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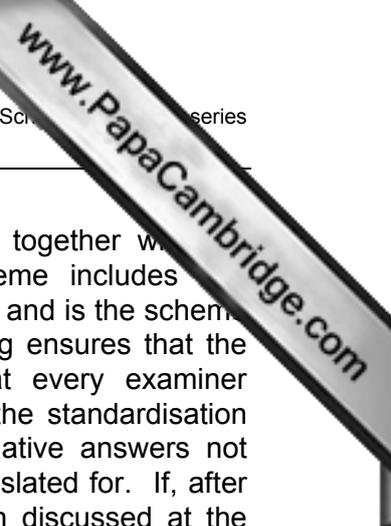
**General Certificate of Education  
June 2010**

**Design and Technology:  
Product Design (Textiles)**

**TEXT3**

**Final**

***Mark Scheme***



Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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**Section 1**

- 0 1** Explain in detail the unique corporate identity of one textile brand with which you are familiar.

The unique corporate identity of a textile brand is clearly explained. The distinctive image and a perceived set of values linked to the brand are outlined. How the brand differs and stands out from the competition, and possible reference to how consumers value the brand is clear in the response given. Some reference may be made to advertising campaigns linked to the brand and to the power of a brand name and the impression that this brand creates with the consumer.

Examples could include:

Topshop, which is an internationally recognised fashion brand, has a young profile, and has links with established designers is part of its unique offer, including the fashion forward Kate Moss range.

Burberry, a strong British heritage brand. It is a premium fashion brand with global recognition. A strong name, a historical link with gabardine and the trenchcoat. A recognizable trademark check.

Lycra, globally recognized elastane fibre brand. It can stretch up to seven times and fully recover. It has enabled power stretch products and improved comfort in a vast range of products.

Ralph Lauren, a unique American brand which blends the traditions of English aristocracy with 'Old Hollywood'. Classic sportswear is evident with an essence of New England, creating an American dream.

**Low mark range**

Limited and simplistic explanation of the unique corporate identity of selected brand. Response is vague and lacks clarity. There will be a number of errors of grammar, punctuation and spelling.

0 -2 marks

**Mid mark range**

A more thorough explanation of the unique corporate identity of a selected brand. Some unique attributes indicated but there is an overall lack of detail. Response reflects some understanding. There may be a small number of errors of spelling, grammar and punctuation.

3 – 4 marks

**High mark range**

An in-depth answer, detailed and accurate explanation of the unique corporate identity of a selected brand. Response illustrates a very good understanding of the unique attributes of each selected example. There are few, if any, errors of grammar, punctuation and spelling.

5 -6 marks **(6 marks)**

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- 0 2** In what ways are changing moral and environmental attitudes affecting the labelling and packaging of textile products?

Increase in consumer awareness in the types of packaging used. The importance of recycling, encourage reuse and the choice of material used in packaging. Organic and environmentally friendly options, for example hemp and recycled board and card. Use of recycle logos on packaging. Trend for a move away from plastic, or use of types of recyclable plastic. The 'I am not a plastic bag' campaign led by Anya Hindmarch is an example. Reducing both primary and secondary packaging. Companies like M&S featuring their look behind the label campaign. Tesco and other large retailers encouraging 'every little helps' and the need to recycle carrier bags. Consumers being asked if they wish point of sale carrier bags is contributing to a much greater awareness of the general public. Retailers are using packaging to communicate their green credentials. Labelling – Recycling – Fairtrade – Eco-symbols.

Low temperature wash may be referenced.

#### **Low mark range**

Limited and simplistic explanation of how changing moral and environmental attitudes are affecting the labelling and packaging of textile products. Answers lack depth of response. Arguments stray from the point or are weakly presented. There will be a number of errors of grammar, punctuation and spelling. 0 – 2 marks

#### **Mid mark range**

A more thorough explanation is given of how changing moral and environmental attitudes are affecting the labelling and packaging of textile products. A number of examples are given, although answers lack relevant detail. Sentences are reasonably well connected. Arguments are not always relevant. There may be a small number of errors of spelling, grammar and punctuation. 3 – 5 marks

#### **High mark range**

An in-depth answer with detailed and accurate explanations given of how changing moral and environmental attitudes are affecting the labelling and packaging of textile products. Reference is made to a range of examples, which are clearly outlined with relevant detail. Sentences and paragraphs follow on from one another smoothly and logically. Arguments are relevant and well structured. There are few, if any, errors of grammar, punctuation and spelling. 6 – 8 marks

**(8 marks)**

- 0 3** Critically evaluate the different methods of advertising available to textile retailers.

