></p> <ul style="list-style-type: none"> <li>• age of the child</li> <li>• occasion e.g. school wear</li> <li>• hardwearing/durable/doesn't tear easily for school and play wear.</li> <li>• washable because children are messy</li> <li>• cost as there may be a limited budget/children grow quickly</li> <li>• climate/season – lightweight/thin for hot weather etc</li> <li>• gender</li> <li>• soft/hypoallergenic</li> <li>• age appropriate colour/pattern/designs attractive to child.</li> <li>• Flame resistant</li> </ul> <p>5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of a wide range of things to consider when selecting fabric for childrenswear. Shows a high level of skill in selection of appropriate examples and reason for points given. Very good organisation of answer with skilled use of technical textile terms.</p> <p>3–4 marks Good attempt, wide knowledge of several things to consider when selecting fabric for childrenswear. Selects appropriate examples and some reasons for points given. Shows knowledge of technical textile terms with good organisation and presentation skills.</p> <p>1–2 marks Valid, satisfactory attempt, fair knowledge of one or more things to consider when selecting fabric for childrenswear. May give limited reasons or examples. Moderate organisation with some use of technical textile terms.</p>	<b>6</b>

Question	Answer	Marks
3(a)(i)	<p><b>Sketch and label an original design for a summer top suitable for a teenager. Include the following style features: short set-in sleeve, shaped neckline, button fastening, shaped hemline.</b></p> <ul style="list-style-type: none"> <li>• Neat, labelled sketch</li> <li>• Short set-in sleeve – sleeve line for top of sleeve must be shown.</li> <li>• Shaped neckline – not a basic high round neckline</li> <li>• Button fastening – an opening must be shown.</li> <li>• Shaped hemline</li> </ul> <p>One mark for each correct point. Max 4 if sketch not labelled.</p>	<b>5</b>
3(a)(ii)	<p><b>Identify one fabric suitable for the summer top sketched in 3(a) (i).</b></p> <p>lightweight fabrics e.g. lawn, seersucker, cambric, gingham, jersey, calico etc. Any appropriate fabric.</p>	<b>1</b>

Question	Answer	Marks
3(a)(iii)	<p data-bbox="316 248 1302 315"><b>State two reasons why the fabric identified in 3(a)(ii) is suitable for the summer top in 3(a)(i)</b></p> <ul data-bbox="373 353 1166 562" style="list-style-type: none"><li data-bbox="373 353 804 387">• Lightweight/thin/cool to wear</li><li data-bbox="373 389 938 423">• suitable for the style features of the top</li><li data-bbox="373 425 746 459">• Breathable/loose weave</li><li data-bbox="373 461 1166 528">• Can be made from fibres which are cool to wear such as cotton/linen</li><li data-bbox="373 530 587 562">• Drapes well</li></ul> <p data-bbox="316 600 794 633">One mark for an appropriate reason.</p>	<b>2</b>

