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# 2015 HSC Textiles and Design Marking Guidelines

## Section I

### Multiple-choice Answer Key

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

# Section II

## Question 11 (a)

| Criteria | Marks |
|---|---|
| • Clearly outlines why some Australian consumers may prefer to buy clothing made from organic fibre sources | 2 |
| • Identifies a relevant reason for preferring organic fibre clothing<br>OR<br>• Provides some information on organic fibres | 1 |

***Sample answer:***

Consumers who want to protect the environment, may choose clothing made from an organic fibre source, as harmful chemicals are not used during growing and processing stages.

***Answer could include:***

Consumers may be concerned with the use of chemicals in fibre production, in relation to allergies. So they may choose organic fibre sources for baby wear, towels etc.

## Question 11 (b)

| Criteria | Marks |
|---|---|
| • Recognises the difference between mass-produced and niche textile products<br>• Identifies an appropriate example of each | 3 |
| • Shows some understanding of mass-produced and/or niche textile products<br>• Identifies an appropriate example of mass produced or a niche product | 2 |
| • Identifies a feature of a mass-produced or niche textile product | 1 |

***Sample answer:***

Mass-produced textile products are basic, generic products, which are manufactured on a large scale, eg school socks. Niche textile products are produced on a smaller scale and appeal to a smaller target market with specific needs, eg a high technology extreme weather tent.

## Question 12 (a)

| Criteria | Marks |
|---|---|
| • Clearly outlines one principle of textile dyeing | 2 |
| • Provides some information relevant to textile dyeing | 1 |

***Sample answer:***

Migration occurs when the dye molecules in the dye liquor are attracted to and move towards the textile fibres. As the fibres achieve maximum dye uptake, the dye liquor reaches a point of exhaustion.

***Answers could include:***

- Agitation: stirring of the dye liquor and fabric is often used to assist the dye molecules to move into the amorphous regions of the fibres resulting in greater uniformity and level dyeing.
- Application of heat: the temperature can be increased via hot water, steam or dry heat, which accelerates the migration of the dye molecules to the surface of the fibre.
- Diffusion: The dye molecules move or diffuse into the amorphous regions of the textile, ready to be anchored by the process of fixation.

## Question 12 (b)

| Criteria | Marks |
|---|---|
| • Demonstrates a thorough understanding of how a textile art form can be used as a medium for communication | 4 |
| • Demonstrates a sound understanding of how a textile art form can be used as a medium for communication | 3 |
| • Outlines some features of a textile art form and/or the use of textiles for communication | 2 |
| • Provides some relevant information about a textile art form | 1 |

***Sample answer:***

*India – Sari*
A textile art form, such as embroidery used on Indian Sari fabric, can communicate social status. This can be through the quality of materials used, such as gold threads, intricacy of design and choice of techniques such as beading, shisha mirror work and embroidery stitches. The more expensive and time-consuming the embroidery is to complete, the more it will communicate that the wearer belongs to the upper classes.

***Answers could include:***

*Japan – Kimono*
The Japanese kimono acts as a textile art form and method of communication, signifying marital status, age, etc. A married woman wears a flat knot in her obi sash, whereas a young person wears hers tied 'butterfly' fashion. Colour reflects age, with bright colours reserved for children and more subdued colours for older wearers. Kimono fabric designs communicate different meanings, such as the seasonal symbolism of cherry blossom prints worn in spring.

**Question 12 (c)**

| Criteria | Marks |
|---|---|
| • Demonstrates a thorough understanding of how textile fabric design can be influenced by the availability of resources | 4 |
| • Demonstrates a sound understanding of how textile fabric designs can be influenced by the availability of resources | 3 |
| • Outlines some features of textile fabric design and/or resource availability | 2 |
| • Provides some relevant information on textile fabric design or resource availability | 1 |

***Sample answer:***

Indian fabric design is influenced by the fibres available and human expertise. Cotton plants are grown in Southern warm regions; wild silk moths native to the Central and North Eastern parts of the country create silk; and the fleece of mountain goats of the cold regions is spun into wool. India is rich in human resources, with traditional weaving skills (such as Ikat weaving) passed down through generations of families. This process, along with other decorative techniques, such as embroidery, are time consuming and require a large skilled workforce.