Different methods of advertising include: Packaging, labelling sewn in and swing tickets), carrier bags, television, radio, newspapers, magazines, specialist magazines, niche marketing, point of sale, windows, billboards, poster campaigns, websites and the internet, e mail, catalogues, fliers, in store displays and consumer feedback. Reference would be expected to the cost of different methods of advertising for textile retailers. Time scales and distribution, size of consumer access, availability, impact, target market, lifestyle and demographics are also important and some reference to these issues would be also be expected in answers given. Celebrity endorsement.

**Low mark range**

Limited and simplistic explanation of the different methods of advertising available to textile retailers. Few examples are given and little critical evaluation is made, answers lack depth.

Sentences may not always be well connected. Arguments stray from the point or are weakly presented. There will be a number of errors of grammar, punctuation and spelling. 0 – 2 marks

**Mid mark range**

A more thorough explanation is given of the different methods of advertising available to textile retailers. A range of examples are included and some attempt at critical evaluation is made, but answer lacks specific detail. Sentences are reasonably well connected.

Arguments are not always relevant. There may be a small number of errors of spelling, grammar and punctuation. 3 – 5 marks

**High mark range**

An in-depth answer with detailed and accurate explanations given of the different methods of advertising available to textile retailers. A wide range of examples are included and a very good critical evaluation is made, answers are detailed.

Sentences and paragraphs follow on from one another smoothly and logically. Arguments are relevant and well structured. There are few, if any errors of grammar, punctuation and spelling. 6 – 8 marks **(8 marks)**

- 0 4** In what way has modern technology assisted in the marketing and promotion of textile products?

Examples of modern technology to market and promote, include web e-tailing and e marketing, text messages, virtual products, product and colour simulation, body scanning, social networking sights and pop-ups, home shopping channels – TV.

**Low mark range**

Limited and simplistic explanation of how modern technology has assisted in the marketing and promotion of textile products. Little reference to new technology, answer lacks depth of response. There will be a number of errors of grammar, punctuation and spelling.

0 – 2 marks

**Mid mark range**

A more thorough explanation is given of how modern technology has assisted in the marketing and promotion of textile products. Some reference to new technology, but answer lacks relevant detail, and/or answer focuses on only a few examples. There may be a small number of errors of spelling, grammar and punctuation.

3 – 4 marks

**High mark range**

An in-depth answer with detailed and accurate explanations given of how modern technology has assisted in the marketing and promotion of textile products. Reference is made to a range of examples which are clearly explained with relevant detail. There are few, if any, errors of grammar, punctuation and spelling.

5 – 6 marks

**(6 marks)**

- 0 5** A sketch should be produced of the selected iconic product and is annotated showing clearly key style and design features.

The mini skirt should be clearly of the 1960s, and was well above the knee. It can be of any print, patterned or plain fabric.

The 2.55 quilted chain bag should be the iconic Chanel handbag with logo and diamond quilting.

The Mondrian dress should be a shift dress with primary colour blocks of colour and black connecting grid lines.

The harem pant is a full, ankle-length divided trouser, pleated or gathered into a band at the ankle, based on the trousers worn by Turkish women.

The Capri pant which was a fairly loose pant, tapered to the mid-calf.

**Low mark range**

Limited and simplistic sketch. Little annotation or detail given, few style and design features shown. Arguments stray from the point or are weakly presented. There will be a number of errors of grammar, punctuation and spelling.

