



A-level DESIGN AND TECHNOLOGY: FASHION AND TEXTILES 7562/1

Paper 1 Technical Principles

Mark scheme

June 2025

Version: 1.0 Final



Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

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

No student should be disadvantaged on the basis of their gender identity and/or how they refer to the gender identity of others in their exam responses.

A consistent use of 'they/them' as a singular and pronouns beyond 'she/her' or 'he/him' will be credited in exam responses in line with existing mark scheme criteria.

Further copies of this mark scheme are available from aqa.org.uk

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Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Glossary for maths

If a student uses a method which is not explicitly covered by the mark scheme the same principles of marking should be applied. Credit should be given to any valid methods. Examiners should seek advice from their senior examiner if in any doubt.

[a, b]	Accept values between a and b inclusive.
For π	Accept values in the range [3.14, 3.142]
Their	Accept an answer from the candidate if it has been inaccurately calculated but is subsequently used in a further stage of the question.

Questions which do not ask students to show working

As a general principle, a correct response is awarded full marks.

Qu	Part	Marking Guidance	Total marks	AO
01		Identify the two fabric structures shown in Figure 1. Weft knitted fabric / weft knit Warp knitted fabric / warp knit Award 1 mark per correct answer, up to a maximum of 2 marks.	2 marks	AO4 1a

Qu	Part	Marking Guidance	Total marks	AO						
02		Complete Table 1 by inserting the appropriate term from the list below into the correct category. Do not use any term more than once. <table><tr><th>Smart materials</th><th>Modern materials</th></tr><tr><td>Photochromic dye</td><td>Nano-fibre</td></tr><tr><td>Phase-change fabric</td><td>Microfibre</td></tr></table> 1 mark per correct placement, up to a maximum of 4 marks.	Smart materials	Modern materials	Photochromic dye	Nano-fibre	Phase-change fabric	Microfibre	4 marks	AO4 1a
Smart materials	Modern materials									
Photochromic dye	Nano-fibre									
Phase-change fabric	Microfibre									

Qu	Part	Marking Guidance	Total marks	AO
03	01	Describe the properties of terry towelling fabric. Indictive content: • Absorbent • Moisture wicking • Soft • Warm/insulating/traps air. Award any other valid responses. Award 1 mark per correct answer, up to a maximum of 3 marks	3 marks	AO4 1a

Qu	Part	Marking Guidance	Total marks	AO
03	02	Describe the characteristics of herringbone fabric. Indictive content: • Usually made with wool • Thick/coarse/heavy handle • Chevron/zig-zag/V pattern • Twill weave • Muted/neutral/contrasting colours. Award any other valid responses. Award 1 mark per correct answer, up to a maximum of 3 marks	3 marks	AO4 1a

Qu	Part	Marking Guidance	Total marks	AO
03	03	Describe the structure of quilted fabric. Indictive content: • Two layers of fabric/three layers • Wadding or padding in between the fabrics • Stitching through all three layers • 3d/textured/patterned surface. Award any other valid responses. Award 1 mark per correct answer, up to a maximum of 3 marks	3 marks	AO4 1a

Qu	Part	Marking Guidance	Total marks	AO				
04	01	Calculate the total amount of sales for the period March to August for a standard cycle. <table><tr><td>1 + 3.25 + 4.5 + 5.5 + 4.75 + 2.75 or 1000 + 3250 + 4500 + 5500 + 4750 + 2750 Allow up to 0.05 (or 50) tolerance away from the correct values. Allow one value only to be omitted or out of tolerance.</td><td>1 mark</td></tr><tr><td>21.75 thousand or 21,750 thousand or [21, 22.5] thousand Given tolerance on graph points</td><td>1 mark</td></tr></table>	1 + 3.25 + 4.5 + 5.5 + 4.75 + 2.75 or 1000 + 3250 + 4500 + 5500 + 4750 + 2750 Allow up to 0.05 (or 50) tolerance away from the correct values. Allow one value only to be omitted or out of tolerance.	1 mark	21.75 thousand or 21,750 thousand or [21, 22.5] thousand Given tolerance on graph points	1 mark	2 marks	AO4 1c
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Qu	Part	Marking Guidance	Total marks	AO						
04	02	Calculate the percentage increase in sales for the fad cycle between June and July. <table><tr><td>7 - 4.8 or 7000 - 4800 or 2.2 or 2200</td><td>1 mark</td></tr><tr><td>Their 2.2 ÷ 4.8 x 100 or Their 2200 ÷ 4800 x 100</td><td>1 mark</td></tr><tr><td>[45.8, 45.9] (%)</td><td>1 mark</td></tr></table>	7 - 4.8 or 7000 - 4800 or 2.2 or 2200	1 mark	Their 2.2 ÷ 4.8 x 100 or Their 2200 ÷ 4800 x 100	1 mark	[45.8, 45.9] (%)	1 mark	3 marks	AO4 1c
7 - 4.8 or 7000 - 4800 or 2.2 or 2200	1 mark									
Their 2.2 ÷ 4.8 x 100 or Their 2200 ÷ 4800 x 100	1 mark									
[45.8, 45.9] (%)	1 mark									

Qu	Part	Marking Guidance	Total marks	AO								
05		Explain how the structure of Gore-Tex® fabric protects the wearer in different weather conditions. <table><tr><td>5–6 marks</td><td>Detailed explanation of how the structure of Gore-Tex® fabric protects the wearer in different weather conditions. The response shows an in-depth understanding of Gore-Tex® fabric and gives a number of different points from the indicative content in support of the response. The points made are accurate and in this mark band, specifically relate to the way the structure of Gore-Tex® membrane works to protect the wearer. At the top end of the mark band fairly comprehensive detail is given; at the low end there may be some minor irrelevant points, but there is an in-depth explanations how the fabric protects the wearer in different weather conditions.</td></tr><tr><td>3–4 marks</td><td>Good explanation of how the structure of Gore-Tex® fabric protects the wearer in different weather conditions. The response shows a good understanding of Gore-Tex® fabric and gives a few different points from the indicative content in support of the response. The points in this mark band are generally accurate and may relate to the way the structure of Gore-Tex® membrane works to protect the wearer. At the top end of the mark band some level of detail is given; while at the low end there may be irrelevant points with more generalised explanations how the fabric protects the wearer in different weather conditions.</td></tr><tr><td>1–2 marks</td><td>Basic explanation of how the structure of Gore-Tex® fabric protects the wearer in different weather conditions. The response shows a poor understanding of Gore-Tex® fabric and gives a limited number of points from the indicative content in support of the response. The points in this mark band are generally inaccurate and do not specifically relate to the way the structure of Gore-Tex® fabric works to protect the wearer. At the top end of the mark band there may be a little amount of correct information; while at the low end there are irrelevant points with confused explanations how the fabric protects the wearer in different weather conditions.</td></tr><tr><td>0 marks</td><td>No response or nothing worthy of credit.</td></tr></table>	5–6 marks	Detailed explanation of how the structure of Gore-Tex® fabric protects the wearer in different weather conditions. The response shows an in-depth understanding of Gore-Tex® fabric and gives a number of different points from the indicative content in support of the response. The points made are accurate and in this mark band, specifically relate to the way the structure of Gore-Tex® membrane works to protect the wearer. At the top end of the mark band fairly comprehensive detail is given; at the low end there may be some minor irrelevant points, but there is an in-depth explanations how the fabric protects the wearer in different weather conditions.	3–4 marks	Good explanation of how the structure of Gore-Tex® fabric protects the wearer in different weather conditions. The response shows a good understanding of Gore-Tex® fabric and gives a few different points from the indicative content in support of the response. The points in this mark band are generally accurate and may relate to the way the structure of Gore-Tex® membrane works to protect the wearer. At the top end of the mark band some level of detail is given; while at the low end there may be irrelevant points with more generalised explanations how the fabric protects the wearer in different weather conditions.	1–2 marks	Basic explanation of how the structure of Gore-Tex® fabric protects the wearer in different weather conditions. The response shows a poor understanding of Gore-Tex® fabric and gives a limited number of points from the indicative content in support of the response. The points in this mark band are generally inaccurate and do not specifically relate to the way the structure of Gore-Tex® fabric works to protect the wearer. At the top end of the mark band there may be a little amount of correct information; while at the low end there are irrelevant points with confused explanations how the fabric protects the wearer in different weather conditions.	0 marks	No response or nothing worthy of credit.	6 marks	AO4 1b
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0 marks	No response or nothing worthy of credit.											

