

## **Cambridge International AS & A Level**

## **DESIGN & TEXTILES**

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Paper 1 Fibres, Fabrics and Design MARK SCHEME Maximum Mark: 75

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.

Cambridge International is publishing the mark schemes for the October/November 2023 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

## **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	Co •	<b>mponents using point-based marking:</b> 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.
	Fro	om this it follows that we:
	a b	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) DO credit alternative answers/examples which are not written in the mark scheme if they
	С	are correct 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 <i>n</i> reasons (e.g. State two reasons).
	d e	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.) DO NOT credit answers which are obviously self-contradicting or trying to cover all
	f	possibilities 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	Pre	esentation of mark scheme:
2	•	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	Ca • •	Iculation 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.

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- 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
1(a)(i)	State how the following fibres are obtained: Cotton fibres	2
	<ul> <li>Cotton plant</li> <li>Fibres obtained from the seed pod called a 'boll'</li> <li>Ginning – separating the seeds from the fibres</li> <li>Combing</li> </ul>	
	Sorting fibres into different grades	
	1 mark for a brief description 2 marks for a well explained point	
1(a)(ii)	State how the following fibres are obtained: Polyester fibres	2
	Polyester (polyethylene terephthalate) is derived from a chemical reaction involving petroleum, air, and water. This artificial fibre is comprised of purified terephthalic acid (PTA) and monotheluene glycol (MEG).	
	Accept Petrochemical PET and ethylene glycol and terephtalic acid.	
	Polymers	
	Melt spinning	
	Spinneret	
	Accept any appropriate points about recycled polyester and any other acceptable chemical	
	1 mark for a brief description 2 marks for a well explained point	
1(b)	Describe the results of an examination under a microscope of cotton fibres and polyester fibres.	4
	<b>Cotton fibres</b> <b>Cross section:</b> usually bean/kidney shaped, Elliptical, very thin like a strip, nearly round or circular	
	<b>Longitudinal view:</b> Mature flat and ribbon-like with convolutions (twisted ribbon), thick wall and small lumen, Immature very thin wall and a large lumen with few convolutions, very thin and almost transparent, Mercerized smooth and cylindrical, fewer convolutions and lumen or sometimes may be absent	
	Polyester fibres Cross section: circular/round	
	Longitudinal view: structureless, uniform diameter, rod-like appearance, very regular	
	2 marks for cotton, 2 marks for polyester	

Question	Answer	Marks
1(c)	Explain how the absorbency of cotton fibres affects cotton fabrics. Give examples of products to support your answer.	7
	Answer could include:	
	<ul> <li>Performance characteristics of cotton fibres:</li> <li>a great ability to absorb moisture and soak up water</li> <li>moisture regain 8–9%</li> <li>can hold water 24–27 times their own weight</li> <li>dye absorbent</li> <li>stronger when wet</li> <li>breathable</li> <li>cotton fibres are hollow and have a lumen that swells</li> <li>washable/easy care</li> <li>stain easily due to their absorbency but stains wash away easily</li> <li>doesn't dry quickly</li> </ul>	
	<ul> <li>comfortable and soft to wear/non-irritant</li> <li>can be affected by mildew/mould if stored damp</li> </ul>	
	Not water resistant	
	<ul> <li>Products made from cotton including:</li> <li>Towels/Bathrobes/bath mats – The most effective bath towels are made of 100 percent cotton because cotton is most efficient at absorbing or soaking up water, bathmats, tea towels</li> <li>Bedlinen</li> <li>Recreational performance apparel – clothes used in jogging, exercise and sports, T-shirts</li> <li>Clothing e.g. baby grows</li> <li>Medical purposes and hospital use – gauze, surgical dressings</li> <li>Nursing homes – to absorb bodily fluids</li> <li>Cosmetic uses e.g. Cotton wool pads, cotton buds</li> <li>Sanitary pads</li> <li>Cleaning cloths/dishcloths</li> </ul> Not just fashion clothing as the answer needs to consider absorbency	
	<ul> <li>Examples of cotton fabrics:</li> <li>Cotton waffle pique fabric is a very absorbent fabric which is used to make bathroom and kitchen towels which needs this quality the most.</li> <li>Cotton jersey</li> <li>(Terry) towelling</li> <li>Brushed cotton</li> <li>Any other correct/relevant point</li> </ul>	
	6–7 marks A wide range of points explained, showing thorough and detailed knowledge and understanding of how the absorbency of cotton fibres affects cotton fabrics. Shows a high level of skill in the selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.	