(0- 2 marks)

**0 5 Mid mark range**

**Contd** Reasonable sketch with some annotation and detail given, an attempt is made to show style and design features but answers lack relevant detail. Arguments stray from the point on occasion or may be weakly presented. There may be a small number of errors of spelling, grammar and punctuation. (3 – 5 marks)

**High mark range**

Detailed and accurate sketch of iconic product. Annotation is detailed, style and design features are very accurate. Sentences and paragraphs follow on from one another smoothly and logically. Arguments are relevant and well structured. There are few, if any, errors of grammar, punctuation and spelling. (6 – 8 marks) **(8 marks)**

**0 6** Accurate name of original designer

The Mini skirt – Mary Quant and Andre Courr ges (both are linked to this product, either would be accepted)

The 2.55 quilted chain bag - Chanel

The Mondrian dress – Yves Saint Laurent

The Harem pant – Paul Poiret

The Capri pant – Emilio Pucci

**(1 marks)**

**0 7** The mini skirt came to represent the image of London's Swinging Sixties and became the most popular expression of the new relaxed attitude to the body. Creation of the icon is shared by Mary Quant and Andre Courreges. Predominantly straight square-cut miniskirt, hemlines continued to rise from just above the knee in 1963 to 6 inches above the knee by the end of 1965. By the end of the decade the mini was so short it was known as the micro mini.

The 2.55 quilted chain bag was created by Chanel and the early versions of the Chanel bags date back to 1930. In 1955 the first quilted handbag with a gilt chain was named the 2.55 after the month and year of its introduction. Made in Chanel's favourite colours, beige, black, navy and brown and was available in either leather or jersey. The chain handles were braided with leather and allowed the bag to be worn over the shoulder, emphasizing functionalism and mobility. The double C's were added later.

The Mondrian dress, created by YSL in 1965 illustrating modern art influences featuring daring colour combinations and geometrics as seen in the paintings by Piet Mondrian.

The Harem pant, influenced by the decorative richness and the colours of Diaghilev's Ballet Russes, Paul Poiret launched a collection with a strong Eastern influence in 1910 and 1911 which featured the harem Turkish pants.

The Capri pant was inspired by the fishermen on the island of Capri near Naples. Popular in the 1950's for summer wear. Emilio Pucci made these part of his collection often featuring his signature prints. In 1954 the Capri pant became an international success for Pucci.

**0 7**  
**Cont** **Low Mark Range**  
Limited response with little detail about selected iconic product, little or no reference to the creator of the product and little reference to the impact the product has had on textile design history. Sentences and paragraphs may not always be well connected. Arguments stray from the point or are weakly presented. There will be a number of errors of grammar, punctuation and spelling. 0 – 3 marks

**Mid Mark Range**  
Reasonable information about selected iconic product, some reference to the creator of the product, some reference to the impact the product has had on textile design history. Candidates express straightforward ideas clearly, if not always fluently. Arguments stray from the point on occasion or may be weakly presented. There may be a small number of errors of spelling, grammar and punctuation. 4 – 6 marks

**High Mark Range**  
Detailed information about selected iconic product, accurate reference to the creator of the product, detailed reference to the impact the product has had on textile design history. A very good understanding is evident. Sentences and paragraphs follow on from one another smoothly and logically. Arguments are relevant and well structured. There are few, if any, errors of grammar, punctuation and spelling. 7 – 9 marks **(9 marks)**

**0 8** Only accept accurate named iconic product **(1 mark)**

**0 9** Accurate name of designer **(1 mark)**

**1 0** Candidates have selected textile products that are considered to be icons of design. Explanations are given to justify choice.

**Low Mark Range**  
Limited response with little detail about selected iconic product, little or no reference to the creator of the product and limited explanation as to why the product is considered an icon. Sentences may not always be well connected. There will be a number of errors of grammar, punctuation and spelling. 0 – 2 marks

**Mid Mark Range**  
Reasonable response with some detail about selected iconic product, some reference to the creator of the product, some explanation as to why the product is considered an icon. Sentences are reasonably well connected. There may be a small number of errors of spelling, grammar and punctuation. 3 – 5 marks

**High Mark Range**  
Detailed information about selected iconic product, accurate reference to the creator of the product, detailed explanation as to why the product is considered an icon. Sentences and paragraphs follow on from one another smoothly and logically. There are few, if any errors of grammar, punctuation and spelling. 6 – 8 marks **(8 marks)**

- 1 1** This may be through a traditional woven technique, for example: Guatemalan back strap loom in distinctive colours (Where one end of the loom is attached to a building or a fixed structure and the other end is attached to the weavers body), Ashanti strip weaving (Traditional narrow woven cloths), Kente cloth distinctive cloth created by narrow strips joined together, Kilim tapestry technique to create raised patterns, Ikat weaving where warps are printed prior to weaving, traditional visual patterned Navaho woven cloth. Tartan traditional cloth.

