



GCE A LEVEL MARKING SCHEME

SUMMER 2024

**A LEVEL
DESIGN AND TECHNOLOGY - FASHION & TEXTILES
A601U10-1**

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.

GCE A LEVEL DESIGN AND TECHNOLOGY
COMPONENT 1: FASHION AND TEXTILES
SUMMER 2024 MARK SCHEME

Question 1

The production of a toile forms an essential part of the iterative process in fashion design. Explain how the toile pictured above supports the designer in the development of the following features:

- (a) Aesthetics.
- (b) Construction.

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(a)						2	2				4

Candidates should demonstrate knowledge and understanding of technical principles and apply it to specific appropriate points and be awarded up to 4 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- A toile will help the designer judge whether the overall style and shape is correct and therefore aesthetically appealing [1] and whether the proportions enhance the overall appearance. [1]
- The paper placements or proposed embellishments can be judged [1] for overall size and shape and whether they will sufficiently enhance the overall design.[1] This is the starting point from which further iterations can be developed.[1]
- The effect of the 'origami' folded panels can be judged more easily and amended accordingly - are they aesthetically pleasing? [1]
- The overall appearance when all elements are placed together as a full scale toile can be analysed more successfully this way to ensure the aesthetic appeal is as desired.[1]

Credit any other appropriate response.

(b)						2	2			4
Candidates should demonstrate understanding of technical principles and apply it to specific appropriate points and be awarded up to 4 marks. No response or an inappropriate response – 0 marks Responses should be based on: • A toile allows a designer to assess how the product will go together as in the entire construction [1] which will allow for further modifications if necessary.[1] It also allows the designer to work out the sequence for construction. [1] • A toile allows the designer to consider different seam types [1] according to the intended material and position on the garment. [1] • Edge finishes can be more easily considered to find the most appropriate finish. [1] • In this particular toile there are several folded panels (origami inspired) [1], it is essential that these are fully tested and the construction worked out if the garment is to be successful. [1] The designer needs to see whether this particular design is actually realistic and achievable. [1] • To check the size and fitting of a garment before you cut into the final intended fabric for the project. [1] • A toile takes a 2D flat pattern and transforms it into 3D to fit the body.[1] <i>Credit any other appropriate response.</i>										

Question 2

The back-pack style bag shown below has been designed to hug the natural curve of the spine.

- (a) Explain the importance of ergonomics in the design and development of this bag.
- (b) Whichever way the bag is worn including cross body or on either shoulder, the main zip is always against the user's body.
Justify the decision in placing the zip in this position.
- (c) The retail price for one bag is £65. The chart below shows the breakdown of all costs as a percentage (%) of the retail price.
 - (i) Calculate the profit in pounds (£) the manufacturer will make on 550 bags.
Show all your workings.
 - (ii) In a sales promotion the retail price of the bag is reduced to £49.95, the profit margin will be reduced but all other costs remain the same.
Calculate the new percentage profit per bag for the manufacturer.
Show all your workings.

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(a)						1		2	2		5

Candidates should demonstrate understanding of technical principles and design and make principles and be awarded up to 5 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Ergonomics is the process of designing products that ensures they fit the people who will use them. [1] It also relates to health and safety when products are in use [1] in this example, a bag mostly for leisure purposes and how the user might interact with it. [1]
- The shape of the bag reflects the shape of a persons spine/backbone and is curved accordingly [1] this will allow it to fit close to the body [1] and will allow for more comfort particularly when the bag is fully loaded. [1]
- As body sizes vary, height for example [1], the strap is adjustable to allow for a better fit [1] and even distribution of load. [1]

Credit any other appropriate responses.

(b)						1	2				3
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Candidates should demonstrate knowledge and understanding and be awarded up to 3 marks based on:

No response or an inappropriate response – 0 mark

Responses should be based on:

- The main reason is for security [1] and accessibility. [1]
- Access to the contents from a third party while the bag is being worn is restricted as the zip lies against the users' body [1] the contents are safe as the bag is secure [1].
- The contents are easily accessible to the user if they move the bag to their front [1] they can easily and safely open/close the zip [1].

