GCE A LEVEL MARKING SCHEME

SUMMER 2022

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

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INTRODUCTION

This marking scheme was used by WJEC for the 2022 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

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Question 1

A brushed cotton material has been used to make the child's pyjamas shown below.

(a) Explain how a brushed cotton material improves the functionality of the child's pyjamas.

(b) Piping and interfacing have been used in the construction of the pyjama collar. Explain the function of both in the construction of the collar.

Q 1	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 awarded up to 4 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- During the process of brushing, material is passed over wire brushes [1] which gently tease the fibres leaving a fluffier surface [1].
- During wear, warm air from the body is trapped within the raised fluffy fibres [1] – in the air pockets created during the process of brushing [1]. If warm air cannot escape it forms an insulative barrier within the brushed fibres [1] which will keep the wearer warm which is the function of the pyjamas [1]. Brushed cotton fabric is therefore warmer than plain cotton [1]. It is also more comfortable to wear [1] as it is softer against the skin [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 awarded up to 4 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Piping reinforces the edge of fabric improving the collar's structural integrity [1]. A cord trim is inserted into the edge seam of the collar [1] which helps maintain the smooth curved edge of the collar [1].
- Interfacing is applied to one layer of the collar fabric - the underside. [1] This stabilises the fabric [1] helping to maintain/keep the shape of the collar piece. [1]

Credit any other appropriate descriptive response.

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Question 2

The fashionable top pictured below features a bell sleeve. The lower part of the sleeve or 'bell' is cut from a circular piece of fabric.

(a) Using notes and sketches, explain how you would attach the bell section to the rest of the sleeve.

(b) The designer wishes to add a narrow lace edge to the lower edge of the bell sleeves. Calculate the length of trim needed for the top, using the measurements listed below:

- The depth of the 'bell' section is 24cm.
- The width of the hem of the upper section is 34cm.

Do not include seam allowances
You must show all your workings.
Round your calculations to a whole number.

(c) The fashionable top has been made from a polyester cotton blend. Explain the advantages of using this blended fabric for the top.

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

Candidates should demonstrate understanding of technical principles and design and make principles and awarded up to 4 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Recognition that the 'bell' section of the sleeve is based on a large circular piece with an inner smaller circular piece [1] where it will be attached to the rest of the sleeve [1]
- The upper sleeve piece needs the underarm sleeve seam joined first. [1]
- With right sides together, the inner circle of the 'bell' section is placed in line with the lower edge of the upper sleeve [1] then stitched together [1]. (Candidates might refer to use of an overlocker or straight stitch)
- The diagrams should show that the bell section is inverted over the upper sleeve [1] then it will fall down into the right position concealing the seam. [1]

Assess the work as a whole and credit both diagrams and notes to explain the concept. Apply a best fit when awarding marks.

Credit other appropriate responses.

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Q 2	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(b)		7						7			7

Candidates should demonstrate knowledge and understanding and apply it to technical principles and awarded up to 7 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Recognition that the lower edge of the upper sleeve is the same measurement as the circumference of the inner circle of the 'bell' section – 34 cm. [1]
- πd = circumference d = circumference divided by π [1]
- d = 10.82 (11 cm) [1]
- radius = 5.5cm [1]
- (radius of inner circle+length of bell sleeve) 5.5cm + 24 = 29.5cm [1]
  (The bell section is circular – given in question stem)
- Circumference of lower edge: 2πr (or πd)
  One sleeve: 2 x 3.142 x 29.5cm = 185cm (185.37cm) [1]
- 2 sleeves: 185 x 2 = 3.70m (or 370.74 cm) [1]

Accept other methods of calculation.

All calculations need to be shown for full marks.

(c)							3	1			4

Candidates should demonstrate knowledge and understanding and awarded up to 4 marks based on:

No response or an inappropriate response – 0 marks

Responses should be based on:

- Properties of cotton that make it suitable for a top include absorbency [1] and although it is washable it dries slowly because it retains moisture [1] being absorbent, it will keep the wearer cooler in hot weather [1].
- Polyester is not cool to wear it is more insulative [1] therefore not suitable to wear in hot weather [1].
- Polyester is not absorbent, so after washing it dries quickly [1], therefore a polyester/cotton blend dries more quickly than cotton fabric alone [1].
- Cotton is more expensive than polyester [1] so a poly/cotton blend will be cheaper overall than plain cotton thus reducing the cost of the top [1].
- Polyester has a higher tensile strength making it a much stronger fibre than cotton [1], so the blended fabric will withstand more wear and tear than cotton alone [1].
- Cotton is prone to creasing but polyester is not, this makes caring for the top easier [1], less ironing [1] and it will look better when wearing it [1].
- A polyester/cotton blend will give all-day comfort being absorbent, lightweight with a soft handle [1].
- Cotton is prone to shrinkage but polyester is not [1], the blend reduces the possibility of the top loosing shape after washing [1].

