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Cambridge Ordinary Level

FASHION AND TEXTILES

6130/01

Paper 1

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MARK SCHEME
Maximum Mark: 100

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.

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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 guestion
- 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.

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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.

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SECTION A

Question	Answer	Marks
1(a)(i)	Identify the construction method used to make lawn fabric.	1
	Weaving/plain weave/woven.	
1(a)(ii)	Describe lawn fabric.	1
	Appearance: smooth, same both sides, sheer, lustrous, thin, semi-transparent, sheer.	
	Feel handle: light weight, drapes well, lustrous.	1
1(a)(iii)	State two reasons why lawn fabric is suitable for the style of shirt in Fig. 1.1	2
	Lightweight, smooth, drapes well, gathers easily.	
1(a)(iv)	Identify three fabric finishes to use on lawn fabric made from cotton.	3
	 Easy care/crease resistance Shrink resistance Flame resistance Stain resistance Thermochromic/colour change finishes Any three correct answers.	
1(a)(v)	Identify a natural fibre other than cotton that could be used to make a fabric for the shirt in Fig. 1.1	1
	Silk, linen, bamboo, ramie or any other appropriate natural fibre.	

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Question	Answer	Marks
1(a)(vi)	State three advantages of using the fibre named in 1(a)(v) to make fabric for the shirt in Fig. 1.1	3
	Improved quality/properties	
	Cost/cheaper/increase profit	
	Crease less Leader we grie a /dwarb le /ab region register to	
	 Harder wearing/durable/abrasion resistant Justified environmental reason 	
	1 mark for each correct advantage.	
1(a)(vii)	Explain why synthetic fibres are not environmentally friendly.	2
	Use up natural/non-renewable resources/oil/gas/petrochemical/not sustainable	
	Do not biodegrade/rot	
	Goes to landfill	
	1 mark for each correct point or 2 marks for any well explained point	
	1 mark for each correct point or 2 marks for one well explained point.	
1(b)(i)	Identify two places where interfacing could be used on the shirt in Fig. 1.1	2
	Collar, cuffs, neckline facing, for reinforcement elsewhere.	
	1 mark for each correct point.	
1(b)(ii)	State three reasons to use interfacing on the shirt in Fig. 1.1	3
	To stiffen/stabilise	
	To give body/shape	
	To reinforce/strengthen	
	1 mark for each correct point.	

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Question	Answer	Marks
1(c)(i)	State the correct order of work to make the straight band cuff for the sleeve of the shirt in Fig. 1.1 You may use labelled diagrams in your answer.	4
	 Interface the cuff. Stitch the side edges of the cuff band together Press the seam flat Neaten/hem/turn-in (unnotched) edge of the cuff 	
	mark for each process in correct order. Accept labelled diagrams if the information is communicated.	
1(c)(ii)	State the correct order of work to attach the straight band cuff to the sleeve of the shirt in Fig. 1.1. You may use labelled diagrams in your answer.	4
	 Pin and tack the other [notched] edge of the cuff to the lower/bottom edge of the sleeve matching marks/seams, etc. Stitch the cuff to the sleeve Press/trim seams 	
	4. Turn/press cuff facing to the inside 5. Slip/hand stitch/machine stitch the cuff to the sleeve Accept labelled diagrams if the information is communicated.	
1(d)(i)	Sketch and label an original creative design to go on the shirt in Fig. 1.1. Your design must combine three different named hand embroidery stitches.	4
	1 mark each for any three appropriate named/labelled hand embroidery stitches, e.g. satin, stem, cross, fly, chain stitches, French knots.	
	1 mark for originality of design. Accept any appropriate stitch.	

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Question	Answer	Marks
1(d)(ii)	Explain how to stitch one of the hand embroidery stitches shown in your design in question 1(d)(i). You must use labelled diagrams in your answer.	4
	mark for labelled diagram. mark for starting and finishing the stitch. marks for making the stitch showing the needle placement/movement needed to make the stitch.	
1(e)	Identify two methods that could be used to make a hem on the shirt in Fig. 1.1	2
	Narrow machined/top-stitched hem, slip stitched hem, single hem, double hem, blind hem, rolled hem, false/faced hem.	
	1 mark for each correctly named method.	
1(f)	Identify three processes in which Computer Aided Manufacture (CAM) could be used in the production of a shirt.	3
	 Creating patterns from data using CAM Machine embroidery Laying out fabric Cutting fabric Any specific machining/pressing process Quality control to check fabric for flaws Quality control to check finished product Use of UV light to position buttons, pockets, etc. 	
	1 mark for any correct point.	