Credit any other appropriate response.

(c) (i)		4						4			4
Candidates should demonstrate knowledge and understanding and apply it to technical principles and be awarded up to 4 marks. No response or an inappropriate response – 0 marks Responses should be based on: 100% is £65. 34% of £65 is calculated: $\frac{65}{100} \times 34$ [1] 34% as a monetary value, profit for one bag: £22.10 [1] - For a batch of 550 bags: £22.10 x 550 [1] - Profit for 550 bags: £12,155 [1] OR $65 \times 550 = 35,750$ [1] $35,750/100 = £357.50$ [1] $£357.50 \times 34$ [1] £12,155 [1] <i>Accept other methods of calculation.</i> <i>All calculations need to be shown for full marks.</i>											
(ii)		3						3			3
Candidates should demonstrate knowledge and understanding and apply it to technical principles and be awarded up to 3 marks. No response or an inappropriate response – 0 marks Responses should be based on: - Profit per bag is £22.10, subtract the reduction in price £15.05 = £7.05. [1] $\frac{7.05}{49.95} \times 100$. [1] 14.11% (Rounded to two decimal places). [1] OR - Cost is 66% of £65 = £42.90 [1] $49.95 - 42.90 = £7.05$ [1] $\frac{7.05}{49.95} \times 100 = 14.11\%$ [1] <i>Accept other methods of calculation.</i> <i>All calculations need to be shown for full marks.</i> <i>Do not penalise any errors carried forward from (i).</i>											

Question 3

Silk fibre as pictured below, is the only naturally produced continuous filament.

- (a) Describe the differences between raw silk and spun silk.
- (b) Explain how the structure of the raw silk fibre gives silk very specific properties that influence end use.

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(a)	✓								3		3

Candidates should demonstrate knowledge of technical principles and be awarded up to 3 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Raw silk comes directly from the cocoon in unbroken lengths as one continuous filament. [1] Between 7 and 10 filament ends are found and wound together on a reel to form raw silk yarn. [1] Silk containing sericin is called raw silk. [1]
- Spun silk is made from short staple fibres obtained from broken cocoons [1] which are twisted together to make yarn. [1]
- Spun silk is not as lustrous and strong as raw silk. [1]

Credit other appropriate responses.

(b)	✓				4			1		5
Candidates should demonstrate knowledge of design and make principles and be awarded up to 5 marks. No response or an inappropriate response – 0 marks Responses should be based on: - Raw silk is made from two long triangular shaped [1] protein filaments that are glued together. [1] The physical, chemical and comfort properties of the fabric depend on how these fibres lie together inside each filament. [1] The closer the filaments the stronger [1] and more resilient the fibre. [1] - Diagram opposite shows a triangular cross section of the silk filament and how closely the fibres lie within – credit any diagrams that reflect this example and award marks accordingly – apply best fit - Depending on how closely the fibres are packed together, affects the ability of the fibre to absorb moisture [1] and the depth of lustre [1] of the resultant fabric. - Silk has many uses but is primarily used for clothing and household items [1], the lustre, strength and absorbency rates of different types of silk will affect choices depending on end use i.e. what properties are essential for the end product. [1] - Raw silk is a lightweight and breathable fabric, it can protect from overheating.[1] - It is flexible and does not lose its shape, as it can pull itself back after stretching. [1] - It is perfect for summer clothing because it is absorbent and how it wicks moisture. - A staple for winter wear as it has low conductive properties. [1] - Its strength allows for its use in other products such as bicycle tyres and in medicine.[1] <i>Credit responses where appropriate specific examples of end products with reasoning are presented.</i> <i>Credit other appropriate responses.</i>										

Question 4

The lay-flat cosmetic pouch shown below has been created from a circular piece of fabric with a drawstring cord closure which, when drawn up, holds the contents in place.