**Low mark range**

Limited and simplistic description of a traditional method of creating pattern and colour using construction. Little reference to the selected ethnic tradition. 0 – 1 mark

**Mid mark range**

Reasonable description of a traditional method of creating pattern and colour using construction. Some reference to the selected ethnic tradition. 2 – 3 marks

**High mark range**

Detailed and accurate description of a traditional method of creating pattern and colour using construction. Detailed reference to the selected ethnic tradition. 4 marks

**(4 marks)**

- 1 2** This may be through print and pattern techniques, for example: batik, resist paste, Tritik, tie and dye effects, silk painting, stencil printing, block printing, hand embroidery techniques, Shibori, Shisha mirror work, Mola work, woven samples, e.g. tartan will be awarded 1 mark.

**Low mark range**

Limited and simplistic description of a traditional method of applying surface pattern and colour, little reference to the selected ethnic tradition. 0 – 1 marks

**Mid mark range**

Reasonable description of a traditional method of applying surface pattern and colour, some reference to the selected ethnic tradition. 2 – 3 marks

**High mark range**

Detailed and accurate description of a traditional method of applying surface pattern and colour, thorough reference to the selected ethnic tradition. 4 marks

**(4 marks)**

- 1 3** There are a vast range of traditional techniques that could be referred to. For example woven traditions including Ashanti strip weaving, South American weaving, knitting traditions, resist methods, Bogolan mud cloths, Indonesian Batiks, tie & dye, tritik, shibori, shisha mirror work, gold thread, sashiko and Asian printing techniques. Cultural influences can also be through product shape, for example kimono shapes, colours choice, for example indigo, and fastenings, for example frog closures.

**Low Mark Range**

Limited response with little detail about the ways in which designers could incorporate inspiration from world textile traditions, little or no reference is made to traditional cultural techniques. Sentences and paragraphs may not always be well connected. Arguments stray from the point or are weakly presented. There will be a number of errors of grammar, punctuation and spelling.

0 – 3 marks

**Mid Mark Range**

Reasonable response with some detail about the ways in which designers could incorporate inspiration from world textile traditions, some reference is made to traditional cultural techniques. Candidates express straightforward ideas clearly, if not always fluently. Arguments stray from the point on occasion or may be weakly presented. There may be a small number of errors of spelling, grammar and punctuation.

4 – 8 marks

**High Mark Range**

Detailed response with considerable detail about the ways in which designers could incorporate inspiration from world textile traditions, thorough reference is made to traditional cultural techniques. Candidates will have expressed complex ideas extremely clearly and fluently. Sentences and paragraphs follow on from one another smoothly and logically. Arguments are relevant and well structured. There are few, if any, errors of grammar, punctuation and spelling.

9 – 12 marks **(12 marks)**

**1 4** A major increase in retailers focusing on ethical trading, no longer a minority issue. Where and how a product is made, Fairtrade, ethical practices, child labour – consumer demand for a green/ethical supply chain, environmental issues.

**Low mark range**

Limited and simplistic discussion of the issues facing major retailers in relation to consumer demand for ethical trading. Few examples are given, answers lack depth.

Sentences may not always be well connected. Arguments are weakly presented. There will be a number of errors of grammar, punctuation and spelling. **0 – 2 marks**

**Mid mark range**

A more thorough explanation is given of the issues facing major retailers in relation to consumer demand for ethical trading. A range of examples are included, but answer lacks specific detail.