		Indicative content: • Gore-Tex® is a laminated fabric • made of three layers; the outer fabric, Gore-Tex® and lining fabric • the middle layer is the Gore-Tex® membrane • the membrane is made from expanded PTFE, which has microscopic holes which stop water droplets getting through/are too small for water to enter • these microscopic holes keep the wearer dry from moisture • making the fabric water resistant • the membrane allows perspiration to escape away from the body • making the fabric breathable • Gore-Tex® prevents the elements from entering the fabric, making it windproof. Award credit for correct information given in drawings. Award any other valid responses.		
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Qu	Part	Marking Guidance	Total marks	AO								
06		Explain how the fibre content in Figure 3 enhances the properties of a knitted jacket. <table><tr><td>7–9 marks</td><td>Detailed explanation of how the fibre content in Figure 3 enhances the properties of a knitted jacket. Responses in this mark band show a high level of understanding of the individual fibres, and may include detail how they balance out the properties of other fibres. The information about the fibre properties is correct, and includes appropriate references to the way they enhance the properties of a knitted jacket. There may be more emphasis on individual fibre properties at the lower end of the mark band, however the information is mostly accurate and does not detract from a quality response.</td></tr><tr><td>4–6 marks</td><td>Good explanation of how the fibre content in Figure 3 enhances the properties of a knitted jacket. Responses in this mark band show some understanding of the individual fibres, and may include some detail how they balance out the properties of other fibres. The information about the fibre properties is largely correct, and includes some appropriate references to the way they enhance the properties of a knitted jacket. There is likely to be a lack of detail at the lower end of the mark band that may focus on individual fibre properties, however the points made are generally relevant and do not detract from a good response.</td></tr><tr><td>1–3 marks</td><td>Basic explanation of how the fibre content in Figure 3 enhances the properties of a knitted jacket. Responses in this mark band show little understanding of the individual fibres, and unlikely to include references how they balance out the properties of other fibres. The information about the fibre properties is limited, and may not refer to the way they enhance the properties of a knitted jacket. There may be a few points, however information is generally inaccurate with few relevant points, especially at the lower end of the mark band.</td></tr><tr><td>0 marks</td><td>No response or nothing worthy of credit.</td></tr></table>	7–9 marks	Detailed explanation of how the fibre content in Figure 3 enhances the properties of a knitted jacket. Responses in this mark band show a high level of understanding of the individual fibres, and may include detail how they balance out the properties of other fibres. The information about the fibre properties is correct, and includes appropriate references to the way they enhance the properties of a knitted jacket. There may be more emphasis on individual fibre properties at the lower end of the mark band, however the information is mostly accurate and does not detract from a quality response.	4–6 marks	Good explanation of how the fibre content in Figure 3 enhances the properties of a knitted jacket. Responses in this mark band show some understanding of the individual fibres, and may include some detail how they balance out the properties of other fibres. The information about the fibre properties is largely correct, and includes some appropriate references to the way they enhance the properties of a knitted jacket. There is likely to be a lack of detail at the lower end of the mark band that may focus on individual fibre properties, however the points made are generally relevant and do not detract from a good response.	1–3 marks	Basic explanation of how the fibre content in Figure 3 enhances the properties of a knitted jacket. Responses in this mark band show little understanding of the individual fibres, and unlikely to include references how they balance out the properties of other fibres. The information about the fibre properties is limited, and may not refer to the way they enhance the properties of a knitted jacket. There may be a few points, however information is generally inaccurate with few relevant points, especially at the lower end of the mark band.	0 marks	No response or nothing worthy of credit.	9 marks	AO4 1b
7–9 marks	Detailed explanation of how the fibre content in Figure 3 enhances the properties of a knitted jacket. Responses in this mark band show a high level of understanding of the individual fibres, and may include detail how they balance out the properties of other fibres. The information about the fibre properties is correct, and includes appropriate references to the way they enhance the properties of a knitted jacket. There may be more emphasis on individual fibre properties at the lower end of the mark band, however the information is mostly accurate and does not detract from a quality response.											
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Indicative content	
Polyester 44%	Abrasion resistant, strong, some give, easy care, water resistant, non-absorbent, crease resistant.
Wool 40%	Breathable, strong, absorbent, slow drying, crease resistance, warm.
Silk 12%	Adds texture, softness, luxury, lustre, breathability, thermal regulation.
Elastane 4%	Stretch, comfort, shape retention, crease resistance.

- Polyester and wool are both **strong** fibres, making a **hardwearing** jacket
- polyester is a smooth fibre, which contrasts with the staple wool fibres giving the jacket a **smooth** and **soft handle**
- polyester is not breathable, which can be warm to wear; the addition of wool and silk makes the fabric **more breathable** and comfortable to wear
- polyester fibres are **cool** as they don't trap air, wool adds warmth as air is trapped in the fibres
- the addition of wool and silk will make the jacket more **thermally regulating**
- the addition of elastane will add **stretch and recovery** properties
- the addition of elastane will make the jacket more **comfortable** to wear eg at elbows
- both wool and polyester have some give, making the fabric **crease resistant**
- elastane will keep the appearance and shape of the fabric, allowing a better **drape** and **fit**
- wool fibres can be dull in appearance, silk and polyester **adds lustre** to the fabric
- silk adds touch of **luxury** for a knitted jacket.

Award any other valid responses.