- (a) The circular piece of fabric that forms the main part of the cosmetic pouch is 48cm in diameter.
Calculate how many circular pieces of fabric can be cut from a 50m length of fabric at 150cm wide.
Show all your workings.
- (b) Calculate how much drawstring cord will be needed to form the closure for one cosmetic pouch.
Allow 18cm for the section that remains outside the drawstring closure.
Show all your workings.
- (c) The fabrics used to make the cosmetic pouch have a water-resistant finish. Explain how this finish improves the functionality of the cosmetic pouch.

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(a)		4				2	2				4

Candidates should demonstrate knowledge and understanding of technical principles and its application in this context to be awarded up to 4 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Recognition that 3 circular pieces can be cut across a 150cm width. [1]
- For the quantity along the length:
- 50m divided by 0.48m (recognition of numeric value metre v centimetres) [1]
 - Correct quantity down length: 104 [1]
 - Total quantity: 104 (down) x 3 (across) = 312 [1]

Accept other methods of calculation.

All calculations need to be shown for full marks.

(b)		4						4			4
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Candidates should demonstrate knowledge and understanding of technical principles and its application in this context to be awarded up to 4 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Calculate circumference: $2\pi r$ or πd (radius is half diameter: 24cm). [1]
- $2 \times 3.142 \times 24$ or 3.142×48 (π could be shown as $\frac{22}{7}$) [1]
- Circumference is 150cm (rounded up) [1]
- Answer: $150 + 18$ (additional cord) = 168cm [1]

Accept other methods of calculation.

All calculations need to be shown for full marks.

(c)	✓							4			4
Candidates should demonstrate knowledge and understanding of technical principles to be awarded up to 4 marks. No response or an inappropriate response – 0 marks Responses should be based on: • The water resistant finish means the fabric will not absorb water and will resist staining.[1] • The nature of cosmetics means the pouch is likely to be exposed to various toiletries and is likely to become dirty over time. [1] • The bag needs to be washable to remove any dirty marks [1] or to have marks easily wiped off. [1] • The finish extends the life expectancy [1] and aesthetic appeal [1] as it is easy to keep clean and looking good for longer or will function for longer periods of time or the user will keep using it for longer if it remains in good condition. [1] <i>Credit any other appropriate response.</i>											

Question 5

The corset shown below has been 3D printed (additive manufacture).

- (a) Explain how 3D printed technology is revolutionising the way clothes are made.
 (b) Explain how market-pull influences the development of new textile products such as the 3D printed corset.

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c			
(a)	✓					2	3				5

Candidates should demonstrate knowledge and understanding of technical principles and be awarded up to 5 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- 3D printing allows products to be manufactured in one piece which cannot be achieved using traditional construction processes. [1] The design is drawn on the computer then printed layer by layer – additive manufacture [1] and can be adjusted to the intended users personal measurements [1] easy customisation. [1] New creations can be printed as and when needed. [1]
- 3D printing allows for more sculptural shapes to be created [1] such as the shaped edges which would not be as neat if constructed more conventionally.[1]
- Designs can be more radical and innovative [1] and can be tested quickly after printing.[1]
- Developments in more flexible materials mean that 3D printed clothes will be fully washable and able to be ironed as normal cloth. [1]
- Printed medium/fibre can be engineered with specific characteristics or properties to suit the end use of the product [1].
- 3D printing minimises waste in the textile industry [1] as only what is needed is used – no cutting to waste as most lay plans include.[1] Reprints are easily managed – less likely products will be out of stock.
- Most 3D printing materials are recycled or are easily recyclable.[1]
- Development of smart clothes that include technology [1] such as mood sensors [1] or colour changing features [1] or trackers [1] for example.
- Industry experts believe in a future where it will be possible to print our own digital files from home with ease. [1]

Credit other appropriate responses.

