



GCSE MARKING SCHEME

SUMMER 2025

**GCSE
DESIGN AND TECHNOLOGY
FASHION & TEXTILES - UNIT 1
3602U10-1**

About this marking scheme

The purpose of this marking scheme is to provide teachers, learners, and other interested parties, with an understanding of the assessment criteria used to assess this specific assessment.

This marking scheme reflects the criteria by which this assessment was marked in a live series and was finalised following detailed discussion at an examiners' conference. A team of qualified examiners were trained specifically in the application of this marking scheme. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners. It may not be possible, or appropriate, to capture every variation that a candidate may present in their responses within this marking scheme. However, during the training conference, examiners were guided in using their professional judgement to credit alternative valid responses as instructed by the document, and through reviewing exemplar responses.

Without the benefit of participation in the examiners' conference, teachers, learners and other users, may have different views on certain matters of detail or interpretation. Therefore, it is strongly recommended that this marking scheme is used alongside other guidance, such as published exemplar materials or Guidance for Teaching. This marking scheme is final and will not be changed, unless in the event that a clear error is identified, as it reflects the criteria used to assess candidate responses during the live series.

GCSE DESIGN AND TECHNOLOGY

FASHION & TEXTILES - UNIT 1

SUMMER 2025 MARK SCHEME

Question 1		AO3	AO4	Mark
Textile fabrics can be embellished using different techniques.				
(a)(i)	The image below shows an example of silk painting. Complete the following sentences:		✓	2
	<i>Acceptable answers in this order:</i> - prevents; stops - resist			1 1
(ii)	Batik is another method of applying colour and pattern to textile fabrics. Explain how patterns can be applied to textile fabrics using batik.		✓	3
	<i>Answers that indicate an understanding of batik should be awarded up to 3 marks based on:</i> - Hot melted wax used to outline the design on the fabric - May refer to using a tjanting tool for wax application - Fabric can be immersed in dye OR dye applied directly to different areas - Wax resists the dye which creates the pattern once the wax is removed - More wax can be added and redipped to create further pattern Guidance to markers <i>Incorrect/no answer</i> <i>Brief description, some understanding for example:</i> Outline the shape with melted wax then dye it. <i>More detail with understanding for example:</i> Outline the shape with hot melted wax then immerse the fabric in dye. The wax stops the dye. <i>A detailed description with clear understanding for example:</i> Outline the shape with hot melted wax then immerse the fabric in dye. The wax areas prevent the dye from colouring the fabric. When the wax is removed the pattern is created.			0 1 2 3

(iii)	Give one reason why fabric paints have to be set once applied to textile fabrics and describe a method of achieving this.		✓	2
	<i>Answers that indicate an understanding of setting fabric paint should be awarded 1 mark for a correct reason and 1 mark for an appropriate method.</i>			
	REASON: • Makes the paint permanent • Paint will not run if exposed to moisture or water • Fabrics can be washed without the paint running			
	METHOD: • Press the painted fabric with a hot iron as the heat 'sets' the paint • Use the heat press to set the paint			
	Guidance to markers <i>Incorrect/no answer.</i>			0
	Paints need to be permanently fixed to prevent them from running if exposed to moisture.			1
	<i>An acceptable method for example:</i> Use a hot iron and press the painted design.			1
(b)	Explain how a laser cutter can be used creatively to add pattern and texture to textile fabrics.		✓	3
	<i>Answers that indicate an understanding of using the laser cutter to add pattern and texture to fabric can be awarded up to 3 marks based on:</i>			
	• Designs can be cut out of the fabric • Complex shapes can be cut • Parts of designs can be folded back and stitched down to create a 3D effect • Designs can be etched onto the fabric - scores the surface • With etching different patterns can be achieved ie solid areas, lines, cross hatching, all over patterns..... etc • Etching, cutting and folding can be used together to create more imaginative pieces			
	Guidance to markers <i>Incorrect/no answer.</i>			0
	<i>Brief description, some understanding for example:</i> The laser cutter can be used to cut shapes out of fabric.			1
	<i>More detail with understanding for example:</i> The laser cutter can cut very intricate shapes out of fabric and it can also engrave the fabric too.			2
	<i>A detailed description with clear understanding for example:</i> As well as cutting interesting shapes out of fabric that can't be achieved any other way, it can also engrave intricate designs and patterns on the surface of the fabric without cutting it which can't be done any other way.			3
Total				10

