

2017 HSC Textiles and Design

Marking Guidelines

Section I

Multiple-choice Answer Key

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

Section II

Question 11 (a)

Criteria	Marks
<ul style="list-style-type: none"> Outlines how the design of active sportswear reflects changing consumer demand 	2
<ul style="list-style-type: none"> Provides some relevant information 	1

Sample answer:

Consumers participating in different types of sport, eg yoga, athletics, cycling, has led to the need for different fabrics and designs. For example, a cyclist requires seat padding in their pants.

Answers could include:

- The desire for fashionable, fitted, stylish and comfortable active sportswear for different body shapes has resulted in it being made available to fit a greater range of sizes.
- Consumers have adopted a more casual lifestyle and a relaxed approach to dressing. This has resulted in active sportswear being accepted as everyday wear so therefore sportswear is being designed to reflect current fashion.

Question 11 (b)

Criteria	Marks
<ul style="list-style-type: none"> Provides characteristics and features of a suitable marketing strategy for sun protection clothing for teenagers 	3
<ul style="list-style-type: none"> Outlines a marketing strategy for sun protection clothing for teenagers 	2
<ul style="list-style-type: none"> Provides some relevant information 	1

Sample answer:

As a promotional strategy, a manufacturer could sponsor a personality who teenagers will identify with. For example, surfer Stephanie Gilmore could wear the SPF clothing at a televised surf carnival, creating interest in the product. By ensuring the brand name is clearly shown teenagers could search online for products to purchase.

Answers could include:

- Product planning – current fashion trends in style and colour, body covering
- Place and distribution – online website, advertising pop-ups
- Price structure – SPF products comparable in price to other products that appeal to teenagers
- Promotional strategies – use of social media sites.

Question 11 (c)

Criteria	Marks
<ul style="list-style-type: none"> • Clearly explains the relationship between one aspect of textile production and the use of resources in an environmentally sustainable manner 	3
<ul style="list-style-type: none"> • Outlines an aspect of textile production that is environmentally sustainable AND/OR • Outlines the environmentally sustainable use of resources 	2
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

The production of organic cotton eliminates the use of pesticides and herbicides. This means the water run-off is chemical free. The soil/land used for crops has not been contaminated with harmful chemicals. The resulting fibre is also contaminant free.

Answers could include:

- In pad batch-dyeing, dye is forced through rollers onto the surface of fabric. Pad dyeing allows for large amounts of fabric to be dyed and uses a small quantity of dye solution. This results in minimal residual dyestuff being wasted and less water being used in production.
- Using recycled fabrics from clothing and furnishings to upcycle/remake into new textile items, eg a lady's dress into a child's dress. This ensures old clothing does not end up as landfill and not as many new fabrics need to be produced.

Question 12 (a)

Criteria	Marks
<ul style="list-style-type: none"> • Provides characteristics and features of the relationship between trends in society and the work of a nominated designer 	4
<ul style="list-style-type: none"> • Outlines the relationship between trend/s in society and the work of a designer 	3
<ul style="list-style-type: none"> • Outlines the features of the work of designers <p>AND/OR</p> <ul style="list-style-type: none"> • Outlines a societal trend/s that may influence designers <p>AND/OR</p> <ul style="list-style-type: none"> • Identifies a trend and links it to the work of designers 	2
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

Designer Studied: Peter Alexander – example of work: pyjamas

There is a trend of women choosing men’s style pyjamas as sleepwear that is fashionable and comfortable. Peter Alexander has met this trend by designing pyjama pants and tops made out of soft cottons, printed with bright fashionable images. The trend to display current popular icons, eg movie characters, nostalgic/retro images such as Beauty and the Beast and Vegemite, have all been incorporated into his printed fabric designs.

Answers could include:

Lorna Jane Clark – the trend for wearing fashionable fitness wear while exercising and in day-to-day life has been met by Lorna Jane clothing. She has created tights and tops in a fashionable range of sizes, fabrics and colours. The trend of people posting inspirational slogans on Instagram pages has been incorporated into Lorna Jane’s written prints on many of her tops, encouraging people to strive to improve.

Question 12 (b)

Criteria	Marks
• Shows a clear relationship between ONE influence and historical design development in a focus area	4
• Identifies ONE influence and links it to historical design development in a focus area	3
• Outlines some historical design developments OR outlines some influences	2
• Provides some relevant information	1

Sample answer:

The development of smart fabrics has impacted design development of apparel such as active sportswear. Historically, the fibres used have been cotton and synthetics, using traditional fabric structures. Today designers are responding to the desire for sports clothing to actively assist in enhancing performance. These new fabrics may incorporate features such as electronic circuitry, nano technology and finishes that can help regulate body temperature and control muscle vibrations.