(b)						5				5
Candidates should demonstrate knowledge and understanding of technical principles and be awarded up to 5 marks. No response or an inappropriate response – 0 marks Responses should be based on: • Market-pull refers to the need or requirement for new products or a solution to a problem from the market place identified by consumers or market research.[1] This could relate to an entirely new product or the re-development or improvement to an existing one. [1] • 3D printing looks set for substantial growth in the market place in the next few years, consumers are embracing the new technology, with the number of home printers rising. [1] Consumers are intrigued by the concept of 3D printing which manufacturers are capitalising on. [1] • As the technology advances and concepts are understood the demand for innovative new products increases.[1] Technology is the driving force behind the market pull for 3D printed outcomes. [1] • As designers embrace new technology and showcase 3D printed outcomes, consumers are intrigued - the demand or pull is established. [1] This then inspires further developments in fashion – a cyclical process/pushing boundaries for innovation. [1] • As the benefits of 3D printed fashion and textile outcomes are more understood, the demand is likely to increase. [1] Could be for the innovation or a novelty factor. [1] <i>Credit other appropriate responses.</i>										

Question 6

Feasibility studies are carried out before new fashion and textile products are brought to the market place.

Explain what a feasibility study would include and how it could impact on the development of new products.

	Science	Maths		AO3		AO4					Total
								2a	2b	2c	
									5		5

Candidates should demonstrate understanding of design and make principles and be awarded up to 5 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- A feasibility study aims to determine whether a proposed new product is viable [1]. It assesses all aspects of the proposed product including technical, economic, financial, legal and environmental considerations. [1] Ultimately a feasibility study will establish whether a product is commercially viable or not. [1] They support manufacturers in their decision making and whether to go ahead with developing and manufacturing a new product. [1]
- Feasibility studies help formulate the most important and critical considerations for a new fashion and textile product. [1] It also helps to set out guidelines for the design and the development stages that follow. [1] The design brief and specification for the new product are often arrived at as a result of a feasibility study. [1]
- Feasibility studies could look at competitor products, consumer needs and wants [1]. This in turn could influence further iterations of the proposed product. [1] and whether the product meets the needs of users and stakeholders. [1]
- The 4 P's of promotion could form part of a feasibility study – product, price, promotion, place are analysed. [1] They look at the likely commercial success of the proposed product and the potential volume of sales and profit. [1]
- Feasibility study also include using market research teams to gather the opinions of potential users. [1] Feasibility studies identify who the target market is, their buying patterns and habits, and if there is a worthwhile market for the new product.[1]
- Feasibility studies could identify risks with the launch of a new product but do allow manufacturers to prepare in advance and for the best ways to minimise the risk.[1]

Credit any other appropriate response.

Question 7

Modern technical textiles include aramid fibres such as Nomex and Kevlar.

- (a) Evaluate the use of Nomex in the manufacture of protective clothing particularly where extreme heat is a hazard. Exemplify your response with named applications.
- (b) Analyse the use of Kevlar in the manufacture of protective clothing used specifically by military personnel or the police.

	Science	Maths		AO3		AO4					Total
				2a	2b	1b	1c	2a	2b	2c	
(a)	✓				4					2	6

Candidates should show knowledge and understanding, clear evidence of appraisal and/or making judgements and **apply** this to technical principles to be awarded up to 6 marks.

Responses should be based on:

- Aramid fibres such as Nomex are high tech fibres that can be engineered to specific requirements in the form of woven, knitted or non-woven textiles.
- Aramids fibres such as Nomex are 5 times stronger than nylon (also derived from petrochemicals) – excellent abrasion resistance.
- Nomex has very low flammability with no melting point – other synthetic fibres will melt.
- Nomex is best known as a barrier to fire and heat.
- Excellent heat, and cut resistance unlike standard synthetics that can tear and will not withstand heat – naked flames cannot penetrate through the fabric keeping a fireman, for example safe.
- Engineered yarns provide greater levels of cut, heat and durability protection than ever before.
- Nomex is comfortable to wear ensuring those who wear protective clothes made from Nomex are comfortable whilst they work in extreme conditions – unencumbered.
- Users include for example fire-fighters, military aviators, racing car drivers.
- Products include: gloves, all-in-one driving suits/overalls, jackets and trousers, balaclavas, socks, long underwear.

