
2023 HSC Textiles and Design Marking Guidelines

Section I

Multiple-choice Answer Key

Question	Answer
1	D
2	B
3	D
4	D
5	A
6	C
7	A
8	B
9	C
10	D

Section II

Question 11 (a)

Criteria	Marks
<ul style="list-style-type: none"> • Outlines a suitable marketing strategy that could be used to promote the new range 	2
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

A marketing strategy could be to promote the range at local pools and surf competitions. Some children could wear the swimwear and the swimwear could be put on display.

Answers could include:

Promote the swimwear range on social media platforms which target the relevant demographic market, eg parents and grandparents as well as those who already value the brand.

Question 11 (b)

Criteria	Marks
<ul style="list-style-type: none"> • Describes the impact of the growing demand for textiles made from organic sources 	3
<ul style="list-style-type: none"> • Outlines the growing demand and/or the impact for textiles made from organic sources 	2
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

The growing demand for organic textiles means that more products are produced without the use of harmful pesticides, insecticides and chemicals, reducing the pollutants in the environment. However, if supply does not meet the growing demand, then these organic textiles could become more expensive.

Question 11 (c)

Criteria	Marks
• Explains the effect of globalisation on the availability of textiles in Australia	3
• Outlines the effect of globalisation on the availability of textiles in Australia	2
• Provides some relevant information	1

Sample answer:

Globalisation can help increase the supply and variety of textile goods which are manufactured in overseas countries, however, this results in fewer Australian-made products being available to consumers. Globalisation can also enable Australian manufacturers to produce their products overseas at lower labour costs. Hence, cheaper products are then available to Australian consumers.

Question 12 (a)

Criteria	Marks
• Outlines the main difference between <i>embroidery</i> and <i>applique</i>	2
• Provides some relevant information	1

Sample answer:

Embroidery involves the use of a needle and thread to create a design whereas applique involves attaching pieces of fabric to a background fabric to form a picture or pattern.

Question 12 (b)

Criteria	Marks
• Explains how the colour run could have been avoided, with reference to one principle of dyeing	3
• Outlines how the colour run could have been avoided	2
• Provides some relevant information	1

Sample answer:

If the dye runs it could be due to the dye molecules not being fixed to the fibres within the fabric. Fixation is done either by heating the dye bath, which causes the dye molecules to bond with the fibre, or by applying a mordant. The mordant has an affinity to both the dye and the fabric, thus anchoring the dye to the fibre and preventing colour run. The fabric needs to be rinsed well after dyeing to prevent colour run.

Question 12 (c)

Criteria	Marks
<ul style="list-style-type: none"> Explains how expertise can contribute to a designer's success and/or failure Provides examples 	3
<ul style="list-style-type: none"> Outlines how expertise can contribute to a designer's success and/or failure Provides example(s) 	2
<ul style="list-style-type: none"> Provides some relevant information 	1

Sample answer:

Victor and Rolf both obtained their qualification at the Dutch Academy of fashion design, giving them skills for success. They won a French fashion award which led them to international fame solidifying their position in the international arena. After 29 years of industry experience they now employ experienced patternmakers, pattern drafters and ateliers. This expertise has contributed to their increased success.

Question 13 (a)

Criteria	Marks
<ul style="list-style-type: none"> Outlines how the properties of bicomponent yarns contribute to the performance criteria of one textile product 	2
<ul style="list-style-type: none"> Provides some relevant information 	1

Sample answer:

Knit jumper for warmth. Bicomponent yarns consist of two polymers that are extruded together. If one of these polymers shrinks more than the other, it can produce a yarn with a crimp. This creates a bulky and lofty yarn which provides warmth, making it suitable for a knit jumper.

Question 13 (b)

Criteria	Marks
• Describes the advantages and disadvantages of the introduction of innovative machinery to employees	3
• Outlines the advantages and/or disadvantages of the introduction of innovative machinery to employees	2
• Provides some relevant information	1

Sample answer:

The advantages of innovative machinery such as CAD or CAM will allow employees the opportunity to be upskilled and retrained. If the business becomes more successful as a result of this change, employees may have more job security. However, low-level or unskilled workers may suffer job losses due to a possible reduction in the number of employees required.

Question 13 (c)

Criteria	Marks
• Describes how the properties of cotton and the fabric finish contribute to the functional requirements of a sunhat	3
• Outlines how the properties of cotton and/or the fabric finish contribute to the functional requirements of a sunhat	2
• Provides some relevant information	1

Sample answer:

Sunhats need to be comfortable, absorbent and strong. Cotton is a very absorbent fibre and as a result it will absorb perspiration. Cotton is strong, therefore the hat will be very durable. A soil resistant finish would be suitable as it can repel dirt if the hat is thrown in a bag or on the ground.

Section III

Question 14

Criteria	Marks
<ul style="list-style-type: none"> Provides a comprehensive justification of the use of one suitable printing method over another suitable method 	8
<ul style="list-style-type: none"> Provides a sound knowledge of two suitable printing methods <p>AND/OR</p> <ul style="list-style-type: none"> Provides a sound justification of the use of one suitable printing method over another suitable method 	6–7
<ul style="list-style-type: none"> Provides some knowledge of one or two suitable printing methods Outlines the choice of one method over the other 	4–5
<ul style="list-style-type: none"> Outlines the use of one or two printing methods 	2–3
<ul style="list-style-type: none"> Provides some relevant information 	1

Sample answer:

Two possible printing methods that could be used are roller printing and Direct Digital Printing (DDP).