Question 2

Textile fibres are classified according to their source.		AO3	AO4	Mark
(a)	Complete the chart below by selecting the correct fibre listed and placing it under its correct classification		✓	4
	<i>Only acceptable answers in this order:</i> • ANIMAL: Angora • PLANT: Bamboo • SYNTHETIC: Polypropylene • REGENERATED: Acetate			1 1 1 1
(b)(i)	Describe a textile fibre.		✓	2
	<i>Answers that indicate an understanding of fibres can be awarded up to 2 marks based on:</i> • A hair like structure from tissues or plants or animals or other substances • The smallest element of any textile fabric - very small in diameter compared to its length • Can vary in thickness and strength • Twisted together to create yarns Guidance to markers <i>Incorrect/no answer.</i> <i>Brief description, very little detail for example:</i> It's a hair like structure from plants or animals. <i>A more detailed explanation with understanding:</i> It's a hair like structure that is tiny in diameter compared to length.			0 1 2

(ii)	Describe the main differences between regenerated and synthetic fibres.		✓	4
	<i>Answers that indicate an understanding of the difference between regenerated and synthetic fibres should be awarded up to 4 marks based on:</i> REGENERATED: • Part natural/part made made • Natural source - cellulose polymer for example wood pulp or cotton linters • Cellulose polymers are chemically treated to create the fibre(man made element) • Manufactured from renewable sources SYNTHETIC: • Derived/manufactured from petrochemicals (petroleum, oil, coal for example) • 100% man made • Non renewable source Guidance to markers <i>Incorrect/no answer.</i> <i>Brief description, limited understanding for example:</i> Synthetic fibres are entirely manmade but regenerated fibres have a natural source. <i>More detail with a basic understanding for example:</i> Synthetic fibres are entirely manmade from petrochemicals but regenerated fibres have a natural source such as wood pulp. <i>More detailed description with clear understanding for example:</i> Synthetic fibres are entirely manmade from petrochemicals and are finite but regenerated fibres have a natural source such as wood pulp but chemicals are used in processing. <i>A full and detailed explanation with very clear understanding for example:</i> Synthetic fibres are 100% manmade from petrochemicals are finite and not biodegradable. Regenerated fibres have a natural source such as wood pulp but the chemicals used in processing places them in a separate classification to other natural fibres. They are biodegradable because of the natural source but also man made because of the processing.			0
				1
				2
				3
				4

(c)	Analyse the impact synthetic fibres have on the environment following disposal. Marks will be awarded for the content of the answer and quality of written communication.	✓		5			
	<i>Answers that indicate an understanding of the impact of synthetic fibres on the environment and show <u>logical lines of reasoning</u> should be awarded up to 5 marks based on:</i> • Synthetic fibres are non biodegradable • If sent to landfill will not decompose but will eventually break down (500 - 1000 years) • Small particles remain in landfill indefinitely - microplastics • Creates long term pollution • Landfill is the issue - build up of toxins, green house gases • Impact on bio diversity • Microplastics can seep into the earth, underwater systems / eco-systems and other waterways posing a severe threat to marine life Guidance to markers <i>Incorrect/no answer.</i> Brief description of the impact synthetic fibres have on the environment following disposal but little detail in the explanation. Little evidence of reasoning. Quality of Written Communication is basic, presenting occasionally appropriate material with some coherence, some errors of grammar, punctuation and spelling. More detailed description of the impact synthetic fibres have on the environment following disposal with some explanation and detail in the response. Some evidence of reasoning. Quality of Written Communication is good, presenting mainly appropriate material in a coherent manner, few errors of grammar, punctuation and spelling. Clear and detailed description of the impact synthetic fibres have on the environment following disposal with detailed explanation in the response. Clear evidence of logical lines of reasoning. Quality of Written Communication is excellent, presenting wholly appropriate material in a coherent and logical manner, hardly any errors of grammar, punctuation and spelling.			0	1-2	3-4	5
		Total		15			