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SECTION B

Question	Answer	Marks
2(a)(i)	Identify one regenerated fibre.	1
	Viscose/rayon/acetate/modal/Tencel/lyocell.	
	Accept any answer that can be verified as a regenerated fibre.	
2(a)(ii)	Identify two raw materials used to make the fibre identified in your answer to 2(a)(i).	2
	 Wood pulp/cotton linters/cellulose/plant sources/bamboo/seaweed Chemicals/ether/acetone/acetic anhydride/xanthate/caustic soda 	
	1 mark for each correct material from each bullet point. Accept any correct answer.	
2(a)(iii)	Explain how regenerated fibres are manufactured.	3
	 Chemicals (caustic soda/carbon disulphide) are used to dissolve/turn into a liquid the cellulose material The liquid (cellulose xanthate + caustic soda) is forced through small holes/spinneret Warm air solidifies the fibres into staple or filament fibres Wet spinning for viscose 	
	1 mark for each correct point.	
2(b)	Sketch the care symbols for a garment made from the regenerated fibre named in 2(a)(i).	2
	 Wash: wash tub symbol with 40°C or lower/hand symbol/two lines beneath wash tub Iron: any recognisable drawing of an iron either with two dots/low or 150–190°C 	

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Question	Answer	Marks
2(c)	Explain how three performance characteristics of fabrics made from regenerated fibres make them suitable for clothing.	6
	 Highly absorbent so absorbs perspiration/breathes/dyes easily Soft and smooth so comfortable to wear and drapes well Washable so easy to care for Does not build up static so doesn't cling Can be blended easily with other fibres to reduce cost/improve performance Moderate dry strength so wrinkles easily Different finishes can be used to change appearance and texture making it suitable for fashion items Abrasion resistant 2 marks for each performance characteristic with explanation of its suitability for clothing. 	

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Question	Answer	Marks
2(d)	Compare the construction of two different woven fabrics. You may use labelled diagrams in your answer.	6
	 Plain weave – fabrics interlaced at right angles. Weft crosses over warp. No pattern. Woven on a loom. Under one over one weave Twill weave – [weft] under one/two over two, under two or more warp threads, forms diagonal stripe on surface of fabric Satin weaves weft goes over at least three warp threads then under 1 warp thread forming floats to create a smooth/shiny surface. Warp faced weave Pile weaves such as velvet, towelling. Woven with loops which may be cut or may be woven in two layers 5–6 marks Very good/excellent attempt that demonstrates detailed knowledge of two named woven fabric construction methods and is able to compare them. May use labelled diagrams effectively to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms. 	
	 3–4 marks Good attempt, wide knowledge of two woven fabric construction methods. May be little comparison. Knowledge of one method may be less detailed. May name only one method. Shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks 	
	Valid, satisfactory attempt. Fair knowledge of one or two woven fabric construction methods. May be no comparison and may simply name two types of weaving. Moderate organisation with some use of technical textile terms.	

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Question	Answer	Marks
3(a)	Give an example of one different type of garment made by each of the following production methods.	3
	 One off production – wedding dress/ball gown/couture/made to measure Batch production – fashion garments/designer jeans/a particular uniform, e.g. football strip, any named appropriate garment Mass production – socks, undergarments, white t-shirts, workwear jeans, uniforms, any garment that is made in vast quantities and is always exactly the same/identical 	
3(b)	Identify two ways a manufacturer can reduce waste when producing garments.	2
	 Only buy correct amount of fabric Ensure patterns are laid out in most economical way Ensure that mistakes are kept to a minimum so that all garments can be sold Make a test garment [before manufacture] toile or virtual catwalk 	
3(c)(i)	1 mark for each correct point. Sketch and label an original appliqué design suitable for a child's dress.	3
3(6)(1)	 Quality of drawing including labels – 1 mark Information on appropriate fabrics, colour, techniques, placement of design – up to 2 marks 	3