Sentences are reasonably well connected. Arguments are not always relevant. There may be a small number of errors of spelling, grammar and punctuation. **3 – 5 marks**

**High mark range**

An in-depth answer with detailed and accurate explanations given of the issues facing major retailers in relation to consumer demand for ethical trading. A wide range of examples are included, answers are detailed and convey a very good understanding of the subject matter. Sentences and paragraphs follow on from one another smoothly and logically. Arguments are relevant and well structured. There are few, if any errors of grammar, punctuation and spelling. **6 – 8 marks**

**(8 marks)**

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**Section 2**

**1 5** **A child's anorak** – Open ended plastic zip, reversible zipper, separating zipper

**Ladies pencil skirt** – Invisible zip, closed end metal or synthetic dress zipper, regulation or conventional chain or coil-constructed zipper closed at one end

**Scatter cushion** – Conventional or regulation zipper

Three different zips named – 1 mark each

**(3 x 1 mark)**

**1 6** A clear detailed step by step outline is given of the manufacturing processes involved when inserting the suggested zip fastener into the named product. Each stage is explained, reference is made to the correct equipment.

Marks awarded as follows:

**Low Mark Range**

Limited and simplistic description of the manufacturing processes involved when inserting suggested zip fastener. Little detail is given of each stage including any reference to the correct equipment required. Answer is basic. There will be a number of errors of grammar, punctuation and spelling. 0 – 2 marks

**Mid Mark Range**

A more thorough description is given of the manufacturing processes involved when inserting suggested zip fastener. Some detail is given of each stage and there is some reference to the correct equipment required. Answer lacks some clarity. Arguments stray from the point on occasion or may be weakly presented. There may be a small number of errors of spelling, grammar and punctuation. 3 – 5 marks

**High Mark Range**

A detailed and accurate description is given of the manufacturing processes involved when inserting suggested zip fastener. Thorough detail is given of each stage and reference is made to the correct equipment required. Answer is clearly explained. Sentences and paragraphs follow on from one another smoothly and logically. Arguments are relevant and well structured. There are few, if any, errors of grammar, punctuation and spelling. 6 – 8 marks

**(8 marks)**

**1 7** A suitable alternative fastening is named.

**(1 mark)**

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18 Marks awarded as follows:

**Low Mark Range**

Limited and simplistic description of the manufacturing processes involved when applying suggested fastening. Little detail is given of each stage including any reference to the correct equipment required. Answer is basic. There will be a number of errors of grammar, punctuation and spelling. 0 – 2 marks

**Mid Mark Range**

A more thorough description is given of the manufacturing processes involved when applying suggested fastening. Some detail is given of each stage and there is some reference to the correct equipment required. Answer lacks some clarity. Arguments stray from the point on occasion or may be weakly presented. There may be a small number of errors of spelling, grammar and punctuation. 3 – 5 marks

**High Mark Range**

A detailed and accurate description is given of the manufacturing processes involved when applying suggested fastening. Thorough detail is given of each stage and reference is made to the correct equipment required. Answer is clearly explained. Sentences and paragraphs follow on from one another smoothly and logically. Arguments are relevant and well structured. There are few, if any, errors of grammar, punctuation and spelling. 6 – 8 marks

**(8 marks)**

- 1 9** Problems could include type of base fabric, weight, opacity, complexity of construction, specialist processes, possible requirement for components to be pre manufactured, cost of component, colour of component and matching to other components, colour continuity of fabric, weight and size of component, sourcing a supplier, delivery lead times, cost of procedures, safety of component to attach and for the user, training for specialist processes.

**Low mark range**

Limited response with little reference to the range of problems a manufacturer could encounter when working with different components.

Limited reference is made to safety implications.

Sentences may not always be well connected. Ideas will be simply expressed and may be imprecise and lack complexity. There will be a number of errors of grammar, punctuation and spelling. 0 – 2 marks

**Mid mark range**

Clear understanding of the range of problems a manufacturer could encounter when working with different components. Some reference is made to safety implications. Several examples are given, but there is a lack of depth to answer. Sentences are reasonably well connected. Ideas although not complex will be expressed clearly. There may be a small number of errors of spelling, grammar and punctuation. 3 – 5 marks

**High mark range**

A thorough understanding of the range of problems a manufacturer could encounter when working with different components. A detailed reference is made to safety implications. A number of examples are given to support response. Sentences and paragraphs follow on from one another smoothly and logically. Ideas are complex and will be expressed clearly and coherently. There are few, if any errors of grammar, punctuation and spelling. 6 – 8 marks