Qu	Part	Marking Guidance	Total marks	AO
07		Name two fancy yarns. Any two correct answers: • boucle/loop • chenille • slub • metallised yarns. Award any other valid responses. Award 1 mark per correct answer, up to a maximum of 2 marks	2 marks	AO4 1a

Qu	Part	Marking Guidance	Total marks	AO						
08		Explain how the properties of synthetic fabrics are affected by the structure of the filaments. <table><tr><td>3–4 marks</td><td>Good explanation of how the properties of synthetic fabrics are affected by the structure of the filaments. There is a very good awareness of the structure of continuous filament fibres, with some reference to the cross section and a smooth linear surface of the fibres. The response gives a number of accurate and relevant points from the indicative content, especially at the top end of the mark band; however, at the low end of the mark band there may be a slight lack of detail and some generalised information.</td></tr><tr><td>1–2 marks</td><td>Basic explanation of how the properties of synthetic fabrics are affected by the structure of the filaments. There is little awareness of the structure of continuous filament fibres, with limited or no reference to the cross section and a smooth linear surface of the fibres. The response gives a few accurate and relevant points from the indicative content, especially at the top end of the mark band; however, at the low end there is little detail and few correct points, with many inaccuracies or generalised information.</td></tr><tr><td>0 marks</td><td>No response or nothing worthy of credit.</td></tr></table> Indicative content • Fabrics made from synthetic filaments are usually: • soft, with a silky feel, due to the smooth linear surface of the filament • good at draping, because of the smooth filaments • lustrous, as the filaments reflect light • cool, as the cross-sectional formation of the filaments are solid, so do not trap air • however, synthetic fabrics can be warm to wear, as they do not absorb moisture • strong and durable, with high tensile strength • easy care and fast drying as filaments are non-absorbent • can be made in various cross-sectional shapes, eg for wicking moisture away from the body • warm, if made into hollow fibres. Award any other valid responses.	3–4 marks	Good explanation of how the properties of synthetic fabrics are affected by the structure of the filaments. There is a very good awareness of the structure of continuous filament fibres, with some reference to the cross section and a smooth linear surface of the fibres. The response gives a number of accurate and relevant points from the indicative content, especially at the top end of the mark band; however, at the low end of the mark band there may be a slight lack of detail and some generalised information.	1–2 marks	Basic explanation of how the properties of synthetic fabrics are affected by the structure of the filaments. There is little awareness of the structure of continuous filament fibres, with limited or no reference to the cross section and a smooth linear surface of the fibres. The response gives a few accurate and relevant points from the indicative content, especially at the top end of the mark band; however, at the low end there is little detail and few correct points, with many inaccuracies or generalised information.	0 marks	No response or nothing worthy of credit.	4 marks	AO4 1b
3–4 marks	Good explanation of how the properties of synthetic fabrics are affected by the structure of the filaments. There is a very good awareness of the structure of continuous filament fibres, with some reference to the cross section and a smooth linear surface of the fibres. The response gives a number of accurate and relevant points from the indicative content, especially at the top end of the mark band; however, at the low end of the mark band there may be a slight lack of detail and some generalised information.									
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0 marks	No response or nothing worthy of credit.									

Qu	Part	Marking Guidance	Total marks	AO								
9		Describe how specific CAM processes are used at each stage to increase efficiency in the manufacture of the skirt shown in Figure 4. <table><tr><td>7–9 marks</td><td>Detailed description of how specific CAM processes are used at each stage to increase efficiency in the manufacture of the skirt shown. A generally high-level response with many points as suggested in the indicative content. The processes given are specific and relevant to computer-controlled manufacture, with accurate descriptions of how each process increases efficiency. At the low end of the mark band there may be a slight lack of detail, however this does not detract from the quality of the response.</td></tr><tr><td>4–6 marks</td><td>Good description of how specific CAM processes are used at each stage to increase efficiency in the manufacture of the skirt shown. A good response with some points as suggested in the indicative content. Some processes are specific and largely relevant to computer-controlled manufacture, with generally accurate descriptions how each process increases efficiency. At the low end of the mark band there may be a lack of detail, however this does not detract from a good response.</td></tr><tr><td>1–3 marks</td><td>Basic description of how specific CAM processes are used at each stage to increase efficiency in the manufacture of the skirt shown. A poor response overall with few points as suggested in the indicative content. The processes given lack specific detail and may not be relevant to computer-controlled manufacture; and do not necessarily describe how the processes increases efficiency. At the low end of the mark band there is very generalised information with irrelevant points.</td></tr><tr><td>0 marks</td><td>No response or nothing worthy of credit.</td></tr></table>	7–9 marks	Detailed description of how specific CAM processes are used at each stage to increase efficiency in the manufacture of the skirt shown. A generally high-level response with many points as suggested in the indicative content. The processes given are specific and relevant to computer-controlled manufacture, with accurate descriptions of how each process increases efficiency. At the low end of the mark band there may be a slight lack of detail, however this does not detract from the quality of the response.	4–6 marks	Good description of how specific CAM processes are used at each stage to increase efficiency in the manufacture of the skirt shown. A good response with some points as suggested in the indicative content. Some processes are specific and largely relevant to computer-controlled manufacture, with generally accurate descriptions how each process increases efficiency. At the low end of the mark band there may be a lack of detail, however this does not detract from a good response.	1–3 marks	Basic description of how specific CAM processes are used at each stage to increase efficiency in the manufacture of the skirt shown. A poor response overall with few points as suggested in the indicative content. The processes given lack specific detail and may not be relevant to computer-controlled manufacture; and do not necessarily describe how the processes increases efficiency. At the low end of the mark band there is very generalised information with irrelevant points.	0 marks	No response or nothing worthy of credit.	9 marks	AO4 1c
7–9 marks	Detailed description of how specific CAM processes are used at each stage to increase efficiency in the manufacture of the skirt shown. A generally high-level response with many points as suggested in the indicative content. The processes given are specific and relevant to computer-controlled manufacture, with accurate descriptions of how each process increases efficiency. At the low end of the mark band there may be a slight lack of detail, however this does not detract from the quality of the response.											
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0 marks	No response or nothing worthy of credit.											