Question	Answer	Marks
3(b)	<p><b>Evaluate three different methods of fastening the top sketched in 3(a)(i).</b></p> <p><b>Zip</b></p> <ul style="list-style-type: none"> <li>• May need to be lightweight or nylon for thin fabric – see 3(a)(ii)</li> <li>• Should match colour, or not match if design feature.</li> <li>• May need to be invisible</li> <li>• Can it be fastened easily depending on position of opening to be fastened</li> <li>• Secure</li> <li>• Easy to use</li> <li>• expensive</li> </ul> <p><b>Button with buttonhole or rouleau</b></p> <ul style="list-style-type: none"> <li>• Need to match colour unless design feature.</li> <li>• May need interfacing to reinforce position depending on fabric</li> <li>• Can they be fastened easily?</li> <li>• Will button hole or rouleau be used? – reasons for choice</li> <li>• Easy to apply</li> <li>• May come off</li> <li>• Lots of colours and designs available</li> <li>• cheap</li> </ul> <p><b>Tape/ribbon</b></p> <ul style="list-style-type: none"> <li>• can be style feature</li> <li>• Easy to apply</li> <li>• Cheap/could be made from fabric of top</li> <li>• Colourful</li> <li>• Fiddly to fasten/May come undone</li> </ul> <p><b>Hook and eye</b></p> <ul style="list-style-type: none"> <li>• Difficult to use/may come undone in wear.</li> <li>• Usually only used to secure fabric at top of an opening</li> <li>• Have to be sewn on by hand</li> </ul> <p><b>Press studs/poppas</b></p> <ul style="list-style-type: none"> <li>• Easyquick to use/fasten/undo</li> <li>• Have to be hand sewn or need special equipment to apply.</li> <li>• Difficult to sew in correct place</li> <li>• Can have a decorative finish on right side</li> </ul> <p><b>Velcro</b></p> <ul style="list-style-type: none"> <li>• Might be too heavy for light weight fabric</li> <li>• Limited range of colours</li> <li>• Stitching visible from right side of garment</li> <li>• Quick to stitch on/needs less skill</li> </ul> <p><b>Eyelets and laces (if appropriate)</b></p> <ul style="list-style-type: none"> <li>• Adjustable, hard to apply eyelets, design feature.</li> </ul>	6

Question	Answer	Marks
3(b)	<p>5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of three methods of fastening appropriate for top in 3ai. Shows a high level of skill in selection of appropriate advantages, disadvantages and examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.</p> <p>3–4 marks Good attempt, wide knowledge of two or more methods of fastening a top or less detailed knowledge of three methods, selects most advantages or disadvantages. May give examples. May not refer to the top in 3ai. Shows knowledge of technical textile terms with good organisation and presentation skills.</p> <p>1–2 marks Valid, satisfactory attempt, fair knowledge of one or more fastening method. May offer a list. Competent selection of some relevant advantages or disadvantages. Moderate organisation with some use of technical textile terms.</p>	
3(c)	<p><b>The formation of gathers or tucks in the sleeve head seam of an inset sleeve is a common problem. Discuss the reasons for this problem and suggest ways in which it can be prevented.</b></p> <ul style="list-style-type: none"> <li>• Sleeve may not be placed correctly so that the underarm seams match. Unpick and refit matching balance marks</li> <li>• Dot at top of sleeve head may not be matched to shoulder seam</li> <li>• Notches and balance marks may not have been matched properly</li> <li>• Ease gathering may not have been done/ gathering stitches may be too large/uneven.</li> <li>• May have done only one row of gathering stitches</li> <li>• Underarm seam may be too big/small making the area to be eased too big/small</li> <li>• insufficient attention paid to easing the gathers to make the sleeve fit</li> <li>• Tacking not firm enough to hold the sleeve in place before sewing</li> <li>• seam not sewn accurately on seam line.</li> </ul> <p>5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of all reasons for this problem and is able to suggest in detail how the problem can be prevented. Very good organisation of answer with skilled use of technical textile terms.</p> <p>3–4 marks Good attempt, some knowledge of reasons for the problem and can suggest some possible solutions. Shows knowledge of technical textile terms with good organisation and presentation skills.</p> <p>1–2 marks Valid, satisfactory attempt, basic understanding of the problem and at least one way of preventing it. Moderate organisation with some use of technical textile terms.</p>	<b>6</b>