Question	Answer	Marks
1(c)	3–5 marks A range of points explained, showing some knowledge and understanding of how the absorbency of cotton fibres affects cotton fabrics. Some appropriate examples given. Shows knowledge of technical textile terms with good organisation and presentation of skills.	
	0–2 marks Valid, satisfactory attempt with limited knowledge and understanding of how the absorbency of cotton fibres affects cotton fabrics. May simply be a list of examples. Moderate organisation with some use of technical textile terms	

Question	Answer	Marks
Question 1(d)	Answer         Evaluate the advantages of using a cotton and polyester blended fibre, instead of 100% cotton fibre. Give examples of fabrics and garments to support your answer.         Answer could include:         Cotton's characteristics:         • soft fabric, pleasing to the touch         • comfortable to wear         • breathable         • absorbent/absorb dyes easier         • drapes well         • durable         • washable         Polyester's characteristics:         • high strength         • durable         • abrasion resistant         • doesn't crease         • washable         • quick drying         Advantages of a cotton and polyester blended fibre:         • Comfort/Soft – cotton's lightweight and cool characteristics in the blend makes the fabric perfect for all-day comfort. Cotton is also hypoallergenic – so it doesn't cause allergies or skin irritation.         • Absorbency – polyester by itself is not a breathable or comfortable fabric to wear and has a tendency to stick to the skin if you get hot. It is hydrophobic. Cotton is a breathable fabric which is why it is so popular. Combining cotton and polyester makes the garment less prone to static.         • Affordability – polyester is generally more affordable than natural cotton; this is where a 50/50 blend becomes a good compromise between polyester's price and cotton's feel. 65/35% polycotton fabric is a good blend to keep costs low while providing a quality product.	Marks
	<ul> <li>blend to keep costs low while providing a quality product.</li> <li>Strength – cotton can tend to wear out and rips easily, whereas polyester is strong, resilient and durable. It is resistant to shrinking and stretching. A poly cotton blend has the strength of polyester and cotton combined.</li> <li>Abrasion-resistant – Poly cotton blends are often fashioned into</li> </ul>	
	<ul> <li>abrasion-resistant fabrics.</li> <li>Durable/Hardwearing</li> <li>Stain resistant</li> </ul>	
	<ul> <li>Stain resistant</li> <li>Easy care – Poly cotton can also be washed more often and doesn't shrink. One of the main advantages of the cotton-polyester blend is that it doesn't crease easily due to the polyester. Polyester also dries quickly.</li> <li>Mildew/moth resistant</li> </ul>	
	Accept any other correct/relevant point	

Question	Answer	Marks
1(d)	Not elastic or drapes well	
	<ul> <li>Uses of a polycotton blended fibre:</li> <li>widely used in the consumer clothing industry. Lightweight polycotton blends are used for shirts and blouses, while heavier ones are reserved for skirts and trousers.</li> <li>Commercial clothing such as corporate uniforms and athletic team uniforms also use blends; a 50/50 ratio is most popular in this industry because of its' balance between breathability and durability. A polyester/cotton blend means work wear needs to be replaced less frequently.</li> <li>Soft furnishings e.g. pillows, bed sheets and tablecloths, etc.</li> <li>Athletic activities that need to be washed often.</li> </ul>	
	Percentages of popular blends could be given e.g. 50/50, 35/65, etc.	
	Any other correct/relevant point	
	8–10 marks A wide range of advantages evaluated, showing thorough and detailed knowledge and understanding of the reasons for using a cotton and polyester blended fibre instead of 100% cotton fibre. 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.	
	4–7 marks A range of advantages evaluated, showing good knowledge and understanding of the reasons for using a cotton and polyester blended fibre instead of 100% cotton fibre. Some appropriate examples given. Shows knowledge of technical textile terms with good organisation and presentation of skills.	
	0–3 marks Valid, satisfactory attempt with limited knowledge and understanding of the reasons for using a cotton and polyester blended fibre instead of 100% cotton fibre. May simply be a list of examples with no explanation. Moderate organisation with some use of technical textile terms.	