## Question 13 (a)

| Criteria | Marks |
|---|---|
| • Outlines the functional properties necessary for a fabric suitable for a sports shirt | 2 |
| • Provides some information relevant to sports shirt fabric | 1 |

***Sample answer:***

The fabric should either have good absorbency or have wicking qualities. It should be flexible, have good handle and be soft on the skin, and should be able to be easily dyed or printed.

## Question 13 (b)

| Criteria | Marks |
|---|---|
| • Clearly explains how the use of microfibres enhances the performance of ONE specific textile item | 3 |
| • Links the use of microfibres to fabric performance | 2 |
| • Provides some information relevant to microfibres | 1 |

***Sample answer:***

Microfibres – formal gown. The fineness of the fibres creates very good drape in the fabric. It dyes extremely well and so can be available in a large range of bold colours. Microfibres are washable and dry-cleanable, allowing for easy care of the formal garment after use.

***Answers could include:***

*Extreme sports wear – for a ski jacket, the fine microfibres can be packed so closely together that the fabric becomes impervious to wind and water, making it comfortable to wear and protecting the wearer from harsh environmental conditions.

*Cleaning cloths – when used in cleaning cloths, the fine microfibres encourage the wicking of moisture and the trapping of dirt particles which are held in the fabric.

## Question 13 (c)

| Criteria | Marks |
|---|---|
| • Shows a thorough understanding of the properties of cotton fibre, staple spun yarn, twill weave denim fabric<br>• Clearly relates the fibre, yarn and fabric properties to the performance requirements of jeans | 5 |
| • Shows a sound understanding of the properties of cotton fibre, staple spun yarn, twill weave denim fabric<br>• Links the fibre, yarn and fabric properties to the performance requirements of jeans | 4 |
| • Outlines some properties of cotton fibre and/or staple spun yarn and/or twill weave denim fabric<br>• Provides some link between these fibre and/or yarn and/or fabric properties and the features of jeans | 3 |
| • Lists some properties of a cotton fibre and/or staple spun yarn and/or twill weave denim fabric and/or jeans | 2 |
| • Provides some information relevant to denim fabric or jeans | 1 |

***Sample answer:***

The excellent absorbency and soft handling of cotton fibres greatly contribute to the comfort of jeans, as they feels smooth against the skin, and absorb perspiration. Cotton fibres are very strong and this contributes to the durability of jeans.

The bulkiness of staple spun fibres adds texture to the appearance and handle of jeans, and increases the absorption (for comfort) and resiliency of the fibres.

The high strength of twill weave is the major contributor to the durability of jeans. The relatively poor drape of twill weave gives the jeans a firm structure which resists creasing and also adds an aesthetic textural design detail in the diagonal lines created on the surface of the fabric.

# Section III

## Question 14 (a)

| Criteria | Marks |
|---|---|
| • Clearly describes how designer/s could respond to economic and social influences to maintain their success | 5 |
| • Describes how designer/s could respond to economic and social influences to maintain their success | 4 |
| • Outlines how designer/s could respond to economic and/or social influences | 3 |
| • Identifies ways that designer/s may respond to economic or social influences or identifies social and/or economic factors that influence designers | 2 |
| • Provides some relevant information about influences on designer/s | 1 |

***Sample answer:***

Successful designers, such as Collette Dinnigan, use their business expertise to identify economic influences and markets, and manage the success of their brand by meeting the needs of the consumer and their budgets at various times. After the 9/11 attacks and the Global Financial Crisis, Dinnigan lowered her prices and released a 'Wild Hearts' lingerie range in Target, as well as a more modestly priced diffusion brand, 'Collette by Collette Dinnigan' for sale in David Jones, to suit a recovering economy. To manage social influences, early in her career Collette targeted the European market by starting in Paris, and soon her lingerie-inspired, sophisticated and feminine dresses were favoured among international celebrities such as Halle Berry, Nicole Kidman and Angelina Jolie. The wearing of her designs by celebrities made them very sought after by the general public, providing a source of inspiration for other designers and sparking trends in society, such as the wearing of underwear as outerwear.