Question 3

The natural world is often the source of inspiration in fabric technology and for fashion and textile designers.		AO3	AO4	Mark
(a)	For each of the smart materials listed in the table below, explain why each has been used for the named products.		✓	4
<i>Answers that indicate an understanding of each smart material and their application can be awarded up to 2 marks for each explained material based on:</i> MICRO ENCAPSULATION WITH ESSENTIAL OILS: • Essential oils embedded onto fabric, released through friction • Essential oils target well being • Lavender is one example that helps relaxation - other oils do similar (accept other factually correct suggestions) • Relaxation aids better sleep patterns - aids recovery, better health, promotes well being THERMOCHROMIC DYES: • Change colour in response to changes in temperature/heat • Army combat uniforms normal camouflage prints but can be embedded with thermochromic dyes to change colour when it suits • Change in surroundings for soldiers - dense shading to intense heat - clothes need to reflect the background • Colours change accordingly purpose of camouflage - no need to change to different colour uniform Guidance to markers <i>Incorrect / no answer.</i> <i>A brief description lacks detail for example:</i> If bed linen smells nice, you relax and sleep better. <i>A good explanation with clear understanding for example:</i> Bedlined embedded with essential oils such as lavender help people relax and sleep more easily.				0
				1
				2

(b)(i)	Plant leaves have inspired the development of new materials and finishes. State the term used to describe taking inspiration from nature.		✓	1
	Only acceptable answer: Biomimicry (biomimetics)			1
(ii)	Describe two reasons why a fashion or textile designer might observe and study nature when seeking a solution to a design problem.		✓	4
	<i>Answers that indicate an understanding of how nature can inform design solutions should be awarded up to 2 marks for each reason based on:</i>			
	• Can be inspired by shape and texture • Can see how nature - insects or plant life - responds in different situations - overcoming issues they encounter • Nature has evolved over millenia to overcome many challenges • Colours and patterns in nature are an endless source of inspiration in fashion and textiles • Velcro inspired by the burs that stick to animal fur • Speedo sharkskin swimsuit - imitates the shark's streamlined skin • Camouflage used by army/service personal inspired by nature • Colour changing clothing inspired by, for example chameleons • Light sensors in clothing that change according to environment			
	Guidance to markers <i>Incorrect/no answer.</i>			0
	<i>Brief description, very little detail for example:</i> Designers can be inspired by shapes and textures found in the natural world.			1
	<i>Some detail with some understanding for example:</i> Designers can be inspired by shapes and textures found in the natural world and use the inspiration for new shapes for clothing or print designs.			2
(iii)	Explain how nature inspired Orla Kiely's textile designs.		✓	5
	<i>Answers that indicate an understanding of Orla Kiely's designs should be awarded up to 5 marks based on:</i>			
	• Inspired by the colours of her childhood • Loves green from moss to seaweed from her childhood by the sea • Greys and browns of the skies and landscape in her homeland • Mustard yellow of the gorse on the hills and wild flowers • Inspired by floral designs from her childhood in the 70s • Inspired by organic forms which are repeated in her prints • Most famous print - Stem - inspired by leaves • Colours of her childhood - constant theme throughout her work			
	Guidance to markers <i>Incorrect/no answer</i>			0
	Brief description relating to how nature inspired the work of Orla Kiely but little detail in the explanation.			1-2
	More detailed description relating to how nature inspired the work of Orla Kiely with some explanation and detail in the response.			3-4
	Clear and detailed description relating to how nature inspired the work of Orla Kiely with detailed explanation and full understanding in the response.			5
Total				14