Question	Answer	Marks
4(a)	<p><b>Define the following textile terms: dyeing, printing.</b></p> <p><b>Dyeing:</b> Colour is added to fabric, fibres or yarns by dissolving pigments/dyes/Dylon in water.</p> <p>One mark for a point. Two marks for a well explained point.</p> <p><b>Printing:</b></p> <ul style="list-style-type: none"> <li>• Used to apply images/designs/patterns to fabric</li> <li>• Can be block printed/roller/digital/screen</li> <li>• Image is printed onto one side of the fabric</li> </ul> <p>One mark for a point. Two marks for a well explained point.</p> <p>2 × 2</p>	<b>4</b>
4(b)(i)	<p><b>Explain how to dye fabric. You may use labelled diagrams to support your answer.</b></p> <ul style="list-style-type: none"> <li>• wash fabric to remove dirt/starch/dressing</li> <li>• measure amount of dye and water needed or weight of fabric to be dyed</li> <li>• Add wetting agent/detergent to water</li> <li>• Add dye and mordant (e.g. salt/vinegar) to hot/cold water</li> <li>• Place fabric in the dye bath</li> <li>• Heat dye bath/stir</li> <li>• Leave for the correct amount of time to absorb dye</li> <li>• remove fabric and rinse until water runs clear</li> <li>• Fix colour by heat if appropriate</li> <li>• dry fabric</li> </ul> <p>If microwave dyeing is offered adjust MS appropriately</p> <p>One mark for each point in correct order. Reward longest correct sequence. Credit points communicated in diagrams.</p>	<b>4</b>

Question	Answer	Marks
4(b)(ii)	<p data-bbox="316 248 979 282"><b>Discuss the reasons why dyed fabric may fade.</b></p> <ul data-bbox="373 320 1273 674" style="list-style-type: none"> <li>• No mordant used when dying</li> <li>• Dye not fixed properly.</li> <li>• Fabric not left in dye long enough</li> <li>• Wrong type of dye used for fibre</li> <li>• Exposure to sunlight/UV light</li> <li>• May have been washed in detergent containing bleach</li> <li>• May have been washed at too high a temperature</li> <li>• May fade over a long period of repeated washing</li> <li>• Could be a natural dye</li> <li>• Some fashion garments are intentionally made to fade with wear</li> </ul> <p data-bbox="316 707 456 741">5–6 marks</p> <p data-bbox="316 741 1307 871">Very good/excellent attempt, demonstrates detailed knowledge of a number of reasons why fabric fades. Shows a high level of skill in selection of examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.</p> <p data-bbox="316 909 456 943">3–4 marks</p> <p data-bbox="316 943 1273 1075">Good attempt, wide knowledge of three or more reasons for fabric fading. May explain two reasons in detail and list other reasons. May give examples. Shows knowledge of technical textile terms with good organisation and presentation skills.</p> <p data-bbox="316 1113 456 1146">1–2 marks</p> <p data-bbox="316 1146 1299 1240">Valid, satisfactory attempt, fair knowledge of one or more reasons for fabric fading. May not offer examples. Moderate organisation with some use of technical textile terms.</p>	<b>6</b>

Question	Answer	Marks
4(c)	<p><b>Discuss ways in which unwanted clothing can be re-used to reduce textile waste.</b></p> <ul style="list-style-type: none"> <li>• Upcycle by changing/embellishing (e.g. trousers into shorts) change style to make more fashionable</li> <li>• Cut up and use for patchwork</li> <li>• Give to a charity shop</li> <li>• Pass on/sell to someone else/ friend/family member</li> <li>• Dye it to improve it</li> <li>• unpick the garment and re-use the best parts of the fabric to make something else e.g. accessory</li> <li>• make the item into a smaller size e.g. adults dress into a child's</li> <li>• Fabric can be shredded and used for things like mattress fillings or industrial fabrics</li> <li>• references to reduce, reuse, recycle, remake, rethink, repair.</li> <li>• Use for rags/cloths/kitchen cloths</li> <li>• Change of use, e.g. use for sleepwear.</li> </ul> <p>5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of a wide range of ways to re-use unwanted clothing and how this will reduce textile waste. Shows a high level of skill in selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.</p> <p>3–4 marks Good attempt, knowledge of two or more ways to re-use garments. May not refer to reducing textile waste. Shows knowledge of technical textile terms with good organisation and presentation skills.</p> <p>1–2 marks Valid, satisfactory attempt, fair knowledge of one or more ways to re-use garments. Moderate organisation with some use of technical textile terms.</p>	<b>6</b>