Credit any other appropriate response.

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Question 3

The arm warmers shown below, are used by cyclists who consider them a useful addition to their all-weather cycling gear.

(a) Cyclists often encounter variable weather conditions whilst out on a cycle ride. Explain how the arm warmers would support their needs whilst out cycling.

(b) Explain how the named materials and components support the product's function.

Q 3	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(a)	✓					4					4

Candidates should demonstrate knowledge of technical principles and awarded up to 4 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- The arm warmers can easily be taken off or put on as and when needed [1]. They will keep the cyclists arms warm when it is extremely cold [1] without the need to put on an additional full layer of clothing [1]. They are small and lightweight enough to roll up and store in a pocket or compact bag/case [1] more manageable than a full layer of clothing [1]. They can also offer and extra layer of insultion under a jacket [1] useful as a base layer when training [1].

Credit other appropriate responses.

(b)	✓								4		4

Candidates should demonstrate knowledge of design and make principles and awarded up to 4 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Polyester and nylon are both strong fibres so will with stand a lot of wear if they are removed and put back on frequently [1]. Both are lightweight fibres so comfortable to wear [1] but being microfibres they wick away moisture (from perspiration) during exertion - breathability [1], helping to regulate body temperature keeping the cyclists cool and dry if it is not convenient to remove the arm warmers straight away.[1] Being made from a tube of fabric will mean no seams so will be more comfortable and less irritating to wear because they fit closely to the arm [1]. Polyester and nylon microfibre also have some elasticity so will help with a closer fit [1].
- Silicone gripper on the inside of the arm warmer will keep the arm warmer in place on the upper bicep when worn [1] as the silicone will 'grip' the skin to keep it in place [1] and will prevent it from moving down the arm during activity [1].

Credit other appropriate responses.

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Question 4

The designer dress shown below features laser cut details on the skirt and sleeves.

(a) Each flower on the skirt is 11 cm in diameter and has been cut on a laser cutter which has a cutting area of 700 mm by 500 mm.
Calculate how many flowers can be cut from a one-metre length of fabric that is 150 cm wide.
Note: Flowers can be placed side by side with minimal spacing between them.
Show all your workings

(b) The flowers are sewn side by side across the straight skirt which has a circumference of 143 cm. There are 7 rows of flowers on the skirt.
Calculate the number of flowers needed for the skirt of the designer dress.
Show all your workings

(c) Justify the use of a laser cutter to create the flower details on the skirt and scalloped edge on the sleeves of the designer dress.

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

Candidates should demonstrate knowledge and understanding of technical principles and and its application in this context to be awarded up to 6 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

Note: as measurements are given in both millimetres and centimetres candidates should use a simple conversion to either/or measurement in the first instance.

- The metre length of fabric will need to be be cut into 4 equally sized pieces to fit into the machine, so each piece would be (150 divided by 2) 75cm (750mm) by (100cm divided by 2) 50cm (500mm), some would lay to waste [2]
- Across width of bed @ 70cm(700mm): 70 divided by 11 = 6.36: **6** whole flowers. [1]
- Depth of bed @50cm (500mm): 50 divided by 11 = 4.54: **4** whole flowers [1]
- 6 flowers across by x 4 flowers down = 24 flowers from one cut piece [1]
- For 4 equally sized pieces 24 x 4 = <u>96 flowers</u> [1]

Accept other methods of calculation.

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

Candidates should demonstrate knowledge and understanding of technical principles and its application in this context to be awarded up to 2 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Circumference of the skirt – 143cm divided by 11cms for each flower = 13 flowers [1]
- 7 rows of flowers in total: 13 x 7 = 91 flowers [1]

Accept other methods of calculation.
All calculations need to be shown for full marks.