Question 4

Study the knitted beanie hat pictured below which has a built-in LED (light emitting diode).		AO3	AO4	Mark
(a) (i)	Explain why the rechargeable feature of the LED will appeal to users.		✓	2
	<i>Answers that indicate an understanding of rechargeable LEDs can be awarded up to 2 marks based on:</i> • Product will be useful for longer if the LED is rechargeable • Not considered a gimmick with planned obsolescence once LED no longer works • No need to buy new batteries - easily recharged - more appealing • Can be recharged from different devices that have a USB port Guidance to markers <i>Incorrect / no answer.</i> <i>A simple statement limited understanding for example:</i> The rechargeable feature means no replacement batteries will need to be purchased adding to cost. <i>A more detailed explanation with understanding for example:</i> The rechargeable feature means no replacement batteries will need to be purchased which adds to cost. The product overall will be fully useful for longer as it can keep being recharged easily.			0 1 2

(ii)	Discuss how technology push has influenced the development of the beanie hat with the built-in LED feature.		✓	3
<i>Answers that indicate an understanding of technology push can be awarded up to 3 marks based on:</i> • Technology allows for the development of a slimline LED to be inserted in the beanie hat • Consumers are drawn to products with integrated technology • Developments in technology allow for newer products to be pushed into the market place – filling a need that was not apparent previously • Torches intergrated into helments have been in existence for ages for specific people/situations for example coal miners, nano technology allows for smaller products to be manufactured for same purpose but in a more accessible format – technology push • Technology allows for revitalised products to be pushed into the market place that consumers may not know they want or need until seen • Integrating the LEDs with the beanie hat combines two products into one, meets a wider range of needs - technology push Guidance to markers <i>Incorrect / no answer.</i> <i>Brief discussion, lacks detail for example:</i> Developments in technology allows new concepts to be pushed into the market place which were not possible previously. <i>More detail in the discussion with some understanding for example:</i> Developments in technology such as small LEDs used in textiles allows new concepts to be pushed into the market place which were not thought of before. <i>A detailed discussion with clear understanding for example:</i> Developments in technology allows new concepts such as the beanie hat with integrated LEDs to be pushed into the market place. Consumers are introduced to newer versions of older products that they didn't know they needed or wanted until seen.				
				0
				1
				2
				3

(b)(i)	Evaluate the effectiveness of the built-in LED in supporting the safety of users in a specific named situation.	✓		5	
	<i>Answers that indicate an understanding of how the LED supports users safety and show <u>evidence of appraisal or making judgements</u> should be awarded up to 5 marks based on:</i> • Hands free flashlight - visibility and safety • Worn on the head rather than carried • To see and be seen - safety • Clear visibility whenever and wherever it is needed • Beam distance provides light for seeing in the dark, different levels of darkness - to see where you are going and be seen • Hands free for athletes - cyclists, runners, hikers, skiers etc. • Hands free for general users - walking, fishing, dog walking, any age • Children on school run, dark morning/afternoons - be seen/safe • Battery life up to 4 hours - long enough to last for most activities Guidance to markers <i>Incorrect/no answer.</i> Brief description of how the LED supports users safety, very little detail in the explanation. Little or no evidence of appraisal/making a judgement. More detailed explanation of how the LED supports users safety with some evidence of appraisal/making judgements. Clear and detailed explanation of how the LED supports users safety with very clear evidence of appraisal/making judgements.			0 1-2 3-4 5	
	(ii)	Evaluate how smart technology integrated into clothing can support athletes in training. Include named examples in your response.	✓		5
	<i>Answers that indicate an understanding of smart technology and show <u>evidence of appraisal/ making judgements</u> should be awarded up to 5 marks based on:</i> • Nano technology can be seamlessly integrated into sports clothing • Is discreet and doesn't impede performance • Can be intergrated into the body of the fabric or as a discreet device • Devices linked via bluetooth to an App in real time - tracks performance • Monitoring physical condition: biometric data - pulse rate, temperature, muscle strength, heart rhythm and physical movement • Heart monitors for example, could indicate an underlying issue • Feedback from monitoring devices help improve training and overall performance • <i>Note: accept other feasible and realistic examples</i> Guidance to markers <i>Incorrect/no answer.</i>			0	
	Brief description of smart technology integrated into clothing but little detail in the explanation. Little or no evidence of appraisal or judgement.			1-2	
More detailed description of smart technology integrated into clothing with some explanation and detail in the response. Some evidence of appraisal and/or making a judgement.			3-4		
Clear and detailed description of smart technology integrated into clothing with a good explanation and detail in the response. Good evidence of appraisal and making judgements.			5		
Total				15	