		Indicative content: Specific CAM processes may include: • Lay planning– computer programmes automatically arrange pattern pieces efficiently, to use as much of the fabric as possible with the minimum amount of waste • computer-controlled cutting - laser cutting of the fabric lays cut through many layers of fabric with accuracy. Often, edges are sealed to prevent fraying of the fabric • automated buttonholing – programmed to create buttonholes and stitch buttons in one operation. This process to allow for consistency, so that all buttons and buttonholes match up accurately each time • zip insertion – is an automatic process to insert zips with consistency on each product. CAM ensures the zips are positioned correctly and both sides of the zip match when zipped up • making and sewing of pockets – pockets are made in a single process, programmed to repeat the operation to allow for consistency, so that pockets are made to the same size and stitched in the correct position • seam and hem stitching – programmed for accuracy so that hems and seams are stitched with equal seam allowance, ensuring the garment fits the correct size. Fabric edges are often overlocked to prevent fraying. CAM ensures stitching visible on the outside of the products are equal distance from the edge of the fabric • applying rivets – applied in one operation, computer-controlled rivet insertion ensures that each rivet passes through the fabric completely, and reduces the likelihood of human error • pressing – with a steam dolly or pressed flat to finish a product. CAM completes the process automatically, ensuring product is finished to a high standard in preparation for packaging • decoration – for example, embroidery, printing and laser cutting. CAM allows decoration to be applied at high speed. Each skirt is identical ensuring the quality of the product is consistently high. Award any other valid responses.		
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Qu	Part	Marking Guidance	Total marks	AO				
10	01	Calculate the amount of thread needed for the embroidered decoration for one skirt. Give your answer to the nearest cm. Show your working out. <table><tr><td>3.85 x 1.9 or 3.85 x 0.9 + 3.85 or 3.85 x 0.9 and answer 347 Accept 3.47(m)</td><td>1 mark</td></tr><tr><td>732 (cm) Accept 7.32(m)</td><td>1 mark</td></tr></table>	3.85 x 1.9 or 3.85 x 0.9 + 3.85 or 3.85 x 0.9 and answer 347 Accept 3.47(m)	1 mark	732 (cm) Accept 7.32(m)	1 mark	2 marks	AO4 1c
3.85 x 1.9 or 3.85 x 0.9 + 3.85 or 3.85 x 0.9 and answer 347 Accept 3.47(m)	1 mark							
732 (cm) Accept 7.32(m)	1 mark							

Qu	Part	Marking Guidance	Total marks	AO														
10	02	Calculate how many reels of thread are needed for a batch of 10 450 skirts. Show your working out. <table><tr><td>10 450 x 4.63 or 48,383.50</td><td>1 mark</td></tr><tr><td>Their 48 383.50 ÷ 200 or their 241.9175</td><td>1 mark</td></tr><tr><td>242</td><td>1 mark</td></tr><tr><td colspan="2">Or alternatively, considering wastage:</td></tr><tr><td>200 ÷ 4.63 or 43</td><td>1 mark</td></tr><tr><td>10450 ÷ their 43 or their 243.02</td><td>1 mark</td></tr><tr><td>244</td><td>1 mark</td></tr></table>	10 450 x 4.63 or 48,383.50	1 mark	Their 48 383.50 ÷ 200 or their 241.9175	1 mark	242	1 mark	Or alternatively, considering wastage:		200 ÷ 4.63 or 43	1 mark	10450 ÷ their 43 or their 243.02	1 mark	244	1 mark	3 marks	AO4 1c
10 450 x 4.63 or 48,383.50	1 mark																	
Their 48 383.50 ÷ 200 or their 241.9175	1 mark																	
242	1 mark																	
Or alternatively, considering wastage:																		
200 ÷ 4.63 or 43	1 mark																	
10450 ÷ their 43 or their 243.02	1 mark																	
244	1 mark																	

Qu	Part	Marking Guidance	Total marks	AO						
10	03	Calculate the cost of the decorative embroidery on a batch of 245 skirts. Give your answer to the nearest penny. Show your working out. <table><tr><td>245 x 8.50 or 2 082.50</td><td>1 mark</td></tr><tr><td>Their 2 082.50 ÷ 60 or their 34.7083333 or their 34.7083333 x 14.85</td><td>1 mark</td></tr><tr><td>£515.42</td><td>1 mark</td></tr></table>	245 x 8.50 or 2 082.50	1 mark	Their 2 082.50 ÷ 60 or their 34.7083333 or their 34.7083333 x 14.85	1 mark	£515.42	1 mark	3 marks	AO4 1c
245 x 8.50 or 2 082.50	1 mark									
Their 2 082.50 ÷ 60 or their 34.7083333 or their 34.7083333 x 14.85	1 mark									
£515.42	1 mark									

Qu	Part	Marking Guidance	Total marks	AO								
11		Discuss the moral issues that can arise from: - the sourcing of plant and animal fibres - offshore practices in fashion manufacturing. <table><tr><td>7–9 marks</td><td>Detailed discussion of the moral issues that can arise from the sourcing of plant and animal fibres and offshore practices in fashion manufacturing. In this mark band both elements from the question are discussed, although not necessarily in equal balance - there may be more information on one of the elements over the other, but this does not detract from a high level response. Points relate appropriately to moral issues, with a slight lack of detail at the low end of the mark band. The points made are generally perceptive in relation to the issues, and accurately reflect the information in the indicative content.</td></tr><tr><td>4–6 marks</td><td>Good discussion of the moral issues that can arise from the sourcing of plant and animal fibres and offshore practices in fashion manufacturing. In this mark band both elements from the question may be discussed, although not necessarily in equal balance - there is likely to be more detailed information on one element over the other. Most points relate appropriately to moral issues, although there may be a lack of detail and understanding at the low end of the mark band. The points made are generally relevant to the issues, and largely reflect some of the information in the indicative content.</td></tr><tr><td>1–3 marks</td><td>Basic discussion of the moral issues that can arise from the sourcing of plant and animal fibres and offshore practices in fashion manufacturing. In this mark band both elements from the question may be discussed, although there is likely to be more information on one element over the other, or the points are discussed in more general terms. Generally, there is a limited information relating to the issues, and there may be many irrelevant points. At the low end of the mark band there is confusion and a lack of understanding of points given in the indicative content.</td></tr><tr><td>0 marks</td><td>No response or nothing worthy of credit.</td></tr></table>	7–9 marks	Detailed discussion of the moral issues that can arise from the sourcing of plant and animal fibres and offshore practices in fashion manufacturing. In this mark band both elements from the question are discussed, although not necessarily in equal balance - there may be more information on one of the elements over the other, but this does not detract from a high level response. Points relate appropriately to moral issues, with a slight lack of detail at the low end of the mark band. The points made are generally perceptive in relation to the issues, and accurately reflect the information in the indicative content.	4–6 marks	Good discussion of the moral issues that can arise from the sourcing of plant and animal fibres and offshore practices in fashion manufacturing. In this mark band both elements from the question may be discussed, although not necessarily in equal balance - there is likely to be more detailed information on one element over the other. Most points relate appropriately to moral issues, although there may be a lack of detail and understanding at the low end of the mark band. The points made are generally relevant to the issues, and largely reflect some of the information in the indicative content.	1–3 marks	Basic discussion of the moral issues that can arise from the sourcing of plant and animal fibres and offshore practices in fashion manufacturing. In this mark band both elements from the question may be discussed, although there is likely to be more information on one element over the other, or the points are discussed in more general terms. Generally, there is a limited information relating to the issues, and there may be many irrelevant points. At the low end of the mark band there is confusion and a lack of understanding of points given in the indicative content.	0 marks	No response or nothing worthy of credit.	9 marks	AO3 2a AO3 2b
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0 marks	No response or nothing worthy of credit.											