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Question	Answer	Marks
3(c)(ii)	Explain how to prepare the appliqué designed in 3(c)(i) and attach it to the child's dress. You may use labelled diagrams in your answer.	6
	Accept any appropriate method of applique. Reverse applique, mola, bondaweb, machine, hand.	
	Bondaweb: • Draw applique design on second fabric/in reverse on Bondaweb backing paper	
	 Draw applique design on second fabric/in reverse on Bondaweb backing paper Cut roughly to shape 	
	Apply bondaweb using heat/hot iron/press with iron to melt glue	
	Cut to shape	
	Remove paper backing from bondaweb	
	Place glue/shiny side of applique piece onto background fabric	
	Mark position	
	Press applique onto background fabric with a hot iron so glue melts Test efficience for edge of applique.	
	 Test stitches for edge of applique Machine stitch/zig zag the applique in place 	
	wachine sutchizing zay the applique in place	
	Reverse applique:	
	Draw the applique design onto paper/make a template	
	Cut a piece of fabric slightly larger than the template	
	Turn in/press the raw edges to wrong side of applique piece	
	• Pin in place	
	Mark position of applique Slip stitch the applique to the background febric	
	 Slip stitch the applique to the background fabric Cut a small hole in the background fabric and remove the paper template 	
I	Out a small hole in the background labric and remove the paper template	

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Question	Answer	Marks
3(c)(ii)	Mola: Place two pieces of fabric together Draw the design onto the top layer of fabric Carefully cut away the top layer leaving enough spare fabric to turn under The bottom layer of fabric is revealed Turn under/needle tuck the raw edges of the upper fabric Slip stitch the top layer in place 5–6 marks Detailed instructions that would enable someone to make the complete applique. Instructions will be in the correct order and there will be excellent use of correct textiles terminology. 3–4 marks Adequate instructions with some inaccuracies or may not be completely in correct order. Some good use of textiles terminology. 1–2 marks Brief and disjointed instructions, may be in the wrong order and will show little or no use of correct textiles terminology. Accept labelled diagrams if the information is communicated.	

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Question	Answer	Marks
3(d)	Evaluate the advantages to a manufacturer of printing a design onto a garment instead of using appliqué.	6
	 Quicker, less skilled, can be done by CAM/computerised, no hand sewing no specialist machines to set up Cheaper, less fabrics/threads/materials, less machinists needed, saves having more than one fabric, less processes, less equipment needed Fabric can be bought ready printed or sent to be printed after cutting out Colours may be brighter/bigger range available More intricate designs can be carried out easily High band 5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of most advantages of print over applique. Shows a high level of skill in relating the advantages to industrial manufacturing and selects appropriate reasons in support of the answer. Very good organisation of answer with skilled use of technical textile terms. 	
	Mid band 3–4 marks Good attempt, demonstrates wide knowledge of two or more advantages of print over applique. Is able to relate the advantages adequately to industrial manufacturing and gives some reasons in support of the answer. Shows knowledge of technical textile terms with good organisation and presentation skills. Low band 1–2 marks Valid, satisfactory attempt, names one or more advantages of print over applique or may answer with a list of advantages with no justification. Moderate organisation with some use of technical textile terms.	

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Question	Answer	Marks
4(a)(i)	Define the term 'reflective textiles'	2
	 Minute glass beads are embedded into yarns, fabrics, dyes and coatings When light is shone on the surface the beads reflect light back into the viewer's eye making the fabric appear shiny and bright The fabric itself never changes, it is just the way our eye sees them, which is why reflective fabrics are modern and not smart 	
	Any two correct points.	
4(a)(ii)	Give one example of a garment that uses reflective textile fabric.	1
	Reflective fabrics are often used for safety and protection, e.g. uniforms, workwear, cycling wear.	
	1 mark for any appropriate garment from these categories.	
4(a)(iii)	Identify one smart textile fabric.	1
	 Thermochromic responds to heat Photochromic, responds to UV light Micro-encapsulated Biomimicry, e.g. fastskin, stomatex Moisture management fabrics that can regulate and absorb sweat Antibacterial 	
	1 mark for any correctly named or described smart fabric.	
4(b)	Label the symbols shown on the sleeve pattern piece in Fig.2.1.	4
	[Straight] grain line, dots, notches/balance marks, lengthening/shortening/adjustment lines.	