Question	Answer	Marks
2(a)(i)	Compare the following: Satin fabrics	2
	Satin fabrics: Construction – Satin weave – created by long floats on the warp or weft threads e.g. 4/1, etc., easily snags or pulls. Not durable	
	<b>Appearance</b> – has a right side (shiny/lustrous/glossy) and wrong side (matt), smooth surface	
	Constructed on a loom	
	Not uses	
	1 mark for a correct point 2 marks for a detailed, accurate point	
2(a)(ii)	Compare the following: Dobby cloth	2
	<b>Dobby cloth:</b> <b>Construction</b> – a woven fabric produced on the dobby loom, the warp and weft threads may be the same colour or different.	
	<b>Appearance</b> – extra texture in the cloth, usually features a simple, repeated geometric pattern, decorative	
	<b>Not uses</b> 1 mark for a correct point 2 marks for a detailed, accurate point	

Question	Answer	Marks
2(b)	Describe the possible end uses of fabrics constructed with a Jacquard weave.	5
	<ul> <li>Answer could include:</li> <li>Jacquard fabric is a type of cloth featuring an intricate curve based pattern woven into the warp on a special mechanical loom (punch cards), rather than printed on the surface. Could also be created digitally.</li> <li>Raised motifs/3D quality to the fabric</li> <li>The design is woven into the fabric itself.</li> <li>It is stronger, thicker and has more stretch than other types of weaves.</li> <li>They are available in a variety of compositions and weights. Lightweight jacquards for winter</li> <li>Fabrics can be florals, paisley and polka dots to very large, detailed, intricate patterns.</li> <li>Brocade – made using the Jacquard loom, uses additional threads to create a raised pattern, resulting in an embossed or embroidered effect. Not reversible.</li> <li>Damask – another type of Jacquard, creates a fabric with opposite patterns on each side. Reversible and used for table linens.</li> <li>Since jacquard is a type of weave rather than a type of material, it can be made with a vast range of fibres. Silk and cotton jacquard is used on high-end and traditional applications, while modern designers are integrating a wider variety of fibres, including linen and cotton blends.</li> </ul>	
	<ul> <li>End uses:</li> <li>Clothing e.g. jackets, costumes, ties, scarves, bags</li> <li>home décor textiles, cushions</li> <li>upholstery fabric for curtains and drapery</li> <li>duvet cover/bedspreads</li> <li>couch covers/throws</li> <li>tablecloths</li> <li>Any other correct/relevant point</li> <li>4–5 marks</li> <li>A wide range of points given, showing thorough and detailed knowledge and</li> </ul>	
	understanding of the possible end uses of fabrics constructed with a Jacquard weave. Shows a high level of skill in the selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.	

Question	Answer	Marks
2(b)	<ul> <li>2–3 marks</li> <li>A range of points given, showing some knowledge and understanding of the possible end uses of fabrics constructed with a Jacquard weave. Shows knowledge of technical textile terms with good organisation and presentation of skills</li> <li>0–1 marks</li> <li>Valid, satisfactory attempt with limited knowledge and understanding of the possible end uses of fabrics constructed with a Jacquard weave. May simply be a list of examples with no explanation. Moderate organisation with some use of technical textile terms.</li> </ul>	