		Indicative content The sourcing of plant and animal fibres: - Materials such as fur, silk and luxury hair fibres may raise moral issues in their cultivation and sourcing - Animals are often killed inhumanely for their fur, for this reason faux fur is widely used as a manmade alternative - Silk moths are boiled alive to obtain unbroken reels of silk thread, however Ahimsa, or peace silk, allows the moth to break free from the cocoon before the silk is harvested - The sourcing of luxury and hair fibres may be considered as immoral; however, fibres can be obtained without harming the animals - Leather and other animal skins may be considered as immoral or unethical, faux or vegan leather can be embossed with a range of surface effects to replicate animal skins - Sourcing of raw materials such as cotton, may encourage cheap labour costs; however, schemes such as fair-trade pays farmers a fair wage for the crops - Some fibre crops require the use of pesticides, which can affect communities through health issues and land contamination. Organic fibres such as cotton may be used as a morally acceptable alternative - Excessive use of water in growing and producing cotton may affect local communities, along with loss of land that could be used for farming. Offshore practices in fashion manufacturing: - Offshore manufacturing is often unregulated in order to provide the demand for cheap or fast fashion - Slave or forced labour, is a widespread issue; however, many retailers will only work with factories who have modern slavery policies in place supporting fair working hours Child labour can lead to slavery and exploitation, especially in countries without schooling and children work to contribute the household. Manufacturers may set a minimum working age, but this is difficult to regulate - Poor working conditions are often hazardous and unhealthy to workers. More accountability from manufacturers through pressure from retailers and consumers often results in factory inspections and improvements in manufacturing practices - Poor practices in offshore manufacturing can contribute to environmental damage and impact local communities - Offshore production can cause a reduction in UK manufacturing, and may lead to a lack of jobs. Many retailers promote products that are made in the UK - Many manufacturers support local communities by providing healthcare, housing and education. Award any other valid responses.		
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Qu	Part	Marking Guidance	Total marks	AO
12		Give three reasons why copyright is important to designers. Indicative content: • Copyright protects designers original work/prevents others from copying • Designers can give permission/license the copyright to others • Designers can sue others if their work is used without permission • It provides legal evidence/public record of design ownership • Prevents loss of money/profit from original design • Protects designs for the lifetime of the designer and 70 years after death. Award any other valid responses. Award 1 mark per correct answer, up to a maximum of 3 marks	3 marks	AO4 1a

Qu	Part	Marking Guidance	Total marks	AO								
13		Explain the safety measures that must be put into place when handling and working with hazardous substances in a factory setting. <table><tr><td>5–6 marks</td><td>Detailed explanation of the safety measures that must be put into place when handling and working with hazardous substances in a factory setting. Student demonstrates an in-depth understanding of the safety measures, giving a number of points as outlined in the indicative content. The points made are relevant to specific regulations in a factory setting. At the low end of the mark band there may be slight references to more general measures, however, generally, there is a high level of understanding and the information is largely accurate.</td></tr><tr><td>3–4 marks</td><td>Good explanation of the safety measures that must be put into place when handling and working with hazardous substances in a factory setting. Student demonstrates some understanding of the safety measures, giving a few points as outlined in the indicative content. The points made are mostly relevant to regulations in a factory setting. At the low end of the mark band the references may focus on general measures with some lack of detail, however there is a fair overall understanding and the information is reasonably accurate.</td></tr><tr><td>1–2 marks</td><td>Basic explanation of the safety measures that must be put into place when handling and working with hazardous substances in a factory setting. Student demonstrates a poor understanding of the safety measures, giving a limited number of points outlined in the indicative content. The points made may not be relevant to regulations in a factory setting. At the low end of the mark band the references are limited to general safety measures with little reference to hazardous substances.</td></tr><tr><td>0 marks</td><td>No response or nothing worthy of credit.</td></tr></table>	5–6 marks	Detailed explanation of the safety measures that must be put into place when handling and working with hazardous substances in a factory setting. Student demonstrates an in-depth understanding of the safety measures, giving a number of points as outlined in the indicative content. The points made are relevant to specific regulations in a factory setting. At the low end of the mark band there may be slight references to more general measures, however, generally, there is a high level of understanding and the information is largely accurate.	3–4 marks	Good explanation of the safety measures that must be put into place when handling and working with hazardous substances in a factory setting. Student demonstrates some understanding of the safety measures, giving a few points as outlined in the indicative content. The points made are mostly relevant to regulations in a factory setting. At the low end of the mark band the references may focus on general measures with some lack of detail, however there is a fair overall understanding and the information is reasonably accurate.	1–2 marks	Basic explanation of the safety measures that must be put into place when handling and working with hazardous substances in a factory setting. Student demonstrates a poor understanding of the safety measures, giving a limited number of points outlined in the indicative content. The points made may not be relevant to regulations in a factory setting. At the low end of the mark band the references are limited to general safety measures with little reference to hazardous substances.	0 marks	No response or nothing worthy of credit.	6 marks	AO4 1b
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0 marks	No response or nothing worthy of credit.											

		Indicative content • Health and Safety at Work Act (HASAWA, 1974) stipulates a range of safe manufacturing practices in a factory setting • manufacturers and employees must follow the regulations, they are a legal requirement • Control of Substances Hazardous to Health (COSHH) is a set of regulations designed to protect workers when handling and working with hazardous substances eg chemicals • COSHH requires documenting risk assessments in the workplace • sets out control methods to reduce the risks to health eg personal protective equipment (PPE) such as gloves, masks and goggles • use of correct labelling/warnings • ventilation systems to extract dust and fumes in working areas • secure storage to minimise hazards and unauthorised use • employees must be trained to handle hazardous materials • workers should be aware of first aid and emergency measures • safety measures are reviewed regularly or annually. Award any other valid responses.		
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Qu	Part	Marking Guidance		Total marks	AO
14		Analyse and evaluate the importance of social media to:		9 marks	AO3 2a AO3 2b
		• fashion marketing • brand identity.			
		7–9 marks	Detailed analysis and evaluation of the importance of social media to fashion marketing and brand identity. There is an in-depth understanding of the issues, that relate to both fashion marketing and brand identity. Both elements in this mark band are analysed, although there may be slightly more information on one area over the other. A wide range of accurate points are given, that correctly relate to the use of social media. The information includes positive and negative evaluative points, although they may not necessarily be of equal balance. At the top end of the mark band there are perceptive comments, while at the low end the analysis may lack minor elements of detail, but this does not detract from a thorough understanding of the issues.		
		4–6 marks	Good analysis and evaluation of the importance of social media to fashion marketing and brand identity. There is some understanding of the issues, that relate to both fashion marketing and brand identity. Both elements in this mark band may be analysed, however there is likely to be more information on one area over the other, or is presented in more general terms. A number of accurate points are given, that largely relate to the use of social media. The information includes positive points and may include some negative points, although they may not necessarily be of equal balance. At the top end of the mark band there are some valid comments, while at the low end the analysis may lack detail or focus on one area over the other, but this does not detract from a good understanding of the issues.		
		1–3 marks	Basic analysis and evaluation of the importance of social media to fashion marketing and brand identity. There is a poor understanding of the issues, that focus on limited aspects of fashion marketing and brand identity. The information may be presented in general terms or with more focus on one of the elements over the other. The information mostly focuses on positive points, with little or no reference to negative points. At the top end of the mark band there are a limited number of comments, which may not always be relevant. At the low end, the analysis lacks accuracy and there may be some confusion, with little or no evaluative comments.		
		0 marks	No response or nothing worthy of credit.		