Question	Answer	Marks
5(a)	<p><b>Describe one method used to transfer pattern markings to fabric.</b></p> <p><b>Tailors tacks (used for dots and balance marks)</b></p> <ul style="list-style-type: none"> <li>• Use (a long) double thread. (may be a contrasting colour)</li> <li>• sew (by hand) on one side of the dot to the other, through the fabric and paper pattern</li> <li>• leave a large loop on top of the fabric/pattern</li> <li>• repeat the stitch twice more,</li> <li>• Pull the layers of fabric apart and cut threads in middle.</li> </ul> <p><b>Tracing wheel and carbon paper/dressmakers carbon Used for lines</b></p> <ul style="list-style-type: none"> <li>• place carbon paper face down between the paper pattern</li> <li>• wheel the tracing wheel along the dart lines</li> <li>• remove carbon paper;</li> </ul> <p><b>Tailors tacking can also be used for lines</b></p> <ul style="list-style-type: none"> <li>• Use a double thread (may be a contrasting colour)</li> <li>• Make very loose looped long running stitches through pattern and fabric following lines on the pattern</li> <li>• Pull the layers apart and cut the threads in the middle of the fabrics</li> </ul> <p>One mark for each correct point in chosen method.</p>	3
5(b)	<p><b>Identify two temporary methods of joining fabrics together</b></p> <p>Pins, tacking/bsting</p>	2
5(c)	<p><b>Define the following textile terms: anti-static, bonded web, eco-labelling.</b></p> <p><b>Antistatic</b> – a finish applied to man made/synthetic textiles to prevent static/reduce electric charge.</p> <p><b>Bonded web</b> – a web or mass of fibres held together with a bonding agent. Eg non woven interfacing</p> <p><b>Eco labelling</b> – voluntary labelling systems of products which are environmentally friendly.</p> <p>One mark for each definition</p> <p>3 × 1</p>	3

Question	Answer	Marks
5(d)	<p><b>Compare two methods of controlling fullness in a garment.</b></p> <p><b>Darts:</b></p> <ul style="list-style-type: none"> <li>• Used to provide shape at waist, hips and bust. Sometimes used to shape e.g. trousers, sleeves</li> <li>• Can be used as style features e.g. on neckline</li> <li>• V shaped</li> <li>• Made by folding fabric and stitching between dots on pattern</li> <li>• Inconspicuous on outside of garment</li> <li>• Need to be made accurately and pressed well</li> <li>• Used for tailored/fitted garments. Skirt waistlines</li> </ul> <p><b>Gathers:</b></p> <ul style="list-style-type: none"> <li>• Fabric is gathered with small stitches so that a longer piece of fabric fits to a shorter piece and they can be stitched together.</li> <li>• e.g. skirt gathered onto waistline, Top/skirt gathered onto a yoke, puffed sleeves</li> <li>• Can be bulky and unflattering</li> <li>• Can allow for growth if elastic is used for gathering</li> <li>• Shirring elastic can be used to gather decorative panels.</li> <li>• Must be evenly gathered.</li> </ul> <p><b>Pleats:</b></p> <ul style="list-style-type: none"> <li>• Mainly used in skirts</li> <li>• knife pleats</li> <li>• box pleats,</li> <li>• inverted pleats,</li> <li>• kick pleats</li> <li>• accordion pleats.</li> <li>• Polyester and thermoplastic fibres can be permanently pleated by heat setting.</li> <li>• Pleats are tedious to make as they have to be measured accurately and face in the planned direction.</li> <li>• If the pleats are in natural fibres they may need to be ironed in again whenever the garment is washed.</li> <li>• Style feature</li> <li>• Used to allow movement e.g. in a skirt</li> </ul> <p><b>Tucks</b></p> <ul style="list-style-type: none"> <li>• Introduce shaping e.g. on shoulders</li> <li>• Stitched down folds of fabric</li> <li>• Can be used so that fabric can be let out later. E.g. in children's clothes</li> <li>• Decoration</li> <li>• Best done on straight grain</li> </ul>	<b>6</b>