*Two to three performance characteristics fully evaluated are required for full marks.
Credit any other appropriate response.*

Band	Marks	AO3 2b	Marks	AO4 2c
2	3–4	Good evaluation of Nomex, its performance properties and their importance to the end user who is reliant on protective clothing. A thorough discussion, which appraises and/or makes judgements in the context of this question. Generally well considered, relevant wider issues used as a context for the discussion.	2	Applies a sound knowledge and understanding of technical principles relating to Nomex in the context of this question.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	1–2	Limited evaluation of Nomex, its performance properties and their importance to the end user who is reliant on protective clothing. Little evidence of appraising or making judgements in the context of this question. Few issues are identified.	1	Applies a basic knowledge and understanding of technical principles relating to Nomex in the context of this question.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark.		

Q7	Science	Maths		AO3		AO4					Total
				2a	2b	1b	1c	2a	2b	2c	
(b)	✓			4			2				6

Candidates should provide evidence of either deconstructing information, find connections and/or logical chains of reasoning and **apply** it appropriately to design and make principles to be awarded up to 6 marks.

Responses should be based on:

- As Kevlar has a high tensile strength to weight ratio, it is lightweight and extremely strong it would suit products that can be worn but also protect.
- Kevlar is engineered for superior cut protection for the users safety.
- Kevlar has very high strength, engineered to exact specification far exceeding steel and even specialist metal alloys, such as magnesium alloys.
- Kevlar fabric is used for protective applications in rigid and soft body applications – ballistic protection products such as body vests and helmets.
- Kevlar can be flexible making it comfortable to wear.
- Kevlar is 5-15 times stronger than steel of equivalent weight.
- Kevlar has excellent heat resistance – military personnel could be exposed to fire from explosions - naked flames cannot penetrate through the fabric.
- Kevlar has excellent cut resistance – knives or bullets for example cannot penetrate the fabric so the user – police or military personnel are protected.

Credit any other appropriate response.

Band	Marks	AO3 2a	Marks	AO4 1c
2	3–4	Good analysis of the use of Kevlar for protective clothing and in the context of this question. A generally sound discussion, which deconstructs information and demonstrates logical reasoning throughout. Generally well-considered, relevant issues used as a context for the discussion.	2	Applies a sound knowledge and understanding of design and make principles in the context of this question.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	1–2	Limited analysis of the use of Kevlar for protective clothing and in the context of this question. Little evidence of logical reasoning. General discussion is limited.	1	Applies a basic knowledge and understanding of design and make principles in the context of this question.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark.		

Question 8

Quality assurance includes the rigorous testing of fabrics prior to manufacture. Evaluate the importance to the manufacturer and consumers of conducting tests on fabric for use in clothing and furnishings as part of a quality assurance guarantee. Exemplify your answer.

	Science	Maths		AO3		AO4					Total
				2a	2b	1b	1c	2a	2b	2c	
	✓				6					3	9

Candidates should show knowledge and understanding of wider issues, with clear evidence of appraisal and/or making judgements and apply this to designing and making principles to be awarded up to 9 marks.

Responses should be based on:

- Reference to various tests such as flammability, abrasion, shrinkage, colourfastness, tensile strength, tear strength, pilling, resistance to light, heat, perspiration or chlorination, water repellency, absorbency.
- Quality assurance refers to building in quality into each step of the manufacturing process including designing, production, and beyond. This includes guaranteeing the quality and performance of the fabrics being used through rigorous testing methods.
- Higher quality and assurance produces a higher return on the manufacturer's investment; builds confidence in the manufacturer/brand.
- Rigorous testing ensures the fabrics used are fit for purpose and will allow the product to function as intended – consumer satisfaction.
- Testing identifies the best performing fabrics for the intended purpose of the product.
- Fabrics can be compared to find the most suitable/ overall best performance following a series of different tests.
- Tests on clothing for example: fire resistance on children's and old people's nightwear; shrink resistance on knitwear or swimwear; abrasion resistance on heavy duty workwear; pilling on knitted products such as woollen jumpers.
- Tests on furnishings for example: fire resistance for soft furnishings and fillings; colour fastness and resistance to sunlight on curtains; abrasion resistance for wear and tear.
- Reference to legislation – The Furniture and Furnishings (Fire Safety) Regulations 1988 (as amended in 1989, 1993 and 2010). Products labelled as compliant assures consumers re: product safety.