		Indicative content: <table><tr><th>Fashion marketing:</th><th>Brand identity:</th></tr><tr><td> • A range of platforms such as Instagram, Facebook and TikTok, present digital content for fashion marketing • which may include video, live streaming and interactive content • fashion marketing via social media is important as it is able to reach many millions of consumers, both in the UK and internationally • it is a low-cost marketing solution • companies can target their chosen demographic market • it is easily accessible to consumers through phones or computers • retailers can quickly show a range of products to the consumer • marketing via social media improves sales • influencers or celebrities may represent or promote a brand </td><td> • A brand identity is usually defined by specific logos, colours, font types and values that visually represent a brand • social media allows a brand to connect with consumers • use of computers and smart phones allows consumers to engage with the brand at any time, 24/7, convenient for the consumer • the brand's looks and aesthetics can appeal to and gain new consumers • loyal consumers can gain unique content • brand values can be communicated clearly, increasing the companies' exposure • having a strong brand identity can develop and grow the brand. </td></tr><tr><td> • However, marketing through social media is likely to promote fast fashion • there is a constant need to present new ideas and content • social media relies on technology, which can often fail • too much content can be overwhelming, the consumer may unfollow fashion retailers. </td><td> • However, it may be difficult to stand out in a competitive market • online presence needs to be eye catching/different to other brands to be noticed • viral products are often key to online success, but can be difficult to predict • negative publicity may damage a brand's identity. </td></tr></table>	Fashion marketing:	Brand identity:	• A range of platforms such as Instagram, Facebook and TikTok, present digital content for fashion marketing • which may include video, live streaming and interactive content • fashion marketing via social media is important as it is able to reach many millions of consumers, both in the UK and internationally • it is a low-cost marketing solution • companies can target their chosen demographic market • it is easily accessible to consumers through phones or computers • retailers can quickly show a range of products to the consumer • marketing via social media improves sales • influencers or celebrities may represent or promote a brand	• A brand identity is usually defined by specific logos, colours, font types and values that visually represent a brand • social media allows a brand to connect with consumers • use of computers and smart phones allows consumers to engage with the brand at any time, 24/7, convenient for the consumer • the brand's looks and aesthetics can appeal to and gain new consumers • loyal consumers can gain unique content • brand values can be communicated clearly, increasing the companies' exposure • having a strong brand identity can develop and grow the brand.	• However, marketing through social media is likely to promote fast fashion • there is a constant need to present new ideas and content • social media relies on technology, which can often fail • too much content can be overwhelming, the consumer may unfollow fashion retailers.	• However, it may be difficult to stand out in a competitive market • online presence needs to be eye catching/different to other brands to be noticed • viral products are often key to online success, but can be difficult to predict • negative publicity may damage a brand's identity.		
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• However, marketing through social media is likely to promote fast fashion • there is a constant need to present new ideas and content • social media relies on technology, which can often fail • too much content can be overwhelming, the consumer may unfollow fashion retailers.	• However, it may be difficult to stand out in a competitive market • online presence needs to be eye catching/different to other brands to be noticed • viral products are often key to online success, but can be difficult to predict • negative publicity may damage a brand's identity.									
Award any other valid responses.										

Qu	Part	Marking Guidance	Total marks	AO								
15		Calculate the volume of each cushion in Figure 5. State which cushion has the smaller volume. You must show your working out. <table><tr><td>Cylinder: $(\pi \times 144 \times 60)$</td><td></td></tr><tr><td>[27 138.24, 27 143.3605]</td><td>1 mark</td></tr><tr><td>Triangular Prism: 22 x 32 ÷ 2 x 80 or 28 160</td><td>1 mark</td></tr><tr><td>Answer: Cylinder/Cushion A and [27 138.24, 27 143.3605] and 28 160 seen Must show working out to support final answer to gain full marks.</td><td>1 mark</td></tr></table>	Cylinder: $(\pi \times 144 \times 60)$		[27 138.24, 27 143.3605]	1 mark	Triangular Prism: 22 x 32 ÷ 2 x 80 or 28 160	1 mark	Answer: Cylinder/Cushion A and [27 138.24, 27 143.3605] and 28 160 seen Must show working out to support final answer to gain full marks.	1 mark	3 marks	AO4 1c
Cylinder: $(\pi \times 144 \times 60)$												
[27 138.24, 27 143.3605]	1 mark											
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Answer: Cylinder/Cushion A and [27 138.24, 27 143.3605] and 28 160 seen Must show working out to support final answer to gain full marks.	1 mark											

Qu	Part	Marking Guidance	Total marks	AO						
16		Explain the benefits of trade fairs for designers. <table><tr><td>3–4 marks</td><td>Good explanation of the benefits of trade fairs for designers. The response gives a number of points that are both accurate and specific to trade fairs. At the top end of the mark band there is very good understanding of the benefits, with in-depth explanations. At the low end, there is a slight lack of detail or fewer points, however this does not detract from an overall good response.</td></tr><tr><td>1–2 marks</td><td>Basic explanation of the benefits of trade fairs for designers. The response gives a few points that are mostly accurate but may not be specific to trade fairs. At the top end of the mark band there is some understanding of the benefits, with limited explanations. At the low end, there is a lack of detail, few if any, points, with inaccuracies or confused information.</td></tr><tr><td>0 marks</td><td>No response or nothing worthy of credit.</td></tr></table> Indicative content • Research the latest innovations in technological developments eg fibres, yarns, fabrics and colour • find inspiration and trends for new collections eg colour and patterns • source/place orders with suppliers • network with other professionals and business contacts • sell designs and promote own business • research the design work of competitors • showcase a brand/new collections. No credit to be given for naming specific trade fairs, or for information on fair trade. Award any other valid responses.	3–4 marks	Good explanation of the benefits of trade fairs for designers. The response gives a number of points that are both accurate and specific to trade fairs. At the top end of the mark band there is very good understanding of the benefits, with in-depth explanations. At the low end, there is a slight lack of detail or fewer points, however this does not detract from an overall good response.	1–2 marks	Basic explanation of the benefits of trade fairs for designers. The response gives a few points that are mostly accurate but may not be specific to trade fairs. At the top end of the mark band there is some understanding of the benefits, with limited explanations. At the low end, there is a lack of detail, few if any, points, with inaccuracies or confused information.	0 marks	No response or nothing worthy of credit.	4 marks	AO4 1b
3–4 marks	Good explanation of the benefits of trade fairs for designers. The response gives a number of points that are both accurate and specific to trade fairs. At the top end of the mark band there is very good understanding of the benefits, with in-depth explanations. At the low end, there is a slight lack of detail or fewer points, however this does not detract from an overall good response.									
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0 marks	No response or nothing worthy of credit.									