Question	Answer	Marks
5(d)	<p>5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of two methods of controlling fullness. Shows a high level of skill in selection of appropriate advantages, disadvantages and examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.</p> <p>3–4 marks Good attempt, wide knowledge of two methods of controlling fullness or less detailed knowledge of one method, selects most advantages and disadvantages, shows knowledge of technical textile terms with good organisation and presentation skills.</p> <p>1–2 marks Valid, satisfactory attempt, fair knowledge of one or more methods of controlling fullness. Competent selection of some relevant advantages and disadvantages. Moderate organisation with some use of technical textile terms.</p>	

Question	Answer	Marks
5(e)	<p><b>Discuss the advantages of using smart fabrics to make garments. Give examples of fabrics and garments to support your answer.</b></p> <ul style="list-style-type: none"> <li>• Smart textiles are intelligent textile structures or fabrics that can sense and react to environmental stimuli, which may be mechanical, thermal, chemical, biological, and magnetic amongst others.</li> <li>• <b>smart textiles</b> are <b>fabrics</b> that may have <b>technological</b> components woven into them, monitoring external stimuli, translating that into data, and responding accordingly. <b>Smart textiles</b> may be aesthetic, driven by design and fashion purposes, or performance enhancing, including <b>technologies</b> like biometric monitoring.</li> </ul> <p>Examples:</p> <ul style="list-style-type: none"> <li>• interactive fabric e.g. dye which reacts to UV light on a child's T shirt – to indicate when the temperature is too high and could cause sunburn;</li> <li>• reflective fabrics which are visible at night when a light shines on the reflective section of the fabric – could be used on a jacket for a sports person;</li> <li>• micro-encapsulation – a fabric which has an added substance e.g. moisturising tights which have cream added and as the fabric is used, the moisture is released; also scents, antibacterial and insect repellent.</li> <li>• Interactive textiles incorporate electronic or conductive fabrics that need a power source to work. E.g. mobile phone connectors, gps, blood pressure monitors</li> <li>• Change colour in response to changes in temperature.</li> <li>• Tights that are cool in hot weather and warm when cooler.</li> <li>• fabrics that filter out UV light to protect the wearer;</li> </ul> <p>Accept any example of types of smart textiles with appropriate examples of their uses.</p> <p>5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of three or more smart fabrics and their uses. Shows a high level of skill in selection of examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.</p> <p>3–4 marks Good attempt, wide knowledge of two or more smart fabrics and their uses. Selects relevant examples and shows knowledge of technical textile terms with good organisation and presentation skills.</p> <p>1–2 marks Valid, satisfactory attempt, fair knowledge of one or more smart fabric. Competent selection of some examples of uses. Moderate organisation with some use of technical textile terms.</p>	6

Question	Answer	Marks
6(a)	<p><b>Sketch and label an original design for a motif to apply to a sports top</b></p> <p>Neat, clear, labelled sketch of original sports related motif. 1 mark            Colour, fabrics, embroidery stitches, techniques etc. 1 mark for each</p> <p>Maximum <b>two</b> marks if sketch not labelled.</p>	<b>3</b>
6(b)	<p><b>State the correct order of work to applique a motif onto a sports top.</b></p> <ul style="list-style-type: none"> <li>• Apply Bondaweb/adhesive layer to back of motif fabric</li> <li>• Draw the shape onto fabric/the back of the Bondaweb paper</li> <li>• Remove backing paper from Bondaweb</li> <li>• If using Bondaweb draw mirror image</li> <li>• Cut out the motif</li> <li>• Iron motif to fabric/pin and tack motif to fabric</li> <li>• Work close machine zig zag/satin stitch or buttonhole stitch or embroidery stitches by hand around the edge of the motif.</li> </ul> <p>One mark for each correct point in logical order. Marks should be either for bondaweb method or tack method, not a combination of both.</p>	<b>5</b>