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Question	Answer	Marks
4(c)	Discuss the importance of the information on a commercial pattern envelope, when making a successful garment.	6
	 Drawing or photograph of the garment/various views helps selection of suitable pattern, helps during construction to see if it looks right Patterns size/s helps choose the right size pattern, helps decide on/calculate any alterations for fit and/or style Back views helps in selection of pattern and while constructing garment. There may be a choice Number of pattern pieces helps ensure you cut out the correct number of pieces of fabric Chart showing fabric needed. To assist in buying fabric, avoid wastage, buy correct amount if any nap or matching patterns Description of garment with style details Helps explain what the garment is like so you buy a pattern within your capabilities Suggested fabrics/notions. Buying the correct fabric is important in order to obtain a good finish – an unsuitable fabric would not be successful. You are able to plan and buy everything in advance Standard body measurement. Helps accurate measurement of body and selection of correct pattern size. Also useful for alterations so you know how different the wearer is to the standard size Pattern number and make for ordering 	
	5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of almost all the information on a commercial pattern envelope. Shows a high level of skill in selection of reasons why the information is important to the success of a garment. Uses examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.	
	3–4 marks Good attempt, wide knowledge of information on commercial pattern envelopes. Selects reasons why the information is important to the success of a garment. Shows knowledge of technical textile terms with good organisation and presentation skills.	
	1–2 marks Valid, satisfactory attempt, fair knowledge of information on commercial pattern envelopes. One or more reasons why this information is important to the success of a garment. Moderate organisation with some use of technical textile terms.	

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Question	Answer	Marks
4(d)	Compare two different methods of controlling fullness in a skirt. Give examples of skirt styles and fabrics to support your answer.	6
	 Darts – waist back and front, smooth. Only used for difference between waist and hips. Not style feature. Usually two at front and four at back. Tailored styles. Mainly to reduce hip size to waist size. Medium to heavy fabrics Easing – used in bias cut skirt or where extra width removed at seams or where top of skirt is curved. Medium to heavy fabrics Gathers – used in a full skirt. Can be gathered onto waist band or a yoke. Bulky, not suitable for heavy fabrics, may be used just at back or front Pleats – lots of different types, boxed, inverted, pencil depending on style. Slimming as a skirt floats over hips from waist. permanent in synthetic fabrics, soft pleats in natural fabrics, light to medium fabrics Tucks – not used often in skirts. The pleats are stitched down, may be used in conjunction with pleats 	
	5–6 marks Very good/excellent, demonstrates detailed knowledge of two or more methods of controlling fullness in a skirt and gives a good range of examples of styles and suitable fabrics as well as reasons for choices. Shows a high level of skill in the selection of appropriate examples of styles and fabrics. May mention fibres as well as fabrics. Very good organisation of answer with skilled use of technical terms.	
	3–4 marks Good attempt, a thorough knowledge of one method or less detailed knowledge of two methods. Selects some examples, gives brief reasons for some choices shows knowledge of technical terms with good organisation and presentation skills.	
	1–2 marks Valid, satisfactory attempt, fair knowledge of one method. May just name a number of methods. Competent selection of one or two examples. Moderate organisation skills with possible use of textiles terms.	

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Question	Answer	Marks
5(a)	Identify four safety rules to follow when using pressing equipment.	4
	Iron, industrial presses, steam presses:	
	Switch off when not in use	
	No trailing wires/near plug socket	
	No broken cables	
	Store on a suitable stand when not being used	
	Use correct temperature	
	Ironing board/sleeve board:	
	Make sure its put up properly/correct height	
	In a place where it is not a tripping hazard	
	Pressing cloth:	
	If damp keep water away from iron	
	Beware of dangers of burns from steam	
	1 mark for each correct rule.	
5(b)	Identify four factors to consider when choosing fabric for a child's dress.	4
	Attractive colour/pattern/fabric suited to child/age	
	Washable/easycare because children play/are messy	
	Hard wearing to withstand playing and washing	
	The activity/occasion when it will be worn/party clothes/practical play clothes	
	Soft/comfortable/lightweight	
	Not allergic	
	Flameproof/non-flammable	
	1 mark for each correct point.	

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Question		Answer		Marks
5(c)	Evaluate the suitabili	ty of different fastenings to use on a jacket for a	3 year-old-child.	6
	Fastening	Advantages	Disadvantages	
	Buttons (and buttonholes)	Cheap, can match garment, fun designs, readily available Different sizes available	May come off, be lost/swallowed/safety issues, difficult to fasten	
	Zip	Quick to fasten, easy (for child) to use	Can get fabric caught in it	
	Velcro	Easy for small child to fasten	Dirt/fluff can get caught in it so it stops working	
	Hooks and eyes	Can be used to close a small gap such as top of zip	Difficult to fasten	
	Press studs/poppas	Quick and easy to fasten	Press studs might come off and may be swallowed	
	Ribbons	Good colour range, soft	May not be appropriate for jacket. Hazardous, can be chewed Wear out easily/fray	
	disadvantages of each Very good organisation 3–4 marks Good attempt, detailed advantages and disadvantages and disadvantages	tempt, demonstrates detailed knowledge of three or a . Shows a high level of skill in selection of appropriate of answer with skilled use of technical textile terms. I knowledge of two fastenings methods or less detailed vantages, shows knowledge of technical textile terms appropriately.	ed knowledge of three fastening, selects most with good organisation and presentation skills.	