Question 5

All consumers require high quality construction in fashion and textile products.		AO3	AO4	Mark
(a)(i)	Complete the following sentence: The standard seam allowance measurement used in textiles is....		✓	1
	<i>Only acceptable answer:</i> 1.5cm (15mm)			1
(ii)	Explain the importance of using a consistent seam allowance throughout the manufacture of a fashion or textile product.		✓	2
	<i>Answers that indicate an understanding of a consistent seam allowance should be awarded up to 2 marks based on:</i> • Shaped templates pieces have to fit together to create a 3D form • A seam allowance is built into each template piece which must be consistently followed • Failure to follow stated allowance will result in some pieces not aligning as they should, further into construction the worse this will become • End result is a poorly fitting, poorly constructed inferior product • Following exact seam allowances will result in a well made outcome that is fit for purpose Guidance to markers <i>Incorrect/no answer.</i>			0
	<i>Brief description with little understanding for example:</i> Taking in too much or too little in the seam allowance means some pieces won't fit together.			1
	<i>A more detailed explanation with understanding for example:</i> Taking in too much or too little in the seam allowance means some pieces won't fit together. Being consistent means all pieces align as they should.			2
(iii)	The machine pictured below is an overlocker. Give two reasons for using an overlocker in the construction of a seam.		✓	4
	<i>Answers that indicate an understanding of overlockers in seam construction should be awarded up to 2 marks for each reason based on:</i> • Built in blade trims the edge of the fabric so it is neat and even • The stitches overlap the raw edge concealing the raw edge. • Overlocking prevents further fraying of the fabric edge. • A more professional finish Guidance to markers <i>Incorrect/no answer.</i>			0
	<i>A very brief description, lacks detail for example:</i> Over stitching the edge hides the raw edge.			1
	<i>A good description with clear reasoning for example:</i> As the stitch goes over the raw edge it prevents the edge from further fraying – a neat professional finish.			2

(iv)	The picture below shows a method of finishing an edge. Name this method and explain why this is suitable for finishing an edge.		✓	3
	<i>Answers that indicate an understanding of edge finishes should be awarded one mark for the correct name and up to 2 marks for the explanation based on:</i> EXPLANATION: • The binding is folded and overlaps the raw edge • Raw edges are fully concealed • Binding adds strength to the edge • Reduces wear and tear NAME: Bound edge (accept binding) Guidance to markers <i>Incorrect/no answer.</i> <i>A simple statement for example:</i> The binding overlaps the raw edge. <i>An explanation with some detail for example:</i> The binding overlaps and conceals the raw edge preventing the edge from fraying and is neat.			1 0 1 2

(b)(i)	Ethical factors related to the manufacture of fashion and textile products are important to workers and consumers. Explain what this logo means to workers employed to manufacture fashion and textile products.		✓	5
	<i>Answers that indicate an understanding of Fairtrade should be awarded up to 5 marks based on:</i> • Fair trade's mission statement: To connect disadvantaged producers and consumers, promote fairer trading conditions and empower producers to combat poverty, strengthen their position and take more control over their lives. • Fair Trade Foundation - non-profit making - seeks to ensure greater equity in international trade • Logo indicates this standard has been applied • Workers receive a fair wage for the products they produce • Workers are not exploited • Workers rights are protected • Working conditions are supervised and are of an acceptable standard • Workers are given appropriate training • FT organisation independently checks standards have been met by the farmers, workers and companies that are part of products' supply chains • Promotes awareness with the public to choose fair trade products which brings additional benefits • FT organisation promotes awareness with the public to choose fair trade products over others which brings additional benefits to workers Guidance to markers <i>Incorrect/no answer.</i> <i>Brief description, limited understanding for example:</i> This is the fair trade logo which means workers making the product have been treated fairly. <i>More detail but with a basic explanation for example:</i> This is the fair trade logo which means workers involved in making the product have been treated fairly and have received a fair wage for the work they do. <i>More detailed explanation with some understanding for example:</i> The Fair trade logo, means that workers involved in making the product have received a fair wage, and working conditions are of a good standard. No one has been exploited in the manufacturing process. <i>A detailed explanation with clear understanding for example:</i> The Fair trade logo means that workers involved in making the product have been trained properly, received a fair wage, and working conditions are of a good standard. No one has been exploited in the supply chain for the product. <i>A full and detailed explanation with very clear understanding for example:</i> The Fair trade logo means that workers involved in making the product have been trained properly, received a fair wage, and working conditions are of a good standard. No one has been exploited in the supply chain for the product and workers rights are protected.			0 1 2 3 4 5