**(8 marks)**

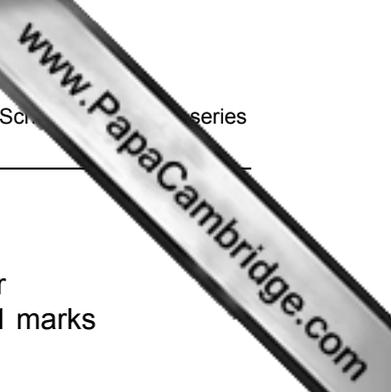
- 2 0** **Fully fashioned** – Fashioning is the knitting of garment parts to their exact shapes by increasing and decreasing stitches directly on the machine or by hand knitting.

They are shaped so that they can be sewn directly into garments without cutting. Welts, neckbands and pockets are knitted integrally.

**Whole garment** – Computerised systems that can knit completed garments, requiring almost no post-production labour. All pockets, welts and neckbands are integrated and all the seams, arms etc are made by the knitting machine.

Advanced technology has made it possible to knit textile products without seams directly by machine

**Cut and sew** - A knitting method whereby a garment is made by knitting fabric lengths on the knitting machine, cutting the pieces of the garment from the fabric and then sewing the pieces together. All edges need to be finished to prevent the stitches from running.



**2 0 Low mark range**

**Contd** Limited and simplistic explanation given of term relating to knitwear manufacture. Answers lack detail. 0 – 1 marks

**High mark range**

An in-depth answer with detailed explanation given of term relating to knitwear manufacture. 2 – 3 marks **(3 x 3 marks)**

**2 1** Problems include: Stretch and stability of fabrics, higher extensibility of knits, may require use of tape particularly with horizontal seams, knitted fabrics rolling when cutting, fabrics to be kept under minimum tension, risk of snagging, ladders in fabric, differential feed problems, special needles for stretch fabrics, damage from stitching, problems when attaching components due to fabric distortion.

**Low mark range**

Limited response with little reference to the difficulties that a manufacturer faces when working with knitted fabrics. Minimal problems outlined, little detail given. Sentences may not always be well connected. Arguments are weakly presented. There will be a number of errors of grammar, punctuation and spelling. 0 – 2 marks

**Mid mark range**

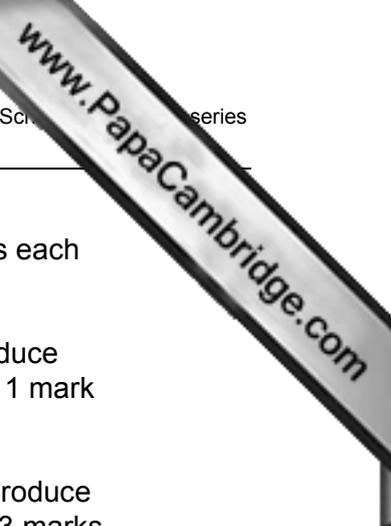
Some understanding of the difficulties that a manufacturer faces when working with knitted fabrics. Several problems are outlined but answer lacks depth. Sentences are reasonably well connected. Arguments are not always relevant. There may be a small number of errors of spelling, grammar and punctuation. 3 – 5 marks

**High mark range**

A detailed response with a very good understanding of the difficulties that a manufacturer faces when working with knitted fabrics. A wide range of problems are outlined. Sentences and paragraphs follow on from one another smoothly and logically. Arguments are relevant and well structured. There are few, if any errors of grammar, punctuation and spelling. 6 – 7 marks **(7 marks)**

**2 2** Embellishment could include: Embroidery (hand or machine), couching, pleating, quilting, beadwork, appliqué, shirring, tucks, crotchet, laser cutting

Accurate name of each technique given 1 mark each **(2 marks)**



**2 3** Two different techniques explained 5 marks each

**Low mark range**

Simplistic explanation of the production techniques required to produce suggested embellishment, little detail given. 0 – 1 mark

**Mid mark range**

Reasonable explanation of the production techniques required to produce suggested embellishment, some relevant detail given. 2 – 3 marks

**High mark range**

Thorough explanation of the production techniques required to produce suggested embellishment, Detailed response, relevant detail given. 4 – 5 marks (2 x 5 marks)#