Answers could include:

- Lycra replaced wool for swimwear which changed the design to make it more form fitting, lightweight and quick drying
- Tents – zipper, lightweight fabric, water resistant
- Costumes – velcro replaced lacing and buttons for quick changing in theatre costumes
- Neoprene – used in formal wear and swimwear, shaping and more figure hugging outfits can be produced
- War – role of women, employment in male roles, with appropriate clothing styles
- Celebrity – jeans from work wear to fashion
- Sun protection – covering the body for protection using SPF fabrics.

Question 13 (a)

Criteria	Marks
• Provides features or characteristics of bicomponent yarns	2
• Provides some relevant information	1

Sample answer:

Bicomponent yarns contain two fibre components that may be physically or chemically different that are extruded together to form a yarn.

Answers could include:

- Types of bicomponent yarns include biconstituent, core and sheath and side-by-side extrusion techniques
- Bicomponent yarns can be engineered to make a yarn for a specific end use.

Question 13 (b)

Criteria	Marks
<ul style="list-style-type: none"> • Outlines the advantages of using washable webs and links these to consumer use • Supports answer with a relevant example 	3
<ul style="list-style-type: none"> • Lists some advantage of using washable webs AND/OR <ul style="list-style-type: none"> • Identifies consumer use/s of washable webs 	2
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

Washable webs can be used as interfacing to provide stiffening and support to collars and facings. They are economical to use, do not fray and are very durable making them easy to use. They can be frequently washed providing long-term support for the garment.

Answers could include:

- Wash cloth – highly absorbent, can be used repeatedly then disposed of, can trap dirt and release easily, inexpensive to purchase
- Non-woven enviro shopping bags – can be washed and reused as needed instead of single use plastic bags.

Question 13 (c)

Criteria	Marks
<ul style="list-style-type: none"> • Clearly explains the extent to which the introduction of computer-aided manufacture (CAM) has affected manufacturing in the textile industry 	3
<ul style="list-style-type: none"> • Outlines how CAM has affected manufacturing in the textile industry AND/OR <ul style="list-style-type: none"> • Outlines the use of CAM in the textile industry 	2
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

The introduction of CAM can speed up production rates and improve quality. As new equipment is purchased, start-up costs could be high and some jobs may be lost. However, new jobs could be created that will require new skills and training.

Section III

Question 14

Criteria	Marks
<ul style="list-style-type: none"> • Demonstrates extensive knowledge of the relationship between textiles from a nominated culture and how they act as a medium for self-expression and communication within the culture • Supports answer with relevant examples 	8
<ul style="list-style-type: none"> • Provides a thorough explanation of the link between textiles and their use for self-expression and communication within a nominated culture • Provides relevant examples 	6–7
<ul style="list-style-type: none"> • Shows sound knowledge of textiles from a nominated culture and links their use to self-expression and/or communication • Provides example/s 	4–5
<ul style="list-style-type: none"> • Describes a relevant cultural textile/s <p>OR</p> <ul style="list-style-type: none"> • Outlines the use of textiles for self-expression and/or communication 	2–3
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

Indonesia

- In Indonesia the most basic and traditional way people use to express culture through clothing is by wrapping traditional *batik* and *ikat* fabrics around their bodies.
- *Batik* shirts are usually worn during formal occasions such as weddings, traditional ceremonies, formal meetings and communal gatherings. *Batik* shirts have two types; long sleeves for formal occasions, and short sleeves for casual to semi-formal occasions. *Batik* shirts (or blouses for women) have patterns which differ from region to region, each having their own motifs, colours or patterns which express their connection to their respective local traditions and culture. Colour, shapes and their arrangements all communicate special meanings eg Javanese batik features lotus motifs in brown, indigo and yellow colours.
- The *kebaya* (jacket) is made from sheer material such as silk, thin cotton or semi-transparent nylon or polyester, depending on the economic and social status of the wearer. It can also be adorned with brocade or floral pattern embroidery to varying extents. For example, the fine silk embroidered *Kebaya* worn by the Indonesian first lady and wives of Indonesian diplomats during official national events, and also by Indonesian ladies when attending traditional ceremonies and weddings, communicates the formality of the occasion and communicates their status.
- Each different region, island, tribe, and culture in Indonesia has its own headdress, usually made of traditional fabrics, which identifies the people of the area. The black velvet *peci* has become the national male headdress, which communicates nationalistic sentiments and expresses Indonesian identity. The Indonesian President customarily wears *peci* as part of his official presidential attire.