(ii)	Explain the role of the BSI (British Standards Institute) and how this impacts consumer confidence when purchasing fashion and textiles products.		✓	4
	<i>Answers that indicate an understanding of the role of the BSI should be awarded up to 4 marks based on:</i> • The role of the BSI (British Standards Institute) is to set standards that all fashion and textile products have to meet in order to be considered safe to use • The BSI, recommends technical requirements, or performance codes, for a wide range of products throughout fashion and textiles • BSI standards could relate to sizing, labelling, safety and testing methods • The BSI recommend standards but do not enforce them, but if manufacturers choose to meet their codes they can apply for BSI certification • One example of the BSI certification is the kitemark • BSI can ensure products are safe for consumers by providing guidance on care labelling - fibre content incase of allergies and nightwear - label should inform consumers to 'keep away from fire' or 'fabric has low flammability - to protect users from naked flames • BSI set guidance for flammability testing for home furnishings and textiles in public spaces • Home furnishings such as sofas, should carry a label indicating that the fabric and filling meets the fire resistance guidelines as set out by the BSI • Other assurances could relate to quality for example: waterproof coat should reasonably protect consumers from wet conditions; children's clothing must not include cords on hoods in case of accidental strangulation; no ribbons or cords attached to clothing in case of a choking hazard <i>Accept other factually correct examples</i> Guidance to markers <i>Incorrect/no answer.</i> <i>Brief description, limited understanding for example:</i> The role of the BSI is to set standards that all fashion and textile products have to meet. <i>More detail with a basic understanding for example:</i> The role of the BSI is to set standards that all fashion and textile products have to meet in order to be considered safe to use which reassures consumers. <i>More detailed description with clear understanding for example:</i> The role of the BSI is to set standards that all fashion and textile products have to meet in order to be considered safe to use which reassures consumers that they are purchasing good quality products. <i>A full and detailed explanation with very clear understanding for example:</i> The role of the BSI is to set standards that all fashion and textile products have to meet in order to be considered safe to use which reassures consumers that they are purchasing good quality products. BSI standards could relate to sizing. for example meaning that items such as a duvet cover must for the correct size duvet - standard sizes.			0 1 2 3 4
			Total	19

Question 6

The sketch below is a fashion student's interpretation of a fancy-dress costume based on the character of Scarecrow from the film Wizard of Oz.		AO3	AO4	Mark
(a)(i)	State the name of the style details labelled as A and B on the sketch above.		✓	2
	<i>Only acceptable answers in this order:</i> - Style detail A: Boat neckline - Style detail B: Puffed sleeve			1 1
(ii)	The broken lines featured on parts of the sketch indicate top stitching. Give one reason for using top stitching on the costume.		✓	1
	<i>Answers that indicate an understanding of top stitching can be awarded 1 mark based on:</i> - It adds definition to a feature such as the shape of the neckline - It enhances the overall design - Bigger stitch used - Can add strength to seams etc as it adds another line of stitching Guidance to markers <i>Incorrect / no answer.</i> <i>An appropriate reason for example:</i> Top stitching adds some definition to a style detail or feature.			0 1
(iii)	Explain what is significant about the thread used specifically for top stitching.		✓	2
	<i>Answers that indicate an understanding of top stitching thread should be awarded up to 2 marks based on:</i> - Top stitching thread is much thicker than standard sewing thread - This allows it to stand out more and be seen - A much stronger thread Guidance to markers <i>Incorrect/no answer.</i> <i>Brief description with little understanding:</i> Its thicker than normal thread. <i>A reasonable explanation with understanding for example:</i> It is much thicker than standard sewing thread so that it stands out and is more visible.			0 1 2