(c)	✓					2	2				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 laser seals the edge of the fabric when cutting it [1] this prevents the edge from fraying [1] allowing complex shapes to be cut accurately [1]. All the flower shapes and scallops on the sleeve will be consistent in size and shape [1]. Alternative methods of making the flowers and scalloped edges are possibe but are more complex [1] and costly [1] and may not look as effective as laser cutting [1].

Credit any other appropriate response.

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Question 5

Hemp is a sustainable fibre with similar qualities and properties to cotton.

(a) Outline the environmental advantages of growing hemp crops compared to cotton crops.

(b) Explain why hemp is a suitable fibre for use in summer clothing.

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

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

No response or an inappropriate response – 0 marks

Responses should be based on:

- Hemp crops replenish the soil with nutrients from falling leaves unlike cotton crops [1]. Hemp roots absorb and dissipate rain and runoff, helping to prevent soil erosion [1].
- Cotton requires huge volumes of water to grow which is often diverted away from natural water sources such as rivers leaving them dry thereby creating soil erosion [1].
- Hemp can grow in any climate so the issues of water to grow are not a problem [1] whereas cotton is restricted to hotter climates often where water is already a scarce commodity [1]. Hemp only needs a third of the amount of water to grow the same quantity as a cotton crop [1].
- Hemp requires little fertiliser and grows well almost anywhere [1] it also resists pests [1] whereas industrial size scale crops of cotton require fertilsers and pesticides to increase yields [1].
- Hemp is unique among other crops in that every part of the plant has utility and potential market value [1] whereas it's the fibre from the cotton boll is the valuable commodity for cotton [1].

Credit other appropriate responses.

(b)							5				5

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

No response or an inappropriate response – 0 marks

Responses should be based on:

- Hemp is absorbent and conducts heat away from the body [1] therefore it is naturally breathable, ideal in warm summer weather [1]. Hemp has excellent thermo-regulating properties, ideal for keeping cool in warm weather or warm in cool weather [1].
- Hemp is non-static as it contains some moisture meaning it will not cling to the body during wear [1]. Hemp is crease resistant requiring less ironing [1].
- It is anti-bacterial and is resistant to mold [1] meaning its appearance will not be affected if exposed to moisture and not allowed to dry properly [1] as bacteria and mold cannot grow on it [1].
- It is effective at blocking out UV rays [1] lessening the risk of sun burn [1].
- It resists degradation by heat and is less prone to fading [1] therefore keeps its colour despite exposure to the sun [1].

Credit other appropriate responses.

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Question 6
Morphological analysis is a design strategy used in the development of new products. Describe the principles of morphological analysis and explain how it could be used to develop a new fashionable raincoat.

Q 6	Science	Maths		AO3		AO4					Total
								2a	2b	2c	
									5		5

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

No response or an inappropriate response – 0 marks

Responses should be based on:

- Morphological analysis is about exploring all possible solutions to a complex problem [1] and can be used when exploring new and different ideas for a new product such as a raincoat – style details for example [1].
- Morphological Analysis provides a structured inventory of possible solutions [1]. Designers can split problems into partial problems [1] and looking at possible options for each part of the problem [1]. In this way, all aspects of a problem are thoroughly investigated [1].
- Morphological Analysis is a relatively simple technique that produces good, useful results that helps designers with one for example looking into fabric technology [1], someone else focusing on improving functionality through styling [1].
- Morphological analysis could be used to track the stages of development of the raincoat over a period of time [1] – what problems were overcome and how? [1]
- As the raincoat evolves it is assumed each version will be an improvement on the last [1] – function is better, styling is improved, better quality fabrics – in what way and how have improvements been achieved? [1]
- Developments in technology may be factored in [1]
- Designers can study the success or failure of a product [1] – look at which version performed the best and why [1].
- Information gathered can be used to inform the next version or a totally new concept product [1].

Credit any other appropriate response.

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Question 7

As a consequence of the recent pandemic many leading fashion designers showcased their Spring 2021 collections as Virtual Reality (VR) shows. Many believe VR is the way forward for fashion.

(a) Leanne Elliott Young, co-founder of the London based agency, Institute of Digital Fashion, was quoted as saying "*There are a lot of similarities between a digital atelier and a couture one. We replicate seams and cuts so the clothes move in tune with the body, as materials would IRL* (*In Real Life*).'
With reference to the quote above, evaluate the use of virtual reality over real life when launching a new fashion collection.

(b) Analyse the benefits for people and the environment of launching a new collection through virtual reality.