Question	Answer	Marks
6(c)	<p><b>Evaluate the range of decorative premanufactured components available to use in the production of garments.</b></p> <p><b>Decorative Components</b></p> <p><b>Braid, ribbon, rickrack, tapes, edging lace.</b></p> <ul style="list-style-type: none"> <li>• Can be used as a decorative trim to the edges of garments/parts of garments to add interest.</li> <li>• may be contrasting colour or texture or same colour as garment.</li> <li>• May be used to strengthen openings</li> <li>• May be used to fasten garments</li> <li>• can be machine or hand stitched</li> <li>• Wide variety of colours and designs</li> <li>• Could be made into bows, roses etc to stitch on garments.</li> </ul> <p><b>Beads, sequins,</b></p> <ul style="list-style-type: none"> <li>• Used for decoration</li> <li>• Used in traditional designs</li> <li>• Often found on expensive couture garments</li> <li>• Often have to be handsewn so are expensive/labour intensive</li> <li>• Need skilled operatives</li> <li>• Not for everyday wear as may come off/for evening/occasion wear</li> <li>• Available in many colours, shapes and sizes</li> <li>• Not suitable for childrenswear</li> </ul> <p><b>Premanufactured motifs</b></p> <ul style="list-style-type: none"> <li>• Popular as easy way of adding decoration/identity</li> <li>• Embroidered or printed</li> <li>• May be team/sport logos</li> </ul> <p><b>Functional components:</b></p> <ul style="list-style-type: none"> <li>• Hook and eye, Press studs/poppas, zips, buttons, Velcro, buckles</li> <li>• All used for fastenings</li> <li>• May also be used as decoration e.g. buttons, zips</li> <li>• Wide range of sizes, colours, designs</li> </ul> <p>Answers should relate to components in garments and justify uses chosen.</p> <p>5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of a wide range of premanufactured components. Shows a high level of skill in selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.</p> <p>3–4 marks Good attempt, wide knowledge of two or more pre-manufactured components. Selects suitable examples to illustrate answer. Shows knowledge of technical textile terms with good organisation and presentation skills.</p>	6

Question	Answer	Marks
6(c)	1–2 marks Valid, satisfactory attempt, fair knowledge of one or more premanufactured components and their uses. Answer may be a list. Moderate organisation with some use of technical textile terms.	
6(d)	<p><b>Discuss the health and safety issues a manufacturer would need to consider when manufacturing textile items.</b></p> <ul style="list-style-type: none"> <li>• staff training so that all staff know safety rules;</li> <li>• good layout of premises so that there is a safe work flow</li> <li>• walk ways must be clear so that no tripping hazards</li> <li>• regular risk assessments must be carried out regularly and changes made when necessary;</li> <li>• good lighting</li> <li>• Display safety rules;</li> <li>• Provision of safety guards e.g. finger guards;</li> <li>• Dust extraction to avoid inhalation of fibres;</li> <li>• Protective clothing for workers/PPE/shoes</li> <li>• Fire exits kept clear;</li> <li>• Regular maintenance of machinery and equipment;</li> <li>• Ergonomic seating to prevent back strain.</li> <li>• Working hours/regular breaks.</li> </ul> <p>5–6 marks            Very good/excellent attempt, demonstrates detailed knowledge of a wide range of safety issues encountered in manufacturing. Shows a high level of skill in selecting examples to support the answer. Very good organisation of answer with skilled use of technical textile terms.</p> <p>3–4 marks            Good attempt, wide knowledge of three or more safety issues or less detailed knowledge of several issues. Selects appropriate examples to support the answer. Shows knowledge of technical textile terms with good organisation and presentation skills.</p> <p>1–2 marks            Valid, satisfactory attempt, fair knowledge of one or more safety issue. Answer may be a list. Moderate organisation with some use of technical textile terms.</p>	<b>6</b>