Question	Answer	Marks
2(c)	Evaluate the suitability of twill weave wool fabrics for winter coats and jackets.	7
	<ul> <li>Answer could include:</li> <li>Wool Twill Fabric refers to a specific weave that features each weft yarn floating across the warp yarns in a progression of interlacings to the right or left, forming a distinct diagonal line. This gives a unique look and feel to the fabric.</li> </ul>	
	<ul> <li>Twill Fabric performance characteristics:</li> <li>very durable – can withstand a lot of wear. Due to its diagonal pattern, it is more resistant to tearing and wear than other fabrics.</li> </ul>	
	<ul> <li>strong</li> <li>thick (due to the high thread count) which makes twill warmer to wear</li> <li>compact fabric, closely/tightly woven, firm, stable structure</li> <li>hides stains well – the way it is woven means that it hides dirt and stains</li> </ul>	
	<ul> <li>well</li> <li>Opaque – twill weave does not create a sheer quality, so all twill fabrics have great opacity</li> </ul>	
	<ul> <li>Its thickness means that it doesn't crease easily</li> <li>Drapes well</li> <li>Not very stretchy</li> </ul>	
	• Texture: The distinctive diagonal texture of twill fabric gives it a unique look and feel.	
	Flexibility: Although it is a tough fabric, twill fabric is flexible and comfortable to wear.	
	Examples of twill fabric: - chino, denim, drill, gabardine, serge, and tweed.	
	<ul> <li>Wool performance characteristics:</li> <li>natural and breathable</li> </ul>	
	<ul> <li>insulating properties/warm</li> <li>durable</li> </ul>	
	<ul> <li>softness</li> <li>sheep's wool is also water-resistant, which makes it perfect for snowy weather.</li> </ul>	
	<ul> <li>doesn't crease easily</li> <li>can shrink when washed so might need to be dry cleaned</li> </ul>	
	<ul> <li>can be prone to pilling</li> <li>drapes well</li> <li>comes in all sorts of finishes: boiled wool, flannel, gabardine and felt are</li> </ul>	
	<ul> <li>is comed in an sorts of ministres, bolied wool, mannel, gabaraine and reit are just some of the examples</li> <li>a wide variety of colours and patterns</li> </ul>	
	Not absorbency	
	Any other correct/relevant point	

Question	Answer	Marks
2(c)	6–7 marks A wide range of points evaluated, showing thorough and detailed knowledge and understanding of the suitability of twill weave wool fabrics for winter coats and jackets. Shows a high level of skill in the selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.	
	3–5 marks A range of points evaluated, showing some knowledge and understanding of the suitability of twill weave wool fabrics for winter coats and jackets. Some appropriate examples given. Shows knowledge of technical textile terms with good organisation and presentation of skills.	
	0–2 marks Valid, satisfactory attempt with limited knowledge and understanding of the suitability of twill weave wool fabrics for winter coats and jackets. May simply be a list of examples with no explanation. Moderate organisation with some use of technical textile terms.	

Question	Answer	Marks
2(d)	Assess how the choice of fibres used for making felt fabrics would affect the fabric's performance.	9
	<ul> <li>Answer could include:</li> <li>Felt has an incredibly unique texture and qualities, and can be made from a wide range of materials which is quite unusual in a fabric.</li> <li>Fibres used to make felt fabrics: Wool, animal fur produce high-quality felt items. Acrylic or rayon felt – produce lower-tier produces the highest quality, softest fabric. It is much stronger than other types of felt, so products will last without stretching or going bobbly and shiny. Pure wool felt is a natural insulator and very resilient to wear and tear, as well as being strong and able to absorb moisture. Wool mats very easily, making it ideal for this fuzzy fabric. It is water repellent and absorbent. It is highly flame retardant, and extinguishes itself. Wool felt has different textures ranging from silky to coarse and this will affect the felt that is made from it. It retains its shape due to its natural 'orimp' texture that allows for elasticity and durability. Can shrink. More expensive than synthetic alternatives</li> <li>Fur felt – Durable</li> <li>Acrylic felt – A cheaper alternative to natural fibres, made using acrylonitrile. Acrylic burns easily, as do other synthetic fibres such as rayon. Used mainly for crafting as it's less comfortable against the skin. It is stain resistant and washes well. Won't last as long as wool felt. Can disintegrate over time which makes it more prone to tearing. It is stiffer and harder to shape than wool felt and is not so soft.</li> <li>Rayon felt – Hydrophilic, used for industrial and medical applications. Normally blended with polyester.</li> <li>Blends – Adding synthetic fibres can increase felts durability.</li> <li>Wool blends are light and breathable but still keep you warm during the Winter months.</li> <li>Not felt used for wadding or batting.</li> <li>Uses of felt fabrics:</li> <li>Felt has a huge range of uses, depending on the type you're using and the quality of the wool.</li> <li>Hats</li> <li>Boot liners</li> <li>Bags</li> <li>Craft activities, soft toys</li> <li>Feit</li></ul>	
	Any other correct/relevant point	