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Question	Answer	Marks
5(d)	Compare the advantages of internet clothes shopping with one other method of clothes shopping.	6
	On-line/internet: Convenient, goods delivered to your door, more choice, competitive prices, saves time travelling to shops, easy returns, can shop at any convenient time without leaving your home, easy to compare prices online, reviews online.	
	Department stores, shopping malls and local shops: May be limited choice, no risk of fraud, can see and feel and try on the garments/get good fit, can match accessories, might be more expensive, might be more original and individual styles.	
	5–6 marks Very good/excellent attempt. Shows detailed knowledge of the named shopping methods and internet shopping. Shows a high level of skill in comparing the advantages of online shopping with the other named method. A very well organised answer with skilled use of technical terms	
	3–4 marks Good attempt, wide knowledge of online shopping and one other method of clothes shopping. Outlines some advantages of on line shopping. Shows knowledge of technical terms with good organisation and presentation skills	
	1–2 marks Valid satisfactory attempt. Fair knowledge of one or more shopping methods which may not include online shopping. Is able to describe briefly two or more advantages of online shopping or one advantage in detail. Moderate organisation with possible use of technical terms.	

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Question	Answer	Marks
6(a)(i)	Identify the type of sleeve on the sports top shown in Fig. 6.1	1
	Raglan sleeve.	
6(a)(ii)	State two advantages of using this type of sleeve for a sport's top	2
	 Allows free movement when playing sports The larger armhole makes it easy to put on and off It is quicker/cheaper to manufacture 	
6(b)	State the method used to finish the neckline of the sports top in Fig. 6.1.	1
	Bound neckline/crossway strip/knitted/ribbed band.	
6(c)	Identify one natural fibre and one synthetic fibre that could be used to make the fabric for the sports top in Fig. 6.1.	1
	Natural: cotton.	
	Synthetic: microfibre, polyester, nylon, acrylic.	1

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Question	Answer	Marks
6(d)	Discuss the performance characteristics of one of the fibres named in question 6(c) that make them suitable for a sports top	6
	Cotton: lightweight, strong, durable, absorbent so cool and dyes easily [team colours], easily washable.	
	Polyester: lightweight, very strong, hard wearing/durable, cheap, washes easily, dries quickly, non-iron, poor absorbency.	
	Microfibre: lightweight, moisture wicks away from body, same properties as polyester otherwise.	
	Nylon: lightweight, strong, durable, cheap, not absorbent so sweat does not wick away from body so may be uncomfortable, non-iron dries quickly, washes easily.	
	5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of all or most performance characteristics of the chosen fibre. The suitability of the performance characteristics for sports wear is demonstrated in detail with appropriate examples to illustrate the answer. Very good organisation with skilled use of technical textiles terms.	
	3–4 marks Good attempt, wide knowledge of performance characteristics of the chosen fibre. Selects some examples which may not always relate to sports. Shows knowledge of technical textile terms with good organisation and presentation skills.	
	1–2 marks Valid satisfactory attempt, fair knowledge of performance characteristics of the named fibre. May not contain examples relating to sports. Moderate organisation with possible use of technical textiles terms.	
6(e)(i)	Identify two knitted fabrics that could be used to make a sports top	2
	Jersey, tricot.	

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Question	Answer	Marks
6(e)(ii)	Evaluate the suitability of knitted fabrics for sports tops.	6
	 Knitted fabric is cheap to produce/can be knitted in tubes Stretches to allow ease of movement, woven fabrics do not stretch and need darts/shaping Cheap to manufacture T-shirts as no shaping because of stretch properties of knit Does not fray when cut Can be overlocked together quickly with no other seam finish required/saves labour and money Don't crease easily The holes in knitted construction may trap air making some knitted fabrics suitable for some cold weather sports 1 mark for each point to a maximum of three marks for a list. 2 marks for each well explained and justified point. 	

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