***Answers could include:***

- Economic influences may include:
  - The value of the dollar
  - The state of the economy
- Social influences may include:
  - Social media
  - Current trends

## Question 14 (b)

| Criteria | Marks |
|---|---|
| • Provides a thorough explanation of how the sources of inspiration of designer/s can be reflected in the fabric decoration and/or fabric colouration used in their designs<br>• Supports answer with clear and relevant examples | 9–10 |
| • Provides an explanation of how the sources of inspiration of designer/s can be reflected in the fabric decoration and/or fabric colouration used in their designs<br>• Supports answer with relevant example(s) | 7–8 |
| • Demonstrates a sound understanding of how the inspirations of designer/s can be linked to the fabric decoration and/or fabric colouration used<br>• Provides relevant example(s) | 5–6 |
| • Outlines the inspiration(s) of a designer and provides a link to the feature(s) of their design work | 3–4 |
| • Provides some relevant information about a designer | 1–2 |

***Sample answer:***

Textile designers are influenced by a huge variety of inspirations, which can be clearly reflected in the fabric decoration and fabric colouration used in their designs.

For example, Collette Dinnigan's choices of fabric decoration and colouration techniques are inspired by feminity, Indian culture, as well as classic designs such as Yves Saint Laurent and Christian Dior. This can be seen in the pastel colour palette, delicate embroidered embellishments and textural manipulations of her wedding dresses and formal wear garments, which are often heavily beaded using Indian techniques, reminiscent of Dior.

Dinnigan's designs feature printed fabrics inspired by floral motifs and feminine colours, which also influence her application of floral lace fabrics, embroidery and sheer panel detailing, adding textural depth to her fabric decoration.

Another example is Akira Isogawa who is strongly inspired by his Japanese cultural background. Vintage kimono textiles have inspired him to design fabrics with all-over designs and prints of flowers, such as camellias and chrysanthemums, which he embellishes with embroidery.

His use of the colour red in his printed fabrics was inspired by the red under-kimono worn by his grandmother. He has also been influenced by the layering technique of the kimono garment which he translates into his designing by layering sheer fabrics partially over printed fabrics, to achieve a variety of fabric colouration effects.

***Answers could include:***

- Elie Saab is inspired by his Lebanese background, producing a fusion of western and eastern culture as seen in his heavily embroidered and elegant fabrics.
- Vivienne Westwood has been inspired by punk and clothing history, producing fabrics ranging from 1800s inspired floral printed fabrics used for 'red carpet gowns', to slashed, heavily studded, pinned fabrics made into corsets and fitted jackets.

## Question 15 (a)

| Criteria | Marks |
|---|---|
| • Provides a thorough description of the design features and fabric properties of a reusable shopping bag | 5 |
| • Provides a sound description of the design features and fabric properties of a reusable shopping bag | 4 |
| • Provides some understanding of design features and/or fabric properties of a reusable shopping bag | 3 |
| • Lists the design features and/or fabric properties applicable to a reusable shopping bag | 2 |
| • Provides some information relevant to reusable shopping bags | 1 |

***Sample answer:***

The design features and fabric properties of a reusable shopping bag should ensure that it is able to carry out its intended use in a practical and ergonomic manner, reflective of its extended lifespan and usefulness.

As a reusable item, the bag should have a low environmental impact, so that when it is finally disposed of it can be recycled. It is designed with sufficient strength and durability to be able to withstand the weight-carrying demands of shopping items such as groceries. It should also be able to be constructed in a variety of styles such as gussetted or pleated designs to suit a variety of shopping requirements, and with the flexibility of having logos or designs easily applied.

A reusable shopping bag should be designed so that the consumer will want to use it repeatedly, so that it is only discarded when it has worn out. It should be comfortable to carry, so the straps should be not too narrow, and they could be of an appropriate length so that the bag can be flexibly carried with either an extended arm, or on the shoulder. The size of the bag depends on what is to be carried – smaller for heavier grocery items and larger for lightweight items.