Question	Answer	Marks
2(d)	7–9 marks A wide range of points assessed, showing thorough and detailed knowledge and understanding of the range of fibres used to make felt fabrics and how this would affect the fabric's performance. Shows a high level of skill in the selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.	
	4–6 marks A range of points assessed, showing some knowledge and understanding of the range of fibres used to make felt fabrics and how this would affect the fabric's performance. Some appropriate examples given. Shows knowledge of technical textile terms with good organisation and presentation of skills.	
	0–3 marks Valid, satisfactory attempt with limited knowledge and understanding of the range of fibres used to make felt fabrics and how this would affect the fabric's performance. May simply be a list of examples with no explanation. Moderate organisation with some use of technical textile terms.	

Question	Answer	Marks
3(a)	Sketch and label a design for a pair of pyjamas suitable for a teenager to wear in the winter. Identify one suitable fabric and one style feature.	4
	<ul> <li>a neatly labelled sketch (1 mark)</li> <li>suitability of the design for winter e.g. long sleeves, full length, collar, hood, etc. (1 mark)</li> <li>suitable fabrics: fabrics would be expected for winter e.g. brushed cotton, polar fleece, wool jersey, wool flannel/flannelette, fake wool fur or any other fabric suitable for winter – Not just 'wool' or 'cotton', must be a fabric (1 mark)</li> <li>style features e.g. pockets, elasticated waist, drawstring, buttons/button placket, binding, collar, logo, hood, slits, different lengths of trousers, cuffs/no cuffs, frills, etc. (1 mark)</li> </ul>	

Question	Answer	Marks
3(b)	Describe what is meant by fashion revivals. Give examples of fashion revivals.	6
	Answer could include:	
	<b>Fashion revivals:</b> It may be a style which has been used before but has been updated to make it more contemporary. It may have modifications to the original so may not be exactly the same e.g. long sleeves which have elastic at the wrist. It may be an item of clothing, a particular style e.g. 1960's shift dresses, a particular fabric e.g. Crimplene or a specific part of an item e.g. sleeve style revived, etc.	
	<b>Examples:</b> 1960's – hippies, Mary Quant mini skirts and hot pants, shift dresses, fabrics like polyester, Spandex and Lycra which are all used today. 1980's – DM's, shoulder pads, neon colours, Mum Jeans, Corduroy, Scrunchies, Silk Scarves, Bike Shorts, Flared Pants, Denim, Puffy sleeves, Skinny jeans, Flared trousers, Platforms, Ripped denim, Smock tops, Harem pants, Y2K style, Corsets	
	<b>Fashion trends</b> are the popular styles of clothing and accessories at a particular moment in time. Microtrends such as tiny sunglasses and high-waisted denim cycle in and out of fashion within a matter of months up to a few years.	
	Any other correct/relevant point, to include local examples	
	5–6 marks A wide range of points described, showing thorough and detailed knowledge and understanding of fashion revivals. Shows a high level of skill in the selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.	
	3–4 marks A range of points described, showing some knowledge and understanding of fashion revivals. Some appropriate examples given. Shows knowledge of technical textile terms with good organisation and presentation of skills.	
	0–2 marks Valid, satisfactory attempt with limited knowledge and understanding of fashion revivals. May simply be a list of examples with no explanantion. Moderate organisation with some use of technical textile terms.	