Answers could include:

JAPAN – sleeve length communicates marital status; fabric prints reflect the seasons; quality silk and highly decorated kimono/obi indicate wealth; multiple family crests indicate a garment to be worn to formal occasions; Harajuku-style street wear, combining traditional and western clothing styles, allows people to express a desire to embrace the old and the new; dressing up as anime characters communicates a keen interest in Japanese film productions.

Question 15

Criteria	Marks
<ul style="list-style-type: none"> • Demonstrates extensive knowledge of the properties of a fibre composition, yarn type and fabric structure suitable for a school shirt • Clearly relates the fibre, yarn and fabric properties to the performance requirements of a school shirt 	8
<ul style="list-style-type: none"> • Demonstrates thorough knowledge of the properties of a fibre composition, yarn type and fabric structure suitable for a school shirt • Links the fibre, yarn and fabric properties to the performance requirements of a school shirt 	6–7
<ul style="list-style-type: none"> • Demonstrates knowledge of the properties of a fibre composition and/or yarn type and/or fabric structure for a school shirt • Provides some link between these properties and the performance requirements of a school shirt 	4–5
<ul style="list-style-type: none"> • Outlines some properties of a fibre composition and/or yarn type and/or fabric structure for a school shirt <p>AND/OR</p> <ul style="list-style-type: none"> • Identifies some performance requirements of a school shirt 	2–3
<ul style="list-style-type: none"> • Provides some relevant information 	1

Sample answer:

A school shirt needs to be absorbent, have a smooth handle and good heat conductivity so as to be comfortable on the skin; durable for everyday wear; strong, in order to withstand frequent laundering; have good dimensional stability to retain appearance; be easily dyed to represent school colours; have good resilience, leading to crease resistance; and be quick drying for easy care. A cotton/polyester blend, high twist staple yarn, plain weave fabric will satisfy all of these performance criteria.

Cotton fibre has excellent absorbency due to its hydrophilic nature, which means it absorbs perspiration and also dyes extremely well. Its smooth surface provides good handle and good heat conductivity, and all of this combines to provide a fibre that is very comfortable on the skin.

Cotton is strong, and stronger when wet, so is able to withstand everyday wear and tear and frequent laundering.

Polyester is strong due to the highly crystalline nature of the fibre and this also makes it resilient, giving the blend excellent crease recovery.

Polyester is hydrophobic, therefore it has excellent drip-dry properties. Its poor absorbency can lead to discomfort on hot days, however this is partly compensated by its good wicking ability whereby liquid can travel along the fibre surface.

A suitable yarn, spun from cotton staple fibres and polyester yarn cut into staple lengths, will have a high twist, resulting in a firm, smooth, strong yarn with good abrasion resistance and quick drying properties.

Plain weave is the least expensive weave. It has no right or wrong side so is economical to manufacture. It has a smooth, crisp handle so it feels soft against the skin. It is a durable weave so is suitable for wearing every day, and withstands frequent laundering. It has little elasticity, so it holds its shape, but can crease easily. However the polyester fibre content counteracts this.

Answers could include:

- A suitable yarn spun from cotton staple fibres and polyester yarn cut into staple lengths will have a medium twist, resulting in a yarn with good resilience and absorbency. It could be a moderately bulky yarn with a soft handle.
- A weft knit fabric is suitable for the school shirt as the knit structure gives comfort with movement, good crease resistance and easy care, while not requiring ironing.

2017 HSC Textiles and Design Mapping Grid

Section I

Question	Marks	Content	Syllabus outcomes
1	1	Factors affecting designers	H6.1
2	1	ATCFAI – mass production	H5.2
3	1	ATCFAI – care labels	H5.2
4	1	Finishing	H4.1
5	1	ATCFAI – globalisation	H5.2
6	1	Digital printing	H3.2
7	1	Cultural influences on design	H6.1
8	1	Dyeing	H1.3
9	1	Microfibres	H3.2
10	1	End use	H3.1

Section II

Question	Marks	Content	Syllabus outcomes
11 (a)	2	Consumer demand and lifestyle	H5.2
11 (b)	3	Marketplace	H5.1
11 (c)	3	Environmentally sustainable	H5.2
12 (a)	4	Designer/trends	H6.1
12 (b)	4	Historical design development	H6.1
13 (a)	2	Bicomponent yarns	H3.2
13 (b)	3	Washable webs – consumer	H3.2
13 (c)	3	CAM – manufacturer	H3.2

Section III

Question	Marks	Content	Syllabus outcomes
14	8	Culture – self-expression and communication	H6.1
15	8	End use – school shirt. Fibre, yarn and fabric	H4.1