(iv)	The head of the sleeve has been gathered to create the style detail. Using notes and sketches, explain how you would create the gathers in the head of the sleeve.		✓	4
	<i>Answers that indicate an understanding of gathering the sleeve head should be awarded up to 4 marks based on:</i> • Stitch two rows of longer length stitches in the area the gathers are needed • Leave long thread ends at the both ends of the stitch rows • On one side of the rows of stitching, secure the loose threads (tie them together) this secures one side of the gathers • On the other end, pull two loose threads from one side of the fabric only to draw up the fullness - this creates the gathers • Spread the gathers evenly at the desired length - secure the loose threads Guidance to markers <i>Incorrect/no answer.</i> <i>A basic sketch which indicates limited understanding.</i> <i>Simple sketch which indicates some understanding</i> <i>Sketches are technically correct indicating good understanding</i> <i>Clear and detailed sketches, technically correct, excellent understanding</i>			0 1 2 3 4
(b) (i)	The three plain weave fabrics that make up the main part of the design are shown below. The hemline of the skirt part of the costume will be unfinished with the intention that the edges fray. Explain why a plain weave fabric will achieve this look.		✓	2
	<i>Answers that indicate an understanding of why plain fabric frays should be awarded up to 2 marks based on:</i> • The nature of a plain weave allows fabric to fray if the end is cut and not neatened • Plain weave consists of several warp threads (running length of fabric) interlinked with a weft thread (across) in an up and under configuration (1 x 1) • The last weft thread on a cut edge will fall away if left raw exposing the ends of the warp threads - this is fraying Guidance to markers <i>Incorrect/no answer.</i> <i>A limited response, lacks detail for example:</i> If the end is cut, the edges will fray as the end weft yarn has nothing to hold it. <i>A more detailed response, clear explanation for example:</i> As the weft yarns interlink with the warp, when the end is cut the last weft yarn has nothing to hold it in place. It will fall away, exposing the ends of warp threads creating a frayed edge.			0 1 2

(ii)	Using notes and sketches, explain how the checks are created in the gingham fabric.		✓	4
<i>Answers that indicate an understanding of how checks are created in the weave should be awarded up to 4 marks based on:</i> • Warp thread are colour blocked when the loom is set up - vertical bands of white, bands of orange across the width • Weft threads are woven in, in the same combination of colour bands • Where similar colours meet ie all white or all orange, a stronger true colour is created • Where orange and white yarns cross, a lighter orange tone is created • This formation creates the check pattern in the gingham • Gingham check combines a pure white square, bold colour square, and a delicate combination of the two in between to add soft depth to the design. Guidance to markers <i>Incorrect/no answer.</i> <i>A basic sketch which indicates limited understanding.</i> <i>Simple sketch which indicates some understanding.</i> <i>Sketch or sketches are technically correct indicating good understanding.</i> <i>Clear and detailed sketches, technically correct, excellent understanding.</i>				
				0
				1
				2
				3
				4