Q 7	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:

- A digital atelier would work via a screen and the final designs may never be fully realised. A couture atelier will design then make the actual garments to fit on a model.
- A digital atelier can only fit a virtual garment to an avatar in the virtual world and can only assume how it would work and look on a person in reality, it might not; whereas a couture atelier gets an immediate response on how the garment looks and works on a person.
- Problems with an actual design can be identified and solved when working in real time, cannot do this in the virtual world. Anything is possible in VR but may not work in reality.
- Buying a fashion collection from a VR fashion show could lead to problems later if the designs cannot be realised exactly as they first appear in VR or don't quite match expectations in reality.
- Both virtual and actual ateliers are highly skilled in their craft but the virtual designer will need months of training on specialist software in order to create the intricacies of couture clothing on screen that imitate reality. Although difficult, couture ateliers are able to create actual intricate details, relatively speaking, more easily.
- It is not a budget option to showcase a collection in VR – spectacular effects to showcase a collection involve multiple agencies; it can take days just to render a couture look on an avatar, using a suite of software tools.
- To replicate how fabrics drape and react and move on a body in VR takes hours of painstaking study to get the look right; a digital atelier has to analyse the fabric weight and drape against the flesh; a couture actually handles and uses the fabric to achieve the desired look – this is by comparison easier.
- The VR atelier can make digital changes more easily compared to having to make a new product in reality – changes such as different colourways. Changing style details on VR designs is not necessarily easier, it depends on the detail and intricacies involved.

Note: unqualified assertions do not gain credit.

Credit any other appropriate response.

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Band	Marks	AO3 2b	Marks	AO4 1c
2	**3-4**	Good evaluation of VR over real life. A sound discussion which appraises and/or makes judgements about the use of VR compared to real life. Generally well-considered, relevant issues used as a context for the discussion.	**2**	Applies a sound knowledge and understanding of technical principles relating to the use of VR and real life to promote a new collection.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	**1-2**	Limited evaluation of VR over real life. Little evidence of appraising or making judgements about the use of VR compared to real life.	**1**	Applies a basic knowledge and understanding of technical principles relating to the use of VR and real life to promote a new collection.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark.		

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Q 7	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:

- A virtual collection does not use actual materials – a saving on use of raw materials, less impact on the environment; materials will not have to be disposed of at some point in the future as none are used.
- Carbon footprint is reduced in many ways: no materials are used – less manufacturing; no transportation of goods globally limits impact; limited personnel involved in developing the collection as everyone can work remotely - reduces travel.
- Everyone can have a front row seat at the fashion show which is beneficial to people who view it remotely, no-one attends an actual show saving on transport costs to the show and reduces their individual carbon footprint.
- There are no limits to designers creativity and imagination using VR; this can be seen as advantageous to people.
- The setting of the show can be anywhere in the world without actually going to the locations; special effects can be included giving viewers a better experience overall.
- Viewers do not get to experience the emotional and storytelling impact of IRL, they don't experience the actual products, no tactile examination of collections; this is seen by many as a critical downside to VR.
- Digital ateliers can work with key personnel from around the world whom they might not have had an opprtunity to work with IRL.
- VR has brought the launch of a new collection into the technological age and revolutionised and enhanced the experience. This is the main reason many see VR as a way forward and a viable alternative.
- Whilst VR reaches more people via social media it increases the potential for copyright infringement of ideas.
- Digitisation is less wasteful allowing fashion to be more eco-friendly and it is more inclusive.

Credit any other appropriate response.

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Band	Marks	AO3 2a	Marks	AO4 2c
2	**3-4**	Good analysis of environmental benefits of VR A sound discussion, which deconstructs information and provides adequate connections and reasoning. Generally well-considered and relevant factors used as a context for the discussion.	**2**	Applies a sound knowledge and understanding of design and make principles in the context of the environmental benefits of using VR to launch a new collection.
		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 benefits of VR. Little evidence of deconstructing information and limited connections are made. Few factors are identified.	**1**	Applies a basic knowledge and understanding of design and make principles in the context the environmental benefits of using VR to launch a new collection.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark.		

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Question 8
The success of a new product depends on the careful selection of appropriate fabrics.
Analyse how fabric type and scale of manufacture influence the choices a designer makes when selecting fabrics for a new product.

Q 8	Science	Maths		AO3		AO4					Total
				2a	2b	1b	1c	2a	2b	2c	
	✓			6						3	9

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 9 marks.