Note: For high level marks (band 3) to be awarded evidence that quality assurance is understood in this context is essential and specific acceptable examples are also included for clothing and furnishing.

Accept other appropriate responses and examples.

Band	Marks	AO3 2b	Marks	AO4 2c
3	5–6	Excellent evaluation of the importance of conducting fabric tests for both manufacturer and consumer. A thorough discussion, which appraises and/or makes judgements about quality assurance related to clothing and furnishings. Well considered, relevant wider issues used as a context for the discussion.	3	Applies a thorough knowledge and understanding of design and make principles in the context of this question.
		There is a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.		
2	3–4	Good evaluation of the importance of conducting fabric tests for both manufacturer and consumer. A thorough discussion, which appraises and/or makes judgements about quality assurance related to clothing and furnishings. Generally well considered, relevant wider issues used as a context for the discussion.	2	Applies a generally sound knowledge and understanding of design and make principles in the context of this question.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	1–2	Limited evaluation of the importance of conducting fabric tests for both manufacturer and consumer. Little evidence of appraising or making judgements about quality assurance related to clothing and furnishings. Few issues are identified.	1	Applies a basic knowledge and understanding of design and make principles in the context of this question.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark		

Question 9

Coco Chanel once said “Only those with no memory insist on their originality”. Discuss this statement with reference to contemporary fashion over recent decades.

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2b	2c	
							5		4		9

Candidates should demonstrate knowledge, and apply knowledge and understanding to technical principles, and application of design and make principles to be awarded up to 9 marks.

Discussion should be based on the following points:

- The concept of clothing and the type of contemporary garments we wear make it difficult for a truly original new product to emerge therefore to state something is entirely original it has to be significantly different on all levels to be ‘original’ – looking back at fashion history supports this point.
- Most contemporary fashion is a reworking of a previous design although it would most likely have been updated in some way: new fabrics or those that embrace new technology.
- Clothing by definition needs to fulfil a function of covering/protecting the body and needs to consider body shape: arms, legs, etc. that is a form of restricting anything radically new or original.
- The shape and form of products can change and be considered original but the function would remain the same.
- Most fashion is a reworking of a previous design albeit updated with new fabrics for example – can it be original?
- The reinvention of the corset by Vivienne Westwood is an example where a new approach has been taken in how the product will be worn and where (original) – underwear to outerwear – a ‘new’ concept for the purpose of the product. This concept was original but the product as such was not.
- Shapes and styles of trousers remain the same but fabrics change – new fabrics with lycra provide better comfort – ‘new’ approach to an old product – improving on it – not entirely original.
- The function of a garment could be standard but the cut and form could be considered original.
- ‘New’ technology integrated into existing products changes the focus of the product – new / refreshed – nano technology, microencapsulation.
- Prints from past eras are reworked on contemporary fabrics but the latest technology, digital prints for example is new – improved clarity of design, colour etc
- Waterproof jackets, laminated are a relative recent invention. The fabrics and processes are ‘original or new.’
- 3D printing allows for complex products – the use of technology is new. But the purpose of an item of clothing remains the same. The possibility of more sculptural shapes can be considered original.
- Fashion is more of a reinvention of old styles inspired by historical influences with a contemporary twist – recently maxi dresses, the cut and length of trousers, shapes of sleeves, many other examples exist.
- If fashion history is unknown - no memory – a designer could be indirectly inspired by something that is a reworking of a previous design.

- Originality could refer to the way fabrics are used or the embellishments applied to garments; not all designs mirror past fashion.

Credit any other appropriate response.