Roller printing requires rollers to be engraved with a design, each roller representing a different colour, so preparation time can be quite lengthy and costly. In comparison, DDP involves the design being created on specialised software, and once this is done the fabric is fed through the computer with multiple colours sprayed at once. Unlike roller printing, the design can easily be changed using CAD software, so if design adaptability is the deciding factor, DDP would be the better option.

Roller printing uses a wet dye paste, therefore drying time needs to be factored in, and fabric for DDP requires pre-treatment with chemicals to fix the dye onto the fabric. It may also need to be heat set. Therefore, both printing methods have their challenges.

Roller printing produces sharper image edges compared to DDP however, as the flags will be displayed up high, sharpness is not a critical factor as it is far from direct eye view.

The fast setup and turn around time of DDP would allow the council to make a sample of the design and obtain approval before a large run of 200 flags is produced. In comparison the sampling process for roller printing would require more time.

Both methods are appropriate in their quality, accuracy, colour options and method of production, however, the most effective method for the 200 flag design production would be DDP over roller printing as this method has a faster setup time, produces high quality accurate designs, and has a fast turn around time.

Question 15

Criteria	Marks
<ul style="list-style-type: none"> • Demonstrates comprehensive knowledge of the properties of the selected fibre, yarn and fabric structure • Justifies the selection of the fibre, yarn and fabric structure for a winter coat 	8
<ul style="list-style-type: none"> • Demonstrates sound knowledge of the properties of the selected fibre, yarn and fabric structure • Provide some justification for the selection of the fibre, yarn and fabric structure for a winter coat 	6–7
<ul style="list-style-type: none"> • Demonstrates some knowledge of the properties of the selected fibre and/or yarn and/or fabric structure suitable for a winter coat 	4–5
<ul style="list-style-type: none"> • Outlines some properties of the fibre and/or yarn and/or fabric for a winter coat <p>OR</p> <ul style="list-style-type: none"> • Outlines some functional requirements of a winter coat 	2–3
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

A winter coat needs to be comfortable, warm, wind-resistant and preferably shower-proof. A suitable fibre, yarn and fabric structure combination could be a wool, soft spun, twill weave fabric.

Wool is a natural protein fibre that has excellent thermal properties thus keeping the wearer warm in cold and windy conditions. It has natural wicking properties and can absorb moisture without feeling wet. Therefore, the coat can be worn during light rain or snow as the moisture will bead and run off.

Wool is durable, strong, resilient and crease resistant. As a result, the winter coat will be comfortable to wear.

A soft spun low twist yarn made using the woollen system will produce a bulky, lofty, stretchy yarn. This will produce a fabric that is soft and bulky contributing to the coat's comfort and warmth. The low twist produces a fuzzy surface that will add to the insulating properties required of a winter coat as well as providing crease resistant properties.

A twill weave is one of the strongest weaves so will provide a surface that is very durable. The characteristic diagonal surface hides stains easily, making it suitable for a coat that may get wet or soiled if it is worn on windy, dusty days. It has good wrinkle recovery so the coat will not crease easily.

Answers could include:

Polyester / textured low twist filament yarn / weft knit
 Cotton / high twist combed yarn / plain weave

2023 HSC Textiles and Design Mapping Grid

Section I

Question	Marks	Content	Syllabus outcomes
1	1	Design — external factors	H6.1
2	1	Properties and performance of textiles — washable webs	H3.2
3	1	ATCFAI — pollution	H5.2
4	1	Properties and performance of textiles — end-use, fibre, yarn, fabric	H3.1
5	1	ATCFAI — appropriate and sustainable textile resources	H5.2
6	1	ATCFAI — changing consumer demand	H5.2
7	1	Design — factors that determine success or failure	H6.1
8	1	Design — historical design development	H6.1
9	1	Properties and performance of textiles — innovations and emerging technologies	H3.1
10	1	Properties and performance of textiles — end-use application	H3.1

Section II

Question	Marks	Content	Syllabus outcomes
11 (a)	2	ATCFAI — marketplace – marketing	H5.1
11 (b)	3	ATCFAI — current issues	H5.2
11 (c)	3	ATCFAI — current issues – globalisation	H5.2
12 (a)	2	Design — fabric colouration and decoration – embroidery and appliqué	H1.3
12 (b)	3	Design — fabric colouration and decoration – dyeing	H1.3
12 (c)	3	Design — contemporary designers – factors that determine the success or failure of designers	H6.1
13 (a)	2	Properties and performance of textiles — innovation and emerging technologies – the use of textiles to enhance performance	H3.2
13 (b)	3	Properties and performance of textiles — advantages and disadvantages of innovation and related textile technologies to benefit the employee and manufacturer	H3.2
13 (c)	3	Properties and performance of textiles — end-use application – finishing	H3.1

Section III

Question	Marks	Content	Syllabus outcomes
14	8	Design — fabric colouration – methods of fabric decoration	H1.3
15	8	Properties and performance of textiles — end-use application	H4.1