Qu	Part	Marking Guidance	Total marks	AO								
17		Analyse and evaluate the environmental benefits of using new generation Lyocell® instead of cotton fibres. <table><tr><td>9–12 marks</td><td>Detailed analysis and evaluation of the environmental benefits of using new generation Lyocell® instead of cotton fibres. There is an in-depth analysis, with a wide range of benefits of using Lyocell® fibres, and drawbacks relating to cotton fibres. The points may not necessarily be of equal balance, however at the top end of the mark band there is a detailed understanding of the impact of the two fibres; while at the low end, the analysis may lack minor elements of detail or focus slightly on one area over the other, but this does not detract from a thorough understanding of the issues.</td></tr><tr><td>5–8 marks</td><td>Good analysis and evaluation of the environmental benefits of using new generation Lyocell® instead of cotton fibres. There is a good analysis, with some benefits of using Lyocell® fibres, and may include drawbacks relating to cotton fibres. The points may not necessarily be of equal balance, however at the top end of the mark band there is good understanding of the impact of both fibres; while at the low end, the analysis may lack minor elements of detail or focus on one fibre over the other, but this does not detract from a good understanding of the issues.</td></tr><tr><td>1–4 marks</td><td>Basic analysis and evaluation of the environmental benefits of using new generation Lyocell® instead of cotton fibres. There is a poor analysis, with limited points that may include a few benefits of using Lyocell® fibres, and maybe drawbacks relating to cotton fibres. The points are unlikely to be equally balanced, however at the top end of the mark band there is a little understanding of the impact of one or both fibres; while at the low end the analysis lacks detail or focuses on one fibre over the other, with many inaccuracies.</td></tr><tr><td>0 marks</td><td>No response or nothing worthy of credit.</td></tr></table>	9–12 marks	Detailed analysis and evaluation of the environmental benefits of using new generation Lyocell® instead of cotton fibres. There is an in-depth analysis, with a wide range of benefits of using Lyocell® fibres, and drawbacks relating to cotton fibres. The points may not necessarily be of equal balance, however at the top end of the mark band there is a detailed understanding of the impact of the two fibres; while at the low end, the analysis may lack minor elements of detail or focus slightly on one area over the other, but this does not detract from a thorough understanding of the issues.	5–8 marks	Good analysis and evaluation of the environmental benefits of using new generation Lyocell® instead of cotton fibres. There is a good analysis, with some benefits of using Lyocell® fibres, and may include drawbacks relating to cotton fibres. The points may not necessarily be of equal balance, however at the top end of the mark band there is good understanding of the impact of both fibres; while at the low end, the analysis may lack minor elements of detail or focus on one fibre over the other, but this does not detract from a good understanding of the issues.	1–4 marks	Basic analysis and evaluation of the environmental benefits of using new generation Lyocell® instead of cotton fibres. There is a poor analysis, with limited points that may include a few benefits of using Lyocell® fibres, and maybe drawbacks relating to cotton fibres. The points are unlikely to be equally balanced, however at the top end of the mark band there is a little understanding of the impact of one or both fibres; while at the low end the analysis lacks detail or focuses on one fibre over the other, with many inaccuracies.	0 marks	No response or nothing worthy of credit.	12 marks	AO3 2a AO3 2b
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0 marks	No response or nothing worthy of credit.											

Indicative content:	
Lyocell® fibres	Cotton fibres
Are manufactured new generation fibres, known commercially as Modal®, Tencel® and Lyocell®	Are natural fibres, but have many environmental disadvantages
Wood pulp often comes from managed forests , where new trees are planted for those cut down, making the fibre more sustainable than cotton	Crops take up large areas of land causing deforestation, making changes to habitats and landscapes, contributing to water pollution or eutrophication
Are obtained from natural wood pulp , which is dissolved in petrochemicals to make the fibre	Uses toxic pesticides or fertilisers to grow and control the crops, harming wildlife and degrading soil quality
Trees do not need pesticides or water /irrigation to grow	Cotton needs vast amounts of water to grow
No bleaching is necessary in fibre production, and less dye is needed in comparison to cotton	Cotton requires bleach and chemicals used for cleaning and dyeing the fibres which can leach into waterways
Lyocell has a minimal impact on local communities and the environment	Local communities are affected by the growing and processing of cotton
Lyocell fibres can be made on demand	Cotton fibres are dependent on the success of cotton crops
Lyocells are made in a closed loop process , where chemicals are reused and do not pollute the environment	Cotton uses many processes and machinery which uses unsustainable and finite fossil fuels
Lyocell fibres have the soft and natural qualities of cotton, but are more environmentally friendly .	Cotton is often marketed as natural, it is however very damaging to the environment unless grown organically .

Award any other valid responses.