**2 4**

	DYE TYPE	FIBRE TYPE
A	Reactive	Cellulosic (cotton, linen, viscose), Protein (wool) and Nylon
B	Disperse	Synthetics (polyester acrylic and nylon) and acetate
C	Direct	Cellulosic (cotton, linen, viscose) and Protein (wool and silk)
D	Acid	Protein (Wool), Nylon and Elastomerics
E	Vat	Cellulosics (cotton, linen, viscose)

1 mark for each correct match of dye type to fibre group. 5 x 1 mark (5 marks)

**2 5** Colour has to be fast to rubbing: Resistance of the colour to rubbing, either wet or dry. Even the most expensively dyed, deep shades may lose some colour in wet rubbing. Colour crocking is when the dye in a fabric is easily rubbed onto another fabric surface.

Colour has to be fast to washing: Fastness to washing determines the wash program, which must be used by the consumer. Fastness to a strong was at 60°C is expected.

Colour also has to be fast to the effects of perspiration (important for underwear, outerwear and sportswear), fast to light, weather, seawater, solvents and dry cleaning

**2 5 Low mark range**

**Contd** Simplistic explanation of the factors affecting colour fastness, very limited range given, inaccurate examples related to colour fastness. 0 – 1 marks

**Mid mark range**

Reasonable explanation of the factors affecting colour fastness, a range given, some accurate examples related to colour fastness. 2 – 3 marks

**High mark range**

Thorough explanation of the factors affecting colour fastness, relevant range given, very accurate examples related to colour fastness.

4 – 5 marks **(5 marks)**

**2 6** Luminescent – Invisible in daylight, visible in UV or infrared light - used in safety clothing for public services, on performance clothing for use in poor visibility, reflective strips and accessories.

Fluorescent – Colours that glow in daylight and also glow in UV light – used in safety clothing and products also used for fashion and clubwear.

Phosphorescent – Printing ink that glows in the dark once charged with light – Novelty clothing, clubwear, safety products.

Thermochromic – Printing inks that react and change with different temperatures – Use on children’s swimwear to indicate exposure to heat, performance clothing.

**Low Level mark:** Incorrect and confused explanation of selected printing media. Few if any examples given. 0 – 1 mark

**Mid Level mark:** Reasonable explanation of selected printing media. Some examples given but answer lacks detail. 2 – 3 marks

**High Level mark:** Correct and very accurate explanation of selected printing media. Relevant examples given which are clearly explained.

4 – 5 marks **(2 x 5 marks)**

**2 7****Sublimation (Transfer) printing:**

Also known as heat transfer printing, the design can be computer generated, and is then printed onto paper with disperse dyes. The printed paper is then passed through a heat transfer machine bringing the printed paper and fabric together at temperatures of around 210°C, the heat causes the dyes to sublime and transfer to the fabric. Smaller heat presses are available for prototype samples. Other advantages of this method include:

- Can print cut garment parts and small sections
- Rapid pattern change over
- Adaptable for short runs

**Digital printing:**

The textile designer works directly from the computer onto fabric. Nozzles from an ink jet printer apply colour directly onto fabric. This technique can print onto most fibre types. This method is very fast, is economical for short runs and is used for strike offs (print samples) and to test the market in prototypes

- Many colours can be printed and the repeat size is unlimited
- Can print cut garment parts and small sections
- Rapid pattern change over
- Adaptable for short runs

**Low mark range**

Simplistic explanation of the two methods of printing indicated. Limited reference to prototype textile products.

Sentences may not always be well connected. Explanations are weakly presented and may be imprecise. There will be a number of errors of grammar, punctuation and spelling. 0 – 2 marks

**Mid mark range**

Reasonable explanation of the two methods of printing indicated. Some reference to prototype textile products.

Sentences are reasonably well connected. Explanations are not always relevant. There may be a small number of errors of spelling, grammar and punctuation. 3- 5 marks

**High mark range**

Thorough explanation of the two methods of printing indicated. Detailed reference to prototype textile products.

Sentences and paragraphs follow on from one another smoothly and logically. Explanations are relevant and well structured. There are few, if any errors of grammar, punctuation and spelling. 6 – 8 marks **(8 marks)**