Question	Answer	Marks
3(c)	Discuss why many garments have a short fashion lifecycle.	7
	A range of relevant points should be included which shows knowledge and understanding of why many high street fashion garments have a very short fashion cycle.	
	<ul> <li>Answer could include:</li> <li>Every season consumers are exposed to a multitude of styles. Some are rejected by buyers at retail level, whereas some styles are accepted for a time – as demonstrated by consumers purchasing and wearing them.</li> <li><b>Fast fashion</b> is a design, manufacturing, and marketing method which focuses on producing high volumes of clothing quickly. Garment production reproduces trends using <b>low-quality</b> materials in order to bring inexpensive styles to the public. These cheaply made, trendy pieces have resulted in an industry-wide movement towards overwhelming amounts of consumption. Consumers choose quantity over quality.</li> <li>Up until the mid-twentieth century, the fashion industry ran on four seasons a year. Today, <b>fast fashion</b> has reached a point of no return. Nowadays, fast fashion brands produce about 52 'micro-seasons' a year – or one new 'collection' a week.</li> <li>Stores have a towering supply of stock at all times, so brands don't have to worry about running out of clothes. By <b>replicating streetwear and fashion week trends</b> as they appear in real-time, these companies can create new, desirable styles weekly, if not daily. The brands then have massive amounts of clothing and can ensure that customers never tire of inventory.</li> <li><b>The fashion cycle</b> – usually depicted as a bell-shaped curve which has 5 stages:</li> <li>Introduction of a style</li> <li>Increase in popularity</li> <li>Decline in popularity</li> <li>Rejection period/Obscelence Stages of Fashion Cycle</li> </ul>	
	<ul> <li>3 Peak</li> <li>2 Rise</li> <li>4 Decline</li> <li>5 Obsolescence</li> <li>Time →</li> <li>Consumers buying habits are gradually changing – they are choosing quality over quantity and considering the disposal of clothing. They are starting to reject fast fashion.</li> </ul>	
	Any other correct/relevant point	

Question	Answer	Marks
3(c)	<ul> <li>6–7 marks</li> <li>A wide range of points discussed, showing thorough and detailed knowledge and understanding of why many garments have a short fashion lifecycle. Shows skill in the selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.</li> <li>3–5 marks</li> <li>A range of points discussed, showing some knowledge and understanding of why many garments have a short fashion lifecycle. Some appropriate examples given. Shows knowledge of technical textile terms with good</li> </ul>	
	organisation and presentation of skills. 0–2 marks Valid, satisfactory attempt with limited knowledge and understanding of why many garments have a short fashion lifecycle. May simply be a list of examples with no explanation. Moderate organisation with some use of	
	technical textile terms.	

Question	Answer	Marks
3(d)	Evaluate the advantages of using Computer-aided design (CAD) to design fabrics.	8
	<ul> <li>design fabrics.</li> <li>Advantages could include: <ul> <li>CAD software links with CAM enabling designing and making processes more efficiently</li> <li>CAD software allows designs to be changed quickly and frequently on screen rather than by hand saving time and energy</li> <li>CAD software allows designs to be experimented with using different colours, shapes, patterns and textures – this saves on physical resources such as paper, pens, fabric, etc.</li> <li>Accurate presentation boards can be generated using CAD to present ideas to client.</li> <li>Design ideas can be presented using real life images and colourways in high quality.</li> <li>CAD software allows repeat patterns for fabric prints and surface decoration patterns to be developed instantly, rotated, repeated, colourways, size changes to best fit fabric/textile product.</li> <li>Fabric designs can be placed on a 3D garment (virtually) to see what it looks like. Virtual products can be viewed prior to making, lowering risk of costly mistakes (wasting fabric, etc.)</li> <li>Design ideas can be emailed for instant feedback speeding up the design process.</li> <li>Design can be changed quickly according to almost instant feedback – decision making process is speeded up.</li> <li>Can save money by not having to make expensive prototypes prior to production.</li> <li>Designing and manufacturing often in different parts of the world so electronic copies of designs enables faster communications.</li> <li>Designers have access to databases of designs that can be useful for development saving time on redesigning</li> <li>Photographs can be scanned into designs.</li> <li>Fabrics can be produced in small quantities as samples</li> <li>Designs can be saved and stored for later use</li> <li>More accurate</li> </ul> </li> </ul>	
	<ul> <li>Any other correct/relevant point</li> <li>6–8 marks</li> <li>A wide range of points evaluated, showing thorough and detailed knowledge and understanding of the advantages of using computer-aided design (CAD) to design fabrics. Shows skill in the selection of appropriate examples to illustrate the answer. Very good 20rganization of answer with skilled use of technical textile terms.</li> <li>3–5 marks</li> <li>A range of points evaluated, showing some knowledge and understanding of the advantages of using computer-aided design (CAD) to design fabrics. Some appropriate examples given. Shows knowledge of technical textile terms with good organisation and presentation of skills.</li> </ul>	