Responses should be based on the following points:

Fabric type

- The two main construction types are knitted or woven. The type of construction affects a fabric's stability: a loosely woven fabric is less stable than a tightly woven one; knitted fabrics stretch but can recover but can also loose shape eventually. Woven fabric is more stable than knitted though and generally easier to work with.
- Non-woven fabrics are not strong but may be selected for specific products such as disposable items which could be, mass or batch produced. Not high quality.
- Woven fabrics are generally not as warm as knitted fabric which can trap air within the loop construction; the same cannot be said for woven fabric in general.
- The source of fibre will influence fabric type; each fibre having different properties so these need to be considered depending on the purpose of the product.
- Applied finishes alter a fabric's inherent properties but give other qualities instead. Finishes could be for aesthetics, functionality or to enhance fabric life.
- Fabric selection is also governed by the cost of the intended product and scale of production.

Scale of manufacture

- Depending on the scale of manufacture, fashion and textile products will have vastly different characteristics.
- Bespoke or one-off products are hand made by highly skilled operatives, greater care is taken during manufacture because of the detail required within each product.
- Customers have an expectation that high quality and expensive fabrics and trims would be used – cost not an issue on this one-off scale. This influences choice.
- Ready to wear/designer collections – limited numbers but still moderately expensive but quite luxurious fabrics and trims might still be considered. A designer label carries certain expectations which must be met.
- Mass produced, batch produced – choice of fabric depends on the product and the specifc target market for the product. Fast fashion is often cheaper, lower quality fabric as the product has a limited life cycle/planned obsolesence.
- Some classic mass produced products need to last long term. Good quality fabric is important at a reasonable price.

Note: Mass and batch produced products are not necessarily poor quality or made using inferior fabric and components. Each point put forward, based on indicative content, must be fully elaborated on to explain its relevance.
To be awarded marks in the top band, both parts of this question must be addressed.

Accept other examples where candidates put forward links and explains the importance.

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Band	Marks	AO3 2a	Marks	AO4 2c
3	**5-6**	Excellent analysis of the importance of fabric type and scale of production when selecting an appropriate fabric. A thorough discussion which deconstructs information and demonstrates logical reasoning throughout. 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 fabric selection.
		There is a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.		
2	**3-4**	Good analysis of the importance of fabric type and scale of production when selecting an appropriate fabric. 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 generally sound knowledge and understanding of design and make principles in the context of the fabric selection.
		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 importance of importance of fabric type and scale of production when selecting an appropriate fabric. 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 the fabric selection.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark		

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Question 9
Intellectual property allows designers to protect their work.
Explain how the use of a design right differs from the use of a trademark when applied to fashion and textile products.

Q 9	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:

<u>Design Right</u>

- Design Rights relate to the physical appearance of a product or item or part of it for example both a striking new design for a jacket and a unique pocket detail on a plain jacket may be registered as a design or attract design protection.
- It can apply to industrial as well as handcraft products.
- This IP right is not concerned with how a product functions but focuses on its appearance and in particular the features of the product or the way it looks.
- Contributory features include: lines; contours; colours; shape; texture; material.
- UK design rights prevents others from copying your design. It only covers the 3D aspect of an item and does not protect the surface decoration of the product or any 2D pattern such as wall paper or carpet design.
- To qualify your design must be NEW, something not previously made public. For example a polo shirt would be commonplace whereas a design created from scratch such as a new shape of sleeve very different to other sleeves previously designed by other designers, would not be commonplace and therefore a design right could be applied for.
- Design right in the fashion industry can protect the structure, look or design of core products such as clothing, footwear, handbag and accessory designs. It also has a wider relevance, covering new product areas that a designer might expand into in future such as luggage or interior furnishings.
- UK unregistered design right does not give a monopoly over all uses of the design in question but it gives the owner the right to prevent third parties from copying the design for commercial purposes.

<u>Trademark</u>

- Trademark protection refers to safeguarding intellectual property rights to protect a trademark from counterfeiting and infringement.
- A trademark is a sign that distinguishes your goods or brand from those of other traders. A sign can include words, logos, pictures or a combination of these.
- The owner of a distinctive mark can apply to receive trademark protection.
- Trademark protection also requires you to continually use the mark in commerce.
- The (TM) symbol has no legal meaning. You can use the symbol on any mark that your company uses without registering it. The most common use of the TM symbol is on a new phrase, logo, word, or design that a company plans to register.
- Trademarks can be used as a marketing tool so your goods are recognised. This can be an asset.
- To be registerable, a trademark should be distinctive for your goods and services and not the same as any earlier mark.