## Question 15 (b)

| Criteria | Marks |
|---|---|
| • Provides a thorough explanation of the use of computer-linked machines in the textile industry<br>• Clearly relates their use to the effects on the environment and the consumer<br>• Supports answer with relevant examples | 9–10 |
| • Provides an explanation of the use of computer-linked machines in the textile industry<br>• Links their use to the effects on the environment and the consumer<br>• Includes relevant example(s) | 7–8 |
| • Demonstrates a sound understanding of the use of computer-linked machines in the textile industry<br>• Shows some link between their use and the effects on the environment and/or the consumer<br>• Includes at least one relevant example | 5–6 |
| • Outlines use(s) of computer-linked machines and/or their effect(s) on the environment and/or the consumer | 3–4 |
| • Provides some relevant information about computer-linked machines | 1–2 |

***Sample answer:***

Computer-based machines allow designers in all sectors of the industry to develop and modify their work on the screen. Changes are quickly made and as a result designs can be programmed faster, providing more variety for consumers and a quicker release time for new designs. For example designers can quickly respond to changing consumer trends in colour or the silhouette of garments, and avoid over-production which could end up in landfill.

CAM allows for construction processes to be computerised and this means that there is a less likely chance of human error, compared to manual operations. This reduces wastage and lowers costs for the manufacturer, which in turn could be a saving for the consumer and the environment, by not wasting resources.

CAD allows designers to determine the most efficient cutting layout; the overall costing of a product is therefore more accurate, resulting in less wastage, which again can be a saving for consumers and the environment.

CAD-linked embroidery machines can produce customised logos on work or sports clothes quickly and cheaply for the consumer.

Computer-linked machines such as 3D Symcad Optifit allow consumers to have their body measurements taken digitally for the fast and efficient production of made-to-measure clothing. This can reduce the environmental impact of landfill by reducing the amount of unwanted clothing, and delivering to consumers clothing that is individually designed and fits well.

Other CAD and CAM technologies that benefit the consumer include seamless technologies. These provide a range of end-uses including compression garments for medical use, seamless underwear and sports gear that provide added comfort and fit. The advantage to the consumer is the availability of a wide range of specialised functional garments. By producing the whole garment, cutting is eliminated and as result there is no off-cut wastage having a negative impact on the environment as it avoids landfill.

# 2015 HSC Textiles and Design Mapping Grid

**Section I**

| Question | Marks | Content | Syllabus outcomes |
|---|---|---|---|
| 1 | 1 | Design – embroidery | H 1.3 |
| 2 | 1 | Cultural influence | H 6.1 |
| 3 | 1 | Finishing | H 4.1 |
| 4 | 1 | Globalisation | H 5.2 |
| 5 | 1 | Digital printing | H 3.2 |
| 6 | 1 | Bicomponent yarns | H 3.2 |
| 7 | 1 | Designers – trends | H 6.1 |
| 8 | 1 | Fibre/yarn/fabric | H 3.1 |
| 9 | 1 | Sustainability | H 5.2 |
| 10 | 1 | Fibre/yarn/fabric – end use | H 4.1 |

**Section II**

| Question | Marks | Content | Syllabus outcomes |
|---|---|---|---|
| 11 (a) | 2 | Current issues | H 5.2 |
| 11 (b) | 3 | Aspects of marketing | H 5.1 |
| 12 (a) | 2 | Principles of dyeing | H 1.3 |
| 12 (b) | 4 | Culture – textile art forms – communication | H 6.1 |
| 12 (c) | 4 | Culture – textile design – resources geographic location | H 6.1 |
| 13 (a) | 2 | Fibre/yarn/fabric – properties | H 3.1 |
| 13 (b) | 3 | Microfibres | H 3.2 |
| 13 (c) | 5 | Fibre/yarn/fabric – properties | H 3.1 |

**Section III**

| Question | Marks | Content | Syllabus outcomes |
|---|---|---|---|
| 14 (a) | 5 | Designer – external factors | H 6.1 |
| 14 (b) | 10 | Designer – inspiration/application to fabric decoration and colouration | H 6.1 |
| 15 (a) | 5 | End-use properties | H 4.1 |
| 15 (b) | 10 | Computer-linked machinery | H 3.2 |