(iii)	The fashion student has carefully considered fabric choice with the intention of being as environmentally friendly as possible. Analyse the choice of fabrics in meeting this requirement.	✓		5
	<i>Answers that indicate an understanding of the environmental impact of the chosen fabrics and where answers are supported with logical lines of reasoning should be awarded up to 5 marks based on:</i> • Polycotton - part synthetic - polyester, part natural - cotton • Gingham - plant based natural cotton • Jute - plant based, natural • Cotton, gingham and jute are biodegradable - reduces impact on disposal • Cotton, gingham and jute can be recycled • Polycotton difficult to recycle as not easy to separate the two different fibres • Manufacture and growing of jute is more environmentally friendly when compared to cotton • Cotton growth - uses huge quantities of water, pesticides applied to increase yields - not environmentally friendly • Polyester - from petrochemicals - finite - not degradable • Polyester only forms a very small part of the proposed design, when compared to the 3 other fibre elements - overall the design meets the criteria for being environmentally friendly • Polycotton could be replaced with 100% cotton Note: Natural fibres listed are not stated as organic but could be which would be of benefit to the environment. Credit responses that suggest this alternative choice Guidance to markers <i>Incorrect/no answer.</i>			
	Brief description of the environmental impact of the chosen fabrics but little detail in the explanation. Little reference to its life cycle. Little evidence of reasoning.			0
	More detailed description of the environmental impact of the chosen fabrics with some explanation and detail in the response. Some evidence of reasoning.			1-2
	Clear and detailed description of the environmental impact of the chosen fabrics with detailed explanation in the response. Clear evidence of logical lines of reasoning.			3-4
				5

(c)	A manufacturer is considering producing a small batch of the fashion student's Scarecrow fancy-dress costume however this means the design has planned obsolescence.			
(i)	Describe the disadvantages of planned obsolescence for the manufacturer.		✓	4
<i>Answers that indicate an understanding of the disadvantages of planned obsolescence for the manufacturer should be awarded up to 4 marks based on:</i> • Cost involved in setting up production lines for a small batch of products • Costs involved in training machinists on new processes • Time spent on reorganising a new set up in the factory - may not be financially worth it • Cost of potentially buying in different machinery or adjusting older machinery for new processes • Workers may not get sufficiently skilled or fast to produce more products with the potential for increased profits as the production run could be short-term - runs out before workers can produce higher quantities Guidance to markers <i>Incorrect/no answer.</i> <i>A limited answer, lacks detail for example:</i> It is expensive to set up new production lines. <i>Some detail in the response, basic explanation for example:</i> It is expensive to set up new production lines which won't be needed for long because of the small numbers needed. <i>More detail in the response with understanding for example:</i> It is expensive to set up new production lines and train workers in new processes which won't be needed for long because of the small numbers needed. <i>Full and detailed explanation with clear understanding for example:</i> It is expensive to set up new production lines and train workers in new processes which won't be needed for long because of the small numbers needed. Time spent on reorganising a new set up in the factory may not be financially worth it because profit made on a small run of products against set up costs may not be financially that viable.				
				0
				1
				2
				3
				4

(ii)	Describe the disadvantages of planned obsolescence for the environment.		✓	3
	<i>Answers that indicate an understanding of the disadvantages of planned obsolescence for the environment should be awarded up to 3 marks based on:</i> • Use/waste of resources for a small number of products even if they are from a sustainable source • Fancy dress costumes or those with limited appeal may not be disposed of in an environmentally friendly way ie recycled • Many consumers view fancy dress costumes or similar products as disposable - just throw them away after use • Detrimental impact on the environment following disposal • Environmental impact of fabric production on the environment for short term use of products if cleaner processes are not used • Rather than promoting reuse and recycling, planned obsolescence encourages continuous resource extraction, compromising the viability of the circular economy • Planned obsolescence fuels the fast fashion industry and the environmental impact associated with that • Fancy dress costumes may only be worn once for impact, not necessarily passed on for someone else - wasteful Guidance to markers <i>Incorrect/no answer.</i> <i>Brief description, limited understanding for example:</i> Planned obsolescence means products are only worn a few times before being thrown away. <i>A limited explanation but with some understanding for example:</i> Planned obsolescence means products are only worn a few times before being thrown away. This is simply a waste of resources and causes damage to the environment if thrown away. <i>A more detailed explanation with clear understanding for example:</i> Clothing of any type that has limited appeal or will go out of fashion quickly as planned, wastes resources that might end up as landfill which causes damage to the environment and ecosystems as many fabrics will not degrade.			0 1 2 3
	Total			27