Question	Answer	Marks
3(d)	0–2 marks Valid, satisfactory attempt with limited knowledge and understanding of the advantages of using computer-aided design (CAD) to design fabrics. May simply be a list of examples with no explanation. Moderate organisation with some use of technical textile terms.	

Question	Answer	Marks
4(a)	State two reasons why it is important to press garments during construction.	4
	<ul> <li>Answer could include:</li> <li>To smooth away unwanted creases</li> <li>To make creases where the design of the garment requires them.</li> <li>Correct pressing helps to shape the fabric to your figure, flatten. To mould the garment to the contour of the body.</li> <li>To press darts, pleats, hems into place</li> <li>To press seams flat</li> <li>Thorough pressing during each construction step contributes to a precision look. It makes following each construction step easier, thus saving you time. Gives a professional finish.</li> <li>Any other relevant points</li> <li>1 mark for a reason Maximum 2 marks 2 marks for a detailed reason</li> </ul>	

Question	Answer	Marks
4(b)	Explain why fashion garments are often lined.	5
	<ul> <li>Answer could include:</li> <li>To add warmth</li> <li>To make a garment more durable/long lasting</li> <li>Adds a professional appearance and a feeling of luxury to the garment.</li> <li>Provides a neat inside finish and conceals interfacing, padding, the raw edges of seams, and other construction details.</li> <li>Reduces the wearing strain on clothing, extending the life of the garment</li> <li>Improves the hang/drape of a garment and prevent the main fabric stretching out of shape.</li> <li>Gives shape/structure/support</li> <li>Allows easier movement</li> <li>Makes the garment easier to get on and off</li> <li>Can protect the garment fabric from body oils, etc.</li> <li>Can be used to change the look of a garment e.g. contrast decorative colour/printed lining. Can make a garment more attractive.</li> </ul>	
	<ul> <li>To give shape</li> <li>To make outer fabric less transparent, etc.</li> </ul> Any other correct/relevant point	
	4–5 marks A wide range of reasons explained, showing thorough and detailed knowledge and understanding of why fashion garments are often lined. Shows skill in the selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.	
	2–3 marks A range of reasons explained, showing some knowledge and understanding of why fashion garments are often lined. Some appropriate examples given. Shows knowledge of technical textile terms with good organisation and presentation of skills.	
	0–1 marks Valid, satisfactory attempt with limited knowledge and understanding of why fashion garments are often lined. May simply be a list of examples with no explanation. Moderate organisation with some use of technical textile terms.	