Qu	Part	Marking Guidance	Total marks	AO								
18		Explain how textile products are designed to be thermally insulating. Give examples of specific fashion and interior textile products in your answer. <table><tr><td>5–6 marks</td><td>Detailed explanation of how textiles are designed to be thermally insulating. The response gives appropriate examples of a number of textile products that are designed to provide warmth. In this mark band, both fashion and interior textiles are given, although there may be more information on one group over the other. The explanations for the examples given are relevant and show correct understanding of how they are able to provide warmth. At the low end of the mark band there may be a slight lack of detail how thermal insulation is achieved, but this does not detract from a high-level response.</td></tr><tr><td>3–4 marks</td><td>Good explanation of how textiles are designed to be thermally insulating. The response gives some appropriate examples of textile products that are designed to provide warmth. In this mark band, reference may be made to both fashion and interior textiles, however there is likely to be more information on one group over the other. The explanations for the examples given are mostly relevant and show some correct understanding of how they are able to provide warmth. At the low end of the mark band there may be a lack of detail, with only some reference to how thermal insulation is achieved.</td></tr><tr><td>1–2 marks</td><td>Basic explanation of how textiles are designed to be thermally insulating. The response gives a few or no examples of textile products that are designed to provide warmth. In this mark band, limited reference is made to fashion and interior textiles, and there is likely to be general information on one or both groups. The explanations for the examples given are not always relevant and show little understanding of how they are able to provide warmth. At the low end of the mark band there is likely to be confusion about thermal insulation or a list of products designed to be thermally insulating with no reference to how thermal insulation is achieved.</td></tr><tr><td>0 marks</td><td>No response or nothing worthy of credit.</td></tr></table>	5–6 marks	Detailed explanation of how textiles are designed to be thermally insulating. The response gives appropriate examples of a number of textile products that are designed to provide warmth. In this mark band, both fashion and interior textiles are given, although there may be more information on one group over the other. The explanations for the examples given are relevant and show correct understanding of how they are able to provide warmth. At the low end of the mark band there may be a slight lack of detail how thermal insulation is achieved, but this does not detract from a high-level response.	3–4 marks	Good explanation of how textiles are designed to be thermally insulating. The response gives some appropriate examples of textile products that are designed to provide warmth. In this mark band, reference may be made to both fashion and interior textiles, however there is likely to be more information on one group over the other. The explanations for the examples given are mostly relevant and show some correct understanding of how they are able to provide warmth. At the low end of the mark band there may be a lack of detail, with only some reference to how thermal insulation is achieved.	1–2 marks	Basic explanation of how textiles are designed to be thermally insulating. The response gives a few or no examples of textile products that are designed to provide warmth. In this mark band, limited reference is made to fashion and interior textiles, and there is likely to be general information on one or both groups. The explanations for the examples given are not always relevant and show little understanding of how they are able to provide warmth. At the low end of the mark band there is likely to be confusion about thermal insulation or a list of products designed to be thermally insulating with no reference to how thermal insulation is achieved.	0 marks	No response or nothing worthy of credit.	6 marks	AO4 1c
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		Indicative content: Fashion products may include: • Padded puffer jacket or quilted coat– which can include feather or polyester wadding in between the outer and lining fabric to create a warm layer • Wool outerwear – often used as wool is naturally warm, as it traps air in the crimp, creating thermal insulation • Knitwear – knitted structures, such as jumpers, traps air in the loops, creating warmth • Lining – products may be lined, air is trapped between the outer and lining fabric to create an extra layer of warmth • Sleep or loungewear – are often made with fleece fabrics. The pile in the fabric creates loops that trap air, giving warmth • Accessories – such as gloves, scarf, hats and socks are designed to create warmth. Often made with a combination of wool and knitted structures. Interior products may include: • Throw or blanket – often used as additional layers for warmth and usually made from wool, knitted or fleece fabrics that trap air in the fibres • Duvet – designed to create warmth by using a layer of feathers, silk, wool or polyester hollow fibres for thermal insulation • Bedding – can be made with brushed cotton, where the raised fibres trap air for warmth and comfort • Curtains – may be made with an insulating fabric such as wool or velvet. Often lined or padded, creating a layer of air to keep warmth in a room. • Oven gloves - padded oven gloves are designed to prevent heat transfer to the user. Do not accept references to heated items such as electric blankets, self-heating garments and products that need electrical charging. Do not accept references to thermoregulating/smart materials such as Outlast™. Award any other valid responses.		
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Qu	Part	Marking Guidance	Total marks	AO								
19		Calculate the cost of all fabrics for 945 coats. Show your working out. <table><tr><td>185 ÷ 100 or 1.85 or 146 ÷ 100 or 1.46</td><td>1 mark</td></tr><tr><td>5.14 x their 1.85 or 9.509 or 2.32 x their 1.46 or 3.3872</td><td>1 mark</td></tr><tr><td>Their 12.8962 x 945</td><td>1 mark</td></tr><tr><td>[12,186.90, 12,186.91]</td><td>1 mark</td></tr></table>	185 ÷ 100 or 1.85 or 146 ÷ 100 or 1.46	1 mark	5.14 x their 1.85 or 9.509 or 2.32 x their 1.46 or 3.3872	1 mark	Their 12.8962 x 945	1 mark	[12,186.90, 12,186.91]	1 mark	4 marks	AO4 1c
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20		Explain the differences between underlining and interfacing. <table><tr><td>5–6 marks</td><td>Detailed explanation of the differences between underlining and interfacing. There is an in-depth understanding of the differences between the two with a number of accurate points as outlined in the indicative content. The response gives a comprehensive account of both underlining and interfacing, not necessarily in equal balance, but with a detailed level of information. There may be a slight lack of detail at the lower end of the mark band, however the points made are largely relevant and do not detract from a quality response.</td></tr><tr><td>3–4 marks</td><td>Good explanation of the differences between underlining and interfacing. There is a good understanding of the differences between the two with some accurate points as outlined in the indicative content. The response attempts to give a good account of both underlining and interfacing, however there may be more information about one over the other. There may be a lack of detail along with some inaccuracies at the lower end of the mark band, however the points made are generally relevant and show some understanding.</td></tr><tr><td>1–2 marks</td><td>Basic explanation of the differences between underlining and interfacing. There is a limited understanding of the differences between the two with few accurate points as outlined in the indicative content. The response may attempt to give an account of both underlining and interfacing, or may focus on one only. The points made may have a little relevance, however there is limited or no detail, and the information has many inaccuracies especially at the lower end of the mark band.</td></tr><tr><td>0 marks</td><td>No response or nothing worthy of credit.</td></tr></table>	5–6 marks	Detailed explanation of the differences between underlining and interfacing. There is an in-depth understanding of the differences between the two with a number of accurate points as outlined in the indicative content. The response gives a comprehensive account of both underlining and interfacing, not necessarily in equal balance, but with a detailed level of information. There may be a slight lack of detail at the lower end of the mark band, however the points made are largely relevant and do not detract from a quality response.	3–4 marks	Good explanation of the differences between underlining and interfacing. There is a good understanding of the differences between the two with some accurate points as outlined in the indicative content. The response attempts to give a good account of both underlining and interfacing, however there may be more information about one over the other. There may be a lack of detail along with some inaccuracies at the lower end of the mark band, however the points made are generally relevant and show some understanding.	1–2 marks	Basic explanation of the differences between underlining and interfacing. There is a limited understanding of the differences between the two with few accurate points as outlined in the indicative content. The response may attempt to give an account of both underlining and interfacing, or may focus on one only. The points made may have a little relevance, however there is limited or no detail, and the information has many inaccuracies especially at the lower end of the mark band.	0 marks	No response or nothing worthy of credit.	6 marks	AO4 1b
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	Indicative content: <table border="1"><tr><th>Underlining</th><th>Interfacing</th></tr><tr><td>Underlining is a separate layer of fabric, designed to add stability or warmth to open structured or lightweight fabrics</td><td>Interfacing is a layer of usually non-woven fabric, applied to garment fabric to add support or strength in specific areas of a garment</td></tr><tr><td>Is a separate layer of the garment, layered underneath the main fabric, and stitched to the main fabric at the seams</td><td>Is applied to fabric to create one layer, and can be stitched or ironed onto the garment fabric for extra stability</td></tr><tr><td>Is used under the whole of the fabric piece e.g. bodice or skirt linings</td><td>Is often used in small areas of a product that need support e.g. collars and cuffs</td></tr><tr><td>Underlining can provide a feature or colour contrast under open structured fabrics</td><td>Designed to blend in with the main fabric usually available in black, grey or white</td></tr><tr><td>Underlining is usually designed to be seen</td><td>Interfacing is hidden and cannot be seen</td></tr><tr><td>Often used to make transparent fabrics more opaque</td><td>Designed to strengthen, support or stabilise fabric</td></tr></table>	Underlining	Interfacing	Underlining is a separate layer of fabric, designed to add stability or warmth to open structured or lightweight fabrics	Interfacing is a layer of usually non-woven fabric, applied to garment fabric to add support or strength in specific areas of a garment	Is a separate layer of the garment, layered underneath the main fabric, and stitched to the main fabric at the seams	Is applied to fabric to create one layer , and can be stitched or ironed onto the garment fabric for extra stability	Is used under the whole of the fabric piece e.g. bodice or skirt linings	Is often used in small areas of a product that need support e.g. collars and cuffs	Underlining can provide a feature or colour contrast under open structured fabrics	Designed to blend in with the main fabric usually available in black, grey or white	Underlining is usually designed to be seen	Interfacing is hidden and cannot be seen	Often used to make transparent fabrics more opaque	Designed to strengthen, support or stabilise fabric		
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