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- No one can use a registered trademark without the permission of the owner. It is an offence to do so.
- You can oppose a new trademark if it is too similar to one you have already registered.
- A registered trade mark often shows the ® symbol; this makes it more straight forward to take legal action against counterfeiters.
- Trademarks need to renewed and paid for every 10 years.

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 of design rights and trademarks. Well considered, relevant wider issues identified.	**3-4**	Demonstrates and applies a thorough knowledge and understanding of design and make principles in the context of design rights and trademarks 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 a generally sound knowledge and understanding of technical principles in the context of design rights and trademarks. Generally well-considered, relevant issues identified.	**2**	Demonstrates and applies a generally sound knowledge and understanding of design and make principles in the context of design rights and trademarks 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 of design rights and trademarks. Some relevant issues identified and used to support the discussion.	**1**	Demonstrates and applies a basic knowledge and understanding of technical principles in the context of design rights and trademarks. Few examples are provided.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark.		

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Question 10
In bespoke fashion design, shape and fit are critical features of a made-to-measure outfit that is both stylish and comfortable to wear.
Evaluate the use of princess line seams and darts when used to shape and style a bespoke tailored outfit or close-fitting evening wear.

Q 10	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2b	2c	
					6			6			12

Candidates should show knowledge and understanding of wider issues, with clear evidence of appraisal and/or making judgements **and** apply this to technical principles to be awarded up to 12 marks.

Responses should be based on:

- Princess line seams: shaped seams that give more of a flattering fit; these seams follow the contours of the body; princess line seams can go from the shoulder, over the bust line, into the waist and out over the hips towards the hemline. Variations exist but the principles are the same.
- Darts: triangular pieces pinched and sewn out of fabric to create shape taking away excess fabric to create a better fit; can be used on the bust line, hips and waistline in clothing but can also be seen near elbows or knees; anywhere on the body that requires a closer fit and shape.
- Clothing can be fitted to the body much better though these shaping techniques – improvement in form and in turn this improves function.
- Both techniques take away excess fabric and add shape (form)
- Both techniques allow for a smoother more flattering silhouette (form)
- Both techniques allow for adjustments to be made to the exact size and shape of each client to achieve that personalised fit.

Tailoring

- In skirts and trousers darts would be used to get a close fit around the waistline
- In a fitted jacket different darts could be used: standard single point dart to shape the bust; a double pointed dart could be used to shape the waistline (front and/or back pieces).
- Darts can be moved (or using technical language ‘swung’) or multiple darts used to add style detail anywhere on a garment provided they still add to the shape and form.
- Single point darts could also be used in the elbow area to get a better fit for the sleeve.
- Half princess line seams can also shape the front and back panels.

Close fitting eveningwear

- Princess line seams could run the length of a dress, front and back, giving a smooth elongated but closely fitted silhouette.
- Boned evening corsets make use of princess line seams – boning follows the seams
- Princess line seams can be used front and back on evening skirts if a close fit is desired
- Single and double pointed darts could be used instead of princess line seams.

Note: Candidates do not have to discuss both outfits, discussion could be built around one product as similar principles apply to both.

Accept other appropriate responses.

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Band	Marks	AO3 2b	Marks	AO4 1c
3	**5-6**	Excellent evaluation of the wider issues relating to the use of seams and darts to shape and fit bespoke clothing. A thorough discussion, which appraises and/or makes judgements about product analysis. 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 using seams and darts to shape and fit bespoke clothing.
		There is a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.		
2	**3-4**	Good evaluation of the wider issues relating to the use of seams and darts to shape and fit bespoke clothing. A generally sound discussion, which appraises and/or makes judgements about product analysis. Generally well-considered, relevant issues used as a context for the discussion.	**3-4**	Applies a generally sound knowledge and understanding of technical principles in the context of using seams and darts to shape and fit bespoke clothing.
		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 wider issues relating to the use of seams and darts to shape and fit bespoke clothing. Little evidence of appraising or making judgements about product analysis. Few issues are identified.	**1-2**	Applies a basic knowledge and understanding of technical principles in the context of using seams and darts to shape and fit bespoke clothing.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark		

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