Question	Answer	Marks
4(c)	Compare one-off(job) production methods with mass production methods.	7
	Answer could include:	
	<ul> <li>One-off (job):</li> <li>one operator or team assemble the whole textile product</li> <li>each product is a one-off, unique item only made once in response to a specific client's request, individual specialist item e.g. wedding dress, designer jacket, made to individual size</li> <li>high cost item/expensive</li> <li>highly skilled labour used; one highly skilled worker will produce a single product for a customer to a specific brief</li> <li>takes time to make the product, labour intensive</li> <li>machinery used which can be adapted to different jobs, detailed work</li> </ul>	
	<ul> <li>one</li> <li>product will be finished to a high standard</li> </ul>	
	Mass:	
	<ul> <li>large quantities of identical items are made continuously with a high level of automation/organisation (skills/techniques)</li> <li>labour is well organised in the most efficient way</li> <li>can be repetitive flow or continual flow</li> <li>Style does not change so garment can be produced in huge quantities made repeatedly in assembly lines</li> <li>fast and continuous method of production to meet demands,</li> <li>identical garments are made very quickly keeping costs down for basic everyday items of clothing in high demand</li> </ul>	
	Any other correct/relevant point	
	6–7 marks A wide range of points compared, showing thorough and detailed knowledge and understanding of the stages involved in one-off and mass production. Shows skill in the selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms.	
	3–5 marks A range of points compared, showing some knowledge and understanding of the stages involved in one-off and mass production. May make an adequate comparison of both methods or a detailed explanation of one method only. Some appropriate examples given. Shows knowledge of technical textile terms with good organisation and presentation of skills.	
	0–2 marks Valid, satisfactory attempt with limited knowledge and understanding of the stages involved in one-off and mass production. May simply be a list of examples with no explanation. Moderate organisation with some use of technical textile terms.	

Question	Answer	Marks
4(d)	Discuss why a manufacturer has to consider product assembly when planning to produce a batch of fashion shirts.	9
	Answer could include:	
	It is important for a manufacturer to consider product assembly for the following reasons:	
	<ul> <li>So that they know what <b>fabrics</b> are needed/available (amounts); do they have to be dyed/printed/embroidered before making up?</li> </ul>	
	<ul> <li>So they know what components are needed/available (amounts) e.g. fastenings, trimmings; do special components need to be brought in?</li> <li>Sterage issues</li></ul>	
	<ul> <li>Storage issues – JIT ordering, cost of storing fabrics, over ordering/waste fabrics</li> <li>They can work out costings – Overheads, labour, availability of</li> </ul>	
	electricity, calculating the rate for individual processes – this is important for the manufacturers to make profit	
	• <b>Time factor</b> – in order to meet the deadline	
	<ul> <li>So they know what techniques and processes are going to be used in the manufacture</li> </ul>	
	Details of colours/sizes to be produced	
	• For working out staffing – How many staff are needed, what skills do the staff have/need, recruitment, etc.	
	Machinery – What machinery is available; Is any special machinery needed; Planning floor layout of machinery	
	<ul> <li>What type of production line is needed – unit production system, progressive bundle system, modular; can any parts of the item be made as a sub-assembly</li> </ul>	
	<ul> <li>Number of products in each batch</li> <li>Quality control – will this be on the line or at the end of production;</li> </ul>	
	<ul><li>samples taken out</li><li>So they know the order of making</li></ul>	
	For efficiency     Benutation	
	<ul> <li>Reputation</li> <li>To reduce complaints</li> </ul>	
	<ul> <li>For considering staff safety (reducing accidents)</li> <li>For sustainability and ethical factors</li> </ul>	
	Any other correct/relevant point	
	7–9 marks A wide range of points discussed, showing thorough and detailed knowledge	
	and understanding of why a manufacturer has to consider product assembly when planning to produce a batch of fashion shirts. Shows skill in the selection of appropriate examples to illustrate the answer. Very good organization of answer with skilled use of technical textile terms.	
	4–6 marks A range of points discussed, showing some knowledge and understanding of why a manufacturer has to consider product assembly when planning to produce a batch of fashion shirts. Some appropriate examples given. Shows knowledge of technical textile terms with good organization and presentation of skills.	

Question	Answer	Marks
4(d)	0–3 marks Valid, satisfactory attempt with limited knowledge and understanding of why a manufacturer has to consider product assembly when planning to produce a batch of fashion shirts. May simply be a list of examples with no explanation. Moderate organisation with some use of technical textile terms.	