Band	Marks	AO4 1b and 1c	Marks	AO4 2b and 2c
3	4–5	Demonstrates and applies a thorough knowledge and understanding of technical principles in the context related to originality in contemporary fashion in recent decades. Well considered, relevant wider issues identified.	3–4	Demonstrates and applies a thorough knowledge and understanding of design and make principles in the context related to originality in contemporary fashion in recent decades, drawing on well-considered, relevant examples.
		There is a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.		
2	2–3	Demonstrates and applies good knowledge and understanding of technical principles in the context related to originality in contemporary fashion in recent decades. Generally well-considered, relevant issues identified.	2	Demonstrates and applies a generally sound knowledge and understanding of design and make principles in the context related to originality in contemporary fashion in recent decades. Generally well-considered examples are provided.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	1	Demonstrates and applies a basic knowledge and understanding of technical principles in the context related to originality in contemporary fashion in recent decades. Some relevant issues identified and used to support the discussion.	1	Demonstrates and applies a basic knowledge and understanding of design and make principles in the context related to originality in contemporary fashion in recent decades. Few examples are provided.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark.		

Question 10

Standard fashionable clothing has traditionally been designed for a particular target market, a specific gender and personality profile. However, there is a growing demand for fashion to be more inclusive.

Analyse how fashionable clothing can be developed to be more inclusive in its design and meet the diverse needs and wants of consumers.

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2b	2c	
				6				6			12

Candidates should provide evidence of either deconstructing information, find connections and/or logical chains of reasoning and **apply** it appropriately to technical principles to be awarded up to 12 marks.

Responses should be based on the following points:

- Fashion is targeted at those who are of average shape and physical ability, and gender stereotypes. It is therefore exclusive to the needs of a narrow range of people in society.
- Inclusive design is designing fashionable clothing and meeting the needs of a wide range of diverse people.
- A diverse range of people could include older people, disabled as well as those with body shapes outside average proportions.
- Some companies specialise in 'plus size' clothing, as well as petite or very tall people.
- Transgender and gender non-conformists may require clothing that is inclusive in terms of shape, style, fit, colour and material choice.
- Ethnicity/ religious beliefs impact what some in society can wear – modest clothing that is still fashionable.
- Androgenous or gender neutral designs are inclusive.
- High street chain Zara has a unisex range called 'Ungendered'; Selfridges also promotes a range – 'Agender' – for genderless shopping.
- The use of very thin fashion models to promote fashion is not considered inclusive so there is a move towards using more realistically shaped models or who represent other minorities.
- Clothing aimed at disabled or older people often lacks aesthetic appeal. Very few companies take fashion trends into consideration for these groups.
- Adaptive clothing allows for independence when dressing. Some people have restrictive movement or limited finger dexterity so dressing can be challenging. Velcro, press studs or magnetic strips are easier to manage rather than buttons and zips.
- For some, clothing should have sections where medical equipment can be stored.
- Clothing products need to be easy to use or worn, comfortable and fashionable.
- Style and colour should challenge stereotypes.

Credit any other appropriate response.

Band	Marks	AO3 2a	Marks	AO4 1c
3	5–6	Excellent analysis of the wider issues relating to inclusivity in fashion design. A thorough discussion which deconstructs information and demonstrates logical reasoning throughout. Well-considered, relevant wider issues used as a context for the discussion.	5–6	Applies a thorough knowledge and understanding of technical principles to the context of inclusivity in fashion design.
		There is a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.		
2	3–4	Good analysis of the wider issues relating to inclusivity in fashion design. A generally sound discussion, which deconstructs information and demonstrates logical reasoning throughout. Generally well-considered, relevant issues used as a context for the discussion.	3–4	Applies a generally sound knowledge and understanding of technical principles to the context of inclusivity in fashion design.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	1–2	Limited analysis of inclusivity in fashion design. Little evidence of logical reasoning. General discussion is limited.	1–2	Applies a basic knowledge and understanding of technical principles in the context of inclusivity in fashion design.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark		