



GCE A LEVEL MARKING SCHEME

SUMMER 2023

**A LEVEL
DESIGN AND TECHNOLOGY
FASHION AND TEXTILES
1602U30-1**

INTRODUCTION

This marking scheme was used by WJEC for the 2023 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.

GCE A LEVEL DESIGN AND TECHNOLOGY

FASHION AND TEXTILES

SUMMER 2023 MARK SCHEME

Question 1		AO3	AO4	Mark
Fashion designers use different techniques to model and refine their ideas in the development of clothing.				
(a)	Explain what a designer might gain from draping their fabric on a dressmaker's dummy in the early stages of design as shown in the picture below. <i>Answers that indicate an understanding of the purpose of draping fabrics should be awarded up to 3 marks based on:</i> • To see how the fabric falls/drapes • To assess the fabric's suitability • To understand how the fabric handles • To gain an understanding of proportion • To work out an idea – form, style – an iteration • To visualise how different techniques/design elements perform – difficult to do this on the flat Guidance to markers <i>Incorrect / no answer</i> <i>Brief description of draping for example:</i> To see how the fabric falls <i>More detailed explanation of draping fabrics for example:</i> To see how well the fabric drapes to assess its suitability. <i>A clear and detailed explanation for draping fabric on a dress form for example:</i> To gain a better understanding of the fabric's draping qualities and to see how or if the design will work, once it has been made into a garment. It will allow the designers to gain an understanding on the suitability of the fabric.		✓	[3]
				0
				1
				2
				3

(b)	Reverse engineering refers to the deconstruction of products and fabrics.			
(i)	Describe one detailed reason for deconstructing a piece of fabric.		✓	[2]
	<i>Answers that indicate an understanding of deconstructing fabric should be awarded up to 2 marks based on:</i> • Check/assess the quality/type of the construction: weave/knit • Yarn count – density of the fabric • Test fibre content – source of fibres • Possible finishes for yarns – texturised, fancy yarns • Number of plies in the yarn Guidance to markers <i>Incorrect/no answer</i> <i>Brief reason with some understanding fabric deconstruction for example:</i> To find out what type of fabric construction has been used. <i>A more detailed reason, with clear understanding of fabric deconstruction for example:</i> To find out what type of yarns and different fibres have been used in the construction of the fabric.			0
				1
				2
(ii)	Explain why a designer might use reverse engineering in the development of a product.		✓	[3]
	<i>Answers that indicate an understanding of reverse engineering should be awarded up to 3 marks based on:</i> • To look at the construction processes and learn from them • To see if improvements are possible • To examine more closely any innovative features • To look at the structural details and learn from them • To take a pattern template from the deconstructed pieces • To closer inspect the fabric/processes/techniques • To test the fabrics and components • To gain a better understanding of the products, use this information going forward Guidance to markers <i>Incorrect/no answer</i> <i>Brief description, very little understanding for example:</i> To look at the construction processes that have been used. <i>Some detail with some understanding of reverse engineering for example:</i> To get a better understanding of how the product goes together and to then use this information in their own product to make a better one. <i>A detailed explanation with clear understanding of the advantages of reverse engineering for example:</i> By deconstructing a product, you get a better understanding of its construction and whether you can use or improve on this in your own products. You could look specifically at where the product has been reinforced for example and learn from what others have done.			0
				1
				2
				3
			Total	8

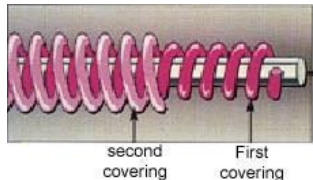
Question 2

Smart fabrics offer many design possibilities for designers.		AO3	AO4	Mark
(a)	Thermoregulation in textile fabrics is triggered by changes in body temperature – smart temperature control. Outline the benefits of wearing clothes that have smart temperature control.		✓	[4]
<i>Answers that indicate an understanding of smart fabric and thermoregulation should be awarded up to 4 marks based on:</i> • A means of controlling body temperature • The wearer does not overheat or become too cold • Temperature control means clothes are more comfortable to wear • It is only activated if and when it is needed – smart • Can be active for longer as the heat is regulated Guidance to markers <i>Incorrect / no answer</i> <i>Brief description, a simple fact for example:</i> It will stop the wearer overheating or being too cold. <i>More detailed description with some understanding for example:</i> The body temperature is constant neither too hot nor too cold, more comfortable. <i>A more detailed description with understanding for example:</i> As it is activated by a rise in temperature the wearer will not be aware of this fact as they will maintain a constant temperature. It will be far more comfortable for them being neither too hot nor cold. <i>A clear and more detailed description with understanding for example:</i> As the wearer is unaware of when the fabric is activated, by controlling the temperature they will constantly feel comfortable. They will be neither too hot nor too cold. They will be able to continue activities for longer as they are not impeded by excessive heat.				0 1 2 3 4

(b)	Explain what is meant by micro-encapsulation. Include one example of its use in textiles and the benefit it gives to the user in your answer.		✓	[4]
	<i>Answers that indicate an understanding of microencapsulation should be awarded up to 4 marks based on:</i> • Microscopic particles are applied to fabric and released through friction • The capsules can contain different particles such as essential oils, perfumes, antibacterial chemicals, moisturisers, insect repellent, antibiotics, antiseptics, therapeutic oils, insecticides, UV protection • Uses include for example: well-being, medical, health, fun factor <i>Note: Benefits will depend on the stated example.</i> • To aid healing • For protection • For well-being - feel good Guidance to markers <i>Incorrect / no answer</i> <i>Brief description, very little understanding for example:</i> Tiny particles are attached to fabric or fibres and released through friction. <i>Some detail with some understanding of microencapsulation for example:</i> Microscopic particles are attached to fabric and released through friction, for example moisturiser. <i>A more detailed explanation with understanding of microencapsulation for example:</i> Microscopic particles are attached to fabric and released through friction, for example moisturiser. The moisturiser would be released straight onto the skin to helping to soothe the skin. <i>Fully detailed explanation with clear understanding of setting a high retail price for example:</i> Microscopic particles are attached to fabric and released through friction. Moisturisers can be encapsulated onto fabric. For someone with a skin condition, the moisturiser would go straight onto their skin and possibly stop it drying too much. This would help with healing.			
		Total	8	

Question 3

Study the pictures below of a sports top and the type of knitted construction method used for the fabric.		AO3	AO4	Mark
(a)	Explain why this type of knitted fabric can be cut into panels to make the sports top.		✓	[4]
<i>Answers that indicate an understanding of warp knitting should be awarded up to 4 marks based on:</i> • Understanding that this is warp knitting • The vertical construction of warp knitting means it can be cut without unravelling • It is usually constructed as a length of fabric • Several yarns are used in the construction, the loops run vertically allowing it to be cut • It is a more stable construction than weft knitting which cannot be cut without unravelling • Once cut into shaped pieces, the edges don't unravel allowing the panels to be stitched together Guidance to markers <i>Incorrect / no answer</i> 0 <i>Brief description, very little understanding for example:</i> The construction method is warp knitting which doesn't unravel. 1 <i>Some detail with some understanding of warp knitting for example:</i> Warp knitting consists of multiple yarns interlocking vertically which means it does not unravel when cut. 2 <i>A more detailed explanation with clear understanding of warp knitting for example:</i> Warp knitting is made up of multiple yarns that interlock vertically, each yarn only interlinks with the yarns on either side. This means it can be cut into pieces and will not unravel. 3 <i>Fully detailed explanation with clear understanding of warp knitting for example:</i> Warp knitting is made up of multiple yarns that interlock through loops vertically, each yarn only interlinks with the yarns on either side. Cutting one yarn does not affect any others, meaning it can be cut into shaped pieces and will not unravel. 4 <i>Candidates must include reference to <u>warp</u> knitting in order to be awarded full marks.</i>				

(b)	The fabric for the sports top also contains elastane. Using notes and sketches explain how elastane is used in the construction of the yarn for the knitted fabric.	✓	[3]
<i>Answers that indicate an understanding of how elastane is incorporated into yarn should be awarded up to 3 marks based on:</i> Sketches should be based on:  Elastane  Elastane Sketch 1: The core of the yarn is elastane and has other fibres wrapping over it to conceal it. Sketch 2: The elastane fibre is twisted in with other fibres, not entirely concealed. Guidance to markers <i>Incorrect / no answer</i> <i>A very basic sketch, limited understanding, lacks annotation:</i> <i>A reasonable sketch, some annotation, shows some understanding.</i> <i>A more detailed sketch, good annotation showing clear understanding.</i>			0 1 2 3

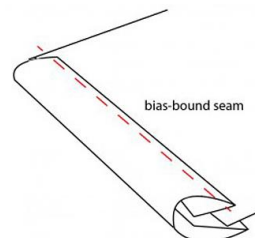
(c)	Discuss the benefits to the user of wearing clothes that contain elastane during sporting activities.		✓	[5]
	<i>Answers that indicate an understanding of the benefits of elastane in sports clothing should be awarded up to 5 marks based on:</i> • Elastane’s main property is its ability to stretch and recover • When included in clothing it retains its properties meaning clothing can also stretch and recover as required • Clothing maintains its shape even when stretched • Clothing can stretch to fit any shape – comfortable • The elastane will keep clothing in place – less likely to move around despite activity • Less irritation from clothing as it fits snugly to the body • It allows for a streamlined shape – less restriction from clothing Guidance to markers • Incorrect/no answer • Candidate has simplistic knowledge. • The use of terminology and technical language is basic. • Brief description of the benefits of wearing clothes that contains elastane during sporting activities • The candidate has some understanding of the issues associated with the question. • The use of terminology and technical language is reasonably accurate. • More detailed description of the benefits of wearing clothes that contains elastane during sporting activities • The candidate demonstrates a clear understanding of the issues associated with the question. • Uses correct terminology and technical language. • Detailed and very clear understanding of the benefits of wearing clothes that contains elastane during sporting activities			0 1-2 3-4 5
		Total		12

Question 4

The picture below shows a lightweight travel beach bag.		AO3	AO4	Mark
(a)	The fabric for the beach bag is polyester cotton with a water-resistant finish. Explain how this finish is applied and why it would support the beach bag's function.		✓	[3]
<i>Answers that indicate an understanding of a water-resistant finish should be awarded up to 3 marks based on:</i> • Silicone (Scotchguard) is applied to the surface of the fabric • Teflon could also give the same finish, applied to the surface • Finishes are applied as a chemical (sprayed) or a coating • Water resistant surface finish will stop water penetrating through the fabric – water runs off • The function of the bag is to hold possessions, keep them dry • Anything inside the bag will stay dry – potential at the beach for things to get wet Guidance to markers <i>Incorrect / no answer</i> <i>Brief description, very little understanding for example:</i> Silicone is applied to the surface of the fabric. <i>Some detail with some understanding a water-resistant finish for example:</i> The surface of the fabric is coated with silicone, this will stop the water going through the fabric and the contents remain dry. <i>Detailed explanation with clear understanding of a water-resistant finish, for example:</i> The surface of the fabric is coated with silicone, this will stop the water going through the fabric. The contents of the bag will remain dry as water cannot seep through it therefore supporting the bag's function which is to keep the contents dry.				
				0
				1
				2
				3

(b) (i)	Justify the use of piping in supporting the structural integrity of the beach bag.		✓	[3]
	<i>Answers that indicate an understanding of piping should be awarded up to 3 marks based on:</i> • Piping is a cord that is inserted into a seam • It adds to the strength of the seam as several layers are placed together in the construction. • Different strength/widths of cord can be used • The cords can be covered with different strength/stiffness of fabric • The added bulk adds strength to the shape – structural integrity • The piping will hold a shape firmly – less likely to collapse Guidance to markers <i>Incorrect / no answer</i> <i>Brief description, very little understanding for example:</i> The piping helps to hold the shape of the end panels. <i>Some detail with some understanding of piping for example:</i> The piping used on the edge helps keep the shape of the bag as the piping is quite strong so it won't collapse. <i>Detailed explanation with clear understanding of piping, for example:</i> Piping can be quite stiff and strong so it will hold the shape of the seam quite firmly. This will help keep the shape of the circular end panels of the bag, prevent them from collapsing meaning the structural integrity of the bag is supported.			0 1 2 3
(ii)	Explain the significance of the stitching detail used on the handle of the beach bag highlighted in the picture.		✓	[2]
	<i>Answers that indicate an understanding of the stitch detail should be awarded up to 2 marks based on:</i> • The stitching holds the strapping securely in place • The criss-cross arrangement of the stitching is a method of reinforcement • At this point the strapping needs to be secure as it may be subjected to force/stress during use Guidance to markers <i>Incorrect / no answer</i> <i>Brief description, some understanding for example:</i> The stitching detail secures the strap in place, making sure the stitch does not come loose. <i>More detailed explanation, clear understanding for example:</i> At that point the strap for the handle maybe subjected to force, the stitching is a very secure method of keeping the strapping in place.			0 1 2

(c)	All the internal seams have a bound finish. Using notes and sketches, explain how this process is constructed and include a reason for its application.		✓	[4]
	<i>Answers that indicate an understanding of binding seams should be awarded up to 3 marks based on:</i> • The (bias) strip of fabric overlaps the raw edge of the fabric • No raw edges are visible • A method of neatening • In the travel bag it's a neater finish than any other method • Will also resist moisture entering through the seams Guidance to markers <i>Incorrect / no answer</i> <i>A very simple sketch, technically lacks detail, limited reasoning.</i> <i>A reasonable sketch, technically more accurate, a simple reason.</i> <i>Sketch is technically correct, a good level of understanding with an appropriate reason.</i> <i>Sketch is technically correct with detailed annotation demonstrated clear understanding. Reasoning is highly appropriate.</i>			
			Total	12



Question 5

Top fashion designers promote their new collections by staging fashion shows like the one pictured below.		AO3	AO4	Mark
(a)	Explain how this type of fashion show influences mainstream contemporary fashion.		✓	[3]
<i>Answers that indicate an understanding of fashion influences should be awarded up to 3 marks based on:</i> • Trickle-down effect – style ideas taken and simplified for mass market - made affordable • Colours are replicated • Cheaper fabrics are sourced but will give a similar style • Celebrities wear designer clothes purchased at fashion shows, people like to emulate their idols • People like to be on trend wearing the latest looks – copied Guidance to markers <i>Incorrect / no answer</i> <i>Brief description, very little detail for example:</i> The styles are copied and simplified for the mass market. <i>Some detail with some understanding related to fashion for example:</i> People like to be on trend with the latest looks so manufacturers simplify designer collections to sell to the masses. <i>A detailed level of understanding related fashion show influences for example:</i> People generally like to wear the latest trends and to wear things that look like the designer styles. The manufacturers simplify these designs to suit mass production so all can wear the latest things and be on trend.				0 1 2 3

(b)	Explain the importance of market segmentation in the promotion of fashion and textile products.		✓	[5]
	<i>Answers that indicate an understanding of market segmentation should be awarded up to 5 marks based on:</i> - Dividing the market of potential customers into groups or segments based on set criteria - Groups or segments respond in a similar way to marketing strategies - These groups share similar interests or locations etc - Four types of market segmentation: geographic, demographic, psychographic and behavioural - Allows market research to be targeted to fully understand target market needs and wants - Segment must be viable - Segment must be identifiable and measurable - Segment must be likely to respond to marketing strategies - Better matching of consumer needs - Knowing your customer base will mean promotion will be more successful Guidance to markers - Incorrect/no answer - Candidate has simplistic knowledge. - The use of terminology and technical language is basic. - Brief description of the importance of market segmentation in the promotion of fashion and textile products. - The candidate has some understanding of the issues associated with the question. - The use of terminology and technical language is reasonably accurate. - More detailed description of the importance of market segmentation in the promotion of fashion and textile products. - The candidate demonstrates a clear understanding of the issues associated with the question. - Uses correct terminology and technical language. - Detailed and very clear understanding of the importance of market segmentation in the promotion of fashion and textile products.			0 1-2 3-4 5
Total				8

Question 6

Designers take inspiration from the world around them including the use of new technology.		AO3	AO4	Mark
(a)	The shoe shown below has been 3D printed. Explain how technology has influenced this design.		✓	[4]
<i>Answers that indicate an understanding of technology influencing design should be awarded up to 4 marks based on:</i> • 3D printing allows products to be manufactured in one piece • Drawn on the computer then printed layer by layer – additive manufacture • Difficult to achieve the shoe design through traditional techniques and construction processes • It's a radical design that can be tested quickly after printing • Allows for more sculptural shapes to be created • The shape works because it is one piece only achievable through 3D printing Guidance to markers <i>Incorrect/no answer</i> <i>Brief description, very little detail for example:</i> The shoe can be printed in one piece. <i>Some detail with some understanding related to 3D printing for example:</i> 3D printing makes it possible to print a shape like this in one piece. <i>A more detailed level of understanding related to 3D printing for example:</i> A sculptural shape like this can only be printed in one piece through 3D printing. It is not possible any other way. <i>Full and detailed knowledge and explanation related 3D printing and the influence of technology for example:</i> Traditional methods would not allow a sculptural one-piece shape like this to be produced. This is only possible through the process of additive manufacture which allows products to be manufactured in one piece as layer by layer is put down in the print.				
				0
				1
				2
				3
				4

(b)	Explain how Japanese tradition and culture has influenced the work of designer Issey Miyake.		✓	[4]
	<i>Answers that indicate an understanding of Issey Miyake's cultural influence should be awarded up to 4 marks based on:</i> • Influenced by craftsmanship and the Japanese aesthetic • Traditional Japanese dress – the kimono and reinvented it with ground breaking techniques • He took the shapelessness, anonymity, and comfort of the kimono as the core philosophy for his designs • He looked to the Japanese tradition of pleating fabric - the inspiration behind the 'Pleats Please' collection • He revived traditional methods but incorporated state of the art pleating technology • This remains an important factor in his more recent work • Many collections are inspired by origami (Japanese craft of folding paper) – folded, twisted, pleated fabrics into cutting edge garments • Many collections inspired by origami (folding paper) – folded, twisted, pleated fabrics into cutting edge garments Guidance to markers <i>Incorrect/no answer</i> <i>Brief description, very little detail for example:</i> He redesigned the Kimono making it more modern. <i>Some detail with some understanding related to Issey Miyake's traditional and cultural influence for example:</i> The basic shapeless concept of the kimono is reflected in the shape of many of his products based on one piece. <i>A more detailed level of understanding related to Issey Miyake's traditional and cultural influence for example:</i> Many of his designs reflect the shape of the kimono, his cultural heritage. Many of his clothes are based on one piece of fabric and shapeless but comfortable like the kimono. <i>Full and detailed knowledge and explanation related to Issey Miyake's traditional and cultural influence for example:</i> Taking inspiration from the kimono many of Miyake's designs appear shapeless and consist of one piece of fabric. These were later pleated having been inspired by traditional Japanese pleating methods. His famous Pleats Please collection was the result.			0 1 2 3 4
			Total	8

Question 7

The picture below shows a stage of dyeing fabric in an industrial setting.		AO3	AO4	Mark
(a)	Employers are required by law to ensure the safety of their employees. Explain what is meant by a hazard in the workplace.		✓	[2]
<i>Answers that indicate an understanding of the term hazard should be awarded up to 2 marks based on:</i> • Unsafe working practices creating an unsafe working environment • Unsafe processes Examples include: • Lack of training • Lack of safety equipment and protective clothing • Machinery without an emergency stop or is unsafe • Blocking of fire exits • Lack of a clean well-ventilated area to work in • Lack of appropriate 'breaks' for workers Guidance to markers <i>Incorrect/no answer</i> <i>Brief description, not explained for example:</i> A situation where an employee is at risk of injury. <i>More detailed description with understanding for example:</i> An unsafe working environment where an employee is put at risk for example lack of training on machinery.				0 1 2

(b)	In the textile industry where fabrics are being dyed, explain how COSHH protects employees.		✓	[4]
	<i>Answers that indicate an understanding of COSHH should be awarded up to 4 marks based on:</i> • COSHH: Control of substances harmful to health • Substances include: dyestuffs, bleaches, chemicals for finishes and dyeing • These need to be stored safely • Substances need to be handled correctly to avoid health and well-being issues • Effects on peoples' health include: chronic lung disease, rashes/skin problems, inhalation of fumes, asthma, eye irritation • Forms part of a company's Risk Assessment • Duty to protect employees • Employees at risk/have been adversely affected have legal rights Guidance to markers <i>Incorrect/no answer</i> <i>Brief description of COSHH, little detail for example:</i> COSHH is there to ensure workers are protected from poisonous chemicals. <i>Some detail with some understanding of COSHH for example:</i> Under COSHH, harmful substances such as chemical dyes have to be stored safely by law, this should protect employees. <i>A more detailed level of understanding of COHSS for example:</i> COHSS requires that all chemical dyes or other toxic products are stored safely and unlikely to put the health of employees at risk. It forms part of a company's risk assessment and is a legal requirement. <i>Full and detailed understanding of COHSS for example:</i> COHSS forms part of a risk assessment which aims to protect employees from harmful substances such as chemical dyes which could be detrimental to an employee's health if handled incorrectly. Dyes should be stored safely to avoid danger, if this is breached the law protects the employee.			0 1 2 3 4

(c)	Discuss how the Health and Safety at Work Act applies to school or college students studying Fashion and Textiles.		✓	[6]
	<i>Answers that indicate an understanding of Health and Safety at Work Act in schools should be awarded up to 6 marks based on:</i> • Safe working environment – also relates to how a student conducts him or herself • Free of potential hazards that could cause injury • Following instructions on the correct use of tools and machinery • Wear protective clothing where necessary particularly when handling dyes or other chemicals • Be aware of blades or other sharp equipment and use safely • Hot equipment such as irons – handle with care • Cables should be out of the way of harm • Storage of bags – away from being a potential hazard to others • Knowledge of what to do in an emergency • Behaviour – ensure poor behaviour does not put others at risk • No eating or drinking around machinery Guidance to markers • Incorrect/no answer • Candidate has a simplistic knowledge. • The use of terminology and technical language is basic. • Very little detail or explanation. • Candidate has some basic understanding of the issues associated with the question. • The use of terminology and technical language is variable. • Some understanding of the Health and Safety at Work Act in a school/college setting. • The candidate has some understanding of the issues associated with the question. • The use of terminology and technical language is reasonably accurate, some logic in the sequence. • More detailed level of understanding shown of the Health and Safety at Work Act in a school/college setting. • The candidate demonstrates a clear understanding of the issues associated with the question. • The use of terminology and technical language is mostly accurate with evidence of a logical sequence for manufacture. • Detailed explanation and understanding evident of the Health and Safety at Work Act in a school/college setting. • The candidate demonstrates a very clear understanding of the issues associated with the question. • Uses correct terminology and technical language. • Full and detailed knowledge and understanding evident of the Health and Safety at Work Act in a school/college setting.			
	Total			12

Question 8

Different systems are used in the industrial manufacture of fashion and textiles products.		AO3	AO4	Mark
(a)	Discuss the economic benefits to the manufacturer of using bought-in components in the manufacture of fashion and textile products.		✓	[4]
<i>Answers that indicate an understanding of bought-in components in fashion and textile manufacturing should be awarded up to 4 marks based on:</i> • Readily available in standard sizes, materials – costs less • Machinery does not need to be adapted to fit other sizes - cheaper option • Components are made by a specialist manufacturer; would be too expensive to buy the equipment needed to manufacture in-house • Delivery is assured as supply is readily available • Specialists manufacture components in bulk, this keeps cost competitive - economies of scale Guidance to markers <i>Incorrect / no answer</i> <i>Brief description of bought-in components, basic level of understanding for example:</i> It is cheaper for someone else to manufacture them. <i>Some detail in description with some understanding of buying in standard components, for example:</i> Specialist manufacturers can produce these far more cheaply than a manufacturer doing it in-house as he may not have the right equipment. <i>A more detailed level of understanding of buying in standard components for example:</i> Specialist manufacturers mass produce standard components at a cost-effective rate which a manufacturer of other products cannot compete with as they may not have the right equipment. Buying in the equipment is too expensive for the quantity they may need. <i>Full and detailed understanding of buying in standard components for example:</i> It is more cost effective to buy in standard components which are readily available rather than manufacturer in-house. Specialist components manufacturers operate within scales on economy and are therefore more cost-effective which fashion and textile manufacturers cannot compete with on price. They would not necessarily have the right equipment so buying that in is too expensive.				
				0
				1
				2
				3
				4

(b)	Just-in-time (JIT) is a stock control management system. Explain the advantages and disadvantages of using just-in-time (JIT) in the manufacture of fashion and textiles products.		✓	[8]
	<i>Answers that indicate an understanding of JIT manufacturing should be awarded up to 8 marks based on:</i> Advantages: • Focused on producing the right quantity of products at the time needed by consumers • Prevents over-production • Less wastage • Minimises waiting times and transport costs • Saves resources by streamlining production systems • Reduces the capital tied up in stock; this can be invested elsewhere • Dispenses with the need for inventory operations • No warehouses costs to hold stock • Decreases product defects prevents goods becoming damaged or obsolete while sitting in storage • Fewer operatives needed to handle stock movement • Flexible working practices • JIT inventory management is ideal for smaller companies that don't have the funds available to purchase huge amounts of stock at once; ordering stock as and when it's needed helps to maintain a healthy cash flow Disadvantages: • Supply chain may not be reliable • No stock/delay in delivery then production is held up/stopped/ will create cost increase • Delays impact on delivery and customer loyalty can be questioned • Essential to have reliable suppliers; quality of their products is paramount to a successful production; sub-standard products delay production • Risk of running out of stock; by not carrying much stock, it is important you have the correct procedures in place to ensure stock can become readily available • Relies heavily on good relations with the supply chain • No room for error - extremely reliant on the consistency of your supply chain; if your supplier struggles with your requirements, or goes out of business, can you get the products quickly from somewhere else? • A sudden increase in demand may not be met Accept other factually correct points Guidance to markers Incorrect/no answer Brief description with little detail in the response: brief knowledge of JIT. Little reference to the manufacturer. Basic level of understanding. Basic description with some detail in the response: some knowledge of a JIT; some knowledge relating to the advantages and disadvantages to the manufacturer. Some evidence of knowledge and understanding. Answer may focus on advantages over disadvantages or vice versa. More detailed description, with clear evidence of knowledge and understanding relating to JIT. Clear understanding of how there are both advantages and disadvantages to the manufacturer. Full and detailed description, with clear and detailed evidence of knowledge and understanding in the response: clear knowledge of issues related to JIT; full and detailed understanding of the advantages and disadvantages to the manufacturer.			
	Total	12		

Question 9

The management of resources is a critical feature of sustainable design.		AO3	AO4	Mark
	Evaluate the impact that the philosophy of the circular economy could have on the management of fashion and textile resources.	✓		[8]
	Candidates should demonstrate knowledge and understanding of the circular economy and apply it to <i>designing and making principles</i> to be awarded up to 8 marks based on: • The circular economy focus is on the elimination of waste • The concept is about recycling more effectively and reprocessing fibres to reintroduce them back into manufacturing cycle/product cycle avoiding creating waste – designers should in the first instance consider using recycled materials • Resources remain in the manufacturing loop for as long as possible, raw materials are kept in continual circulation • This reduces the need for new resources to enter the manufacturing loop which will reduce the environmental impact – drain on resources • Materials remaining in use reduces waste going to landfill • Recycling and reprocessing materials is at the core of the philosophy • The textile industry is responsible for 1000s tonnes of textile waste • Reimagining the way fashion is designed, made, worn and reused • Fibres can be recycled several times over but accepts at some distant point the fibres/fabric will have to be disposed of • Reprocessing of more fibres lessens demand on land used to produce new fibres, this includes non-sustainable fibres – also benefits the eco-systems Guidance to markers • Incorrect/no answer • Candidate has a simplistic knowledge; basic. • The use of terminology and technical language is basic. • Brief description of the circular economy and its effect on resources; little understanding evident. • Little evidence of appraisal. • Candidate has some basic understanding of the issues associated with the question. • The use of terminology and technical language is variable. • Some detail in the description of the circular economy and its effect on resources; some understanding is evident. • Some evidence of appraisal. • The candidate has clear understanding of the issues associated with the question. • The use of terminology and technical language is mostly accurate. • More detailed description with understanding of the circular economy and its effect on resources is evident. • Clear evidence of appraisal. • The candidate demonstrates very clear understanding of the issues associated with the question. • Uses correct terminology and technical language. • Full and detailed description and understanding of the circular economy and its effect on resources. • Detailed evidence of appraisal.			0
				1-2
				3-4
				5-6
				7-8
		Total		8

Question 10

Many fashion and textile collections are the culmination of a designer's personal creative journey and what will sell, whereas user-centred design puts the needs of users first.		AO3	AO4	Mark
	Analyse the benefits to users and the environment, of adopting a user-centred approach in the development of contemporary fashion and textiles products. Marks will be awarded for the content of the answer and the quality of written communication.	✓		[12]
Candidates should demonstrate knowledge and understanding and apply it to <i>designing and making principles</i> to be awarded up to 12 marks based on: • User centred design identifies the target market, how and where they will likely use the product; what it will be used for • The requirements of the users are fully understood – a deeper understanding of who will use the product • Testing at every stage involving the users • The real opinions of users are paramount • The environment/conditions in which it will be used • Whole user experience is considered • Users involved throughout the iterative process • Design teams often consists of multiple disciplines including experts, stakeholders and users • Fashion industry is wasteful, many products cheaply made to fill an immediate need with no long-term aim in mind – throwaway society, built in obsolescence • People increasingly more aware of conflict in the fashion industry, and the need for a more sustainable approach • Focus in fashion is profitability above all else and what will sell • Top fashion designers focus on their collections and image, no further impact than that • Often focuses on a quick style fix and image – users dictated to, what they should be wearing • Is the user in this fast fashion chain really considered much at all? • The way designs are developed – based on upcoming trends, mood boards created for inspiration not targeted at the end users • 1000s tonnes textile waste going to landfill – waste – environmental damage – much as the result of fast contemporary fashion • Consumers increasingly want sustainable fashion but current working practices do not reflect this • Current design practice is about a designer's ideas, what they want to produce not necessarily what the user needs or wants • Sustainable fashion can still be on trend but not at the expense of the environment. • User centred approach gives consumers what they want but can also reduce waste – benefits the environment.				

