#### MARK SCHEME for the October/November 2014 series

### **6130 FASHION AND TEXTILES**

6130/01

Paper 1, maximum raw mark 100

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1 mark to be awarded for each correct point – no half marks.

#### Section A

# 1 (a) (i) Cotton/polyester gingham fabric is suggested for this <u>style</u>. Give <u>two</u> reasons why this fabric is suitable. [2]

Answer could include:

Name of fabric	Cotton/polyester gingham
Reason 1	Fabric gathers easily around waist;
Reason 2	Lightweight fabric, good for warm weather;

Any other relevant point; colourful for children, washable, ease of care 1 mark for each point

# (ii) Name <u>two cotton</u> fabrics with different weaves which would be suitable for the shorts in Fig. 1. [4]

	Name of Fabric	Name of Weave
Cotton fabric 1	Suitable fabrics: cotton poplin; cotton cambric; calico; any other plain weave cotton fabrics	Plain weave
Cotton fabric 2	cotton gabardine; cotton twill; cotton herringbone; denim; drill; any other twill weave fabrics	Twill weave

1 mark for each correct point; weave must be correct for named fabric, e.g. sateen = satin weave

#### (iii) Give two reasons why the shorts in Fig. 1 are suitable for summer wear. [2]

Answer could include: loose fitting style; allows free movement; style is not too bulky for hot weather – legs not covered;

#### (iv) Name and describe the meaning of each of these pattern symbols.

[4]

Answer could include:

Pattern Symbol	Name of Pattern symbol	Meaning of pattern symbol
See Q. Paper	Notch marking on cutting line Balance mark	Cut fabric along line and cut notches outwards to mark where pattern e.g. side seam of skirt pieces need to match together
See Q Paper	Place on fold line	Where fabric needs to be double in the middle e.g. back bodice

1 mark for each correct point

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# (v) Explain, with labelled diagrams, how you would lengthen the pattern for the shorts by 5 cm using a pattern marking. [4]

#### Answer could include:

draw a line across the pattern to indicate alteration line or use the lengthening/ shortening line; cut along the line or between the two lines if lengthening/shortening lines are used; insert a piece of paper 5 cm wide and tape or pin in place. Max of 2 marks if 5 cm is added to the hem.

#### (vi) Suggest <u>two</u> reasons why it may be necessary to lengthen the pattern piece in (v).

[2]

[3]

Reason 1	Child may be tall for their age/pattern size To reuse pattern to make trousers/to change style of garment
Reason 2	Child may prefer longer length shorts

1 mark for each correct point Do not allow change of season or age.

### (b) (i) The waistline for the shorts in Fig. 1 is elasticated. Explain how to calculate the correct amount of elastic needed for the child's shorts. [2]

Answer could include:

use a tape measure and the child should stand up. [1 mark] Measure around the smallest part of the waistline making sure there is a small amount of ease, i.e. not too tight or 5 cm. Include overlap of 5 cm [1 mark] Any two points, one mark each.

(ii) Explain how the elastic is inserted in the casing and suggest a suitable handworked stitch which could be used to join the elastic. You may use labelled diagrams in your answer.

Answer could include: use a bodkin or safety pin (or other suitable small equipment) (1 mark); insert elastic (1 mark); thread elastic through casing a few cm at a time and move it along the casing (1 mark); remove safety pin and overlap or join elastic, using over-sewing to make the elastic secure and not come undone (1 mark); labelled diagram to show stitching (1 mark) [any three points, 1 mark each]

(c) The hemline could be stitched by hand or machine. Name <u>one</u> hand stitch and <u>one</u> machine stitch which is suitable for the hem, and draw a sketch of each stitch in the space below.
[4]

	Name of stitch	Sketch of stitch
Hand-stitched hem	slip-hemming, herringbone stitch 1 mark	1 mark
Machine-stitched hem	Blind hemming or straight stitch 1 mark	1 mark

Do not allow just hemming. Give mark for correct drawing of wrong named stitch

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#### (d) What is meant by the following terms when constructing garments?

#### answer could include:

notching: removing small triangle shaped pieces of fabric to reduce bulk (1 mark) pressing: holding an iron in one place on the fabric/process to set a crease in e.g. a pleat/to flatten a seam/to set a dart in correct direction (1 mark)

# (e) Complete the care label symbols for the cotton/polyester gingham fabric for the child's shorts in Fig. 1:

Name of symbol	Sketch of care symbol	Reason why symbol is used
Wash code	Washtub with temperature 50 degrees or lower Accept hand wash 1 mark	To make sure the garment is washed at correct temperature or to prevent shrinkage/damage to fabric 1 mark
Bleach symbol	Crossed out Triangle with Cl inside 1 mark	No bleach to be used in case it damages the fabric 1 mark
Iron symbol	Side view of iron with one or two dots inside 1 mark	To make sure the correct temperature is used for the fabric so it is not damaged by heat 1 mark

#### (f) (i) The shorts in Fig. 1 could be worn with a top or shirt. Name one knitted fabric which would be suitable for a top/shirt.

[2]

[2]

[6]

	Fibre content	Name of knitted fabric
One knitted fabric	Cotton; linen; cotton/polyester; modal; viscose/cotton Do not allow wool 1 mark	Jersey; T shirting; tricot; 1 mark

#### (ii) Comment on why knitted fabrics are sometimes used for children's tops or shirts.

[3]

Knitted fabric is flexible and fits the body well;

it is comfortable to wear and is not tight; easy to take on/off due to few or no fastenings; if a child grows, the fabric stretches to allow for the growth;

it is an easy method of fabric to produce; cheaper production due to few or no fastenings;

it is cheap to produce which is good for children's clothing

1 mark for each point up to a maximum of 3 marks

[Total: 40]

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#### Section B

Answer three questions from this section.

#### 2 (a) State the origin of silk fibres.

[1]

Silkworm, bombyx mori (1 mark)

# (b) Suggest <u>one</u> way of adding colour to silk fabrics and explain briefly why this method is suitable. [3]

One way of adding colour	One from: Dyeing Silk painting Batik Stencilling	(1 mark)
Explanation of why this method is suitable for silk fabric	Dyeing – silk takes colour well and it can be tie dyed/absorbent;         Silk painting – colours merge/combine well on fabric; can create original design         Wax applied then fabric is dyed, wax is easy to remove after dyeing; any other correct point – must be correct for the method chosen Decorative effect         (2 marks)	

### (c) Silk is popular for clothing. Name <u>three</u> performance characteristics of silk fabric and explain why it is suitable for clothing:

	Explanation
Strong (1 mark)	It does not rip easily yet is fine and thin enough to drape and gather (1 mark)
Absorbent (1 mark)	Comfortable to wear so good for hot weather (1 mark)
Natural elasticity (1 mark)	Creases drop out, drapes well (1 mark)

Answer could include:

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### (d) Explain what is meant by the following textile terms and give <u>one</u> example in each case:

Textile Term	Explanation	Example
Fibre	A thin, hair-/thread-like structure, long or short; staple or filament (any one answer) 1 mark	Wool fibre; polyester, nylon, silk, cotton fibre, etc. (any one answer) 1 mark
Yarn	A thread made up of many single strands, usually twisted together; can be fibres which are spun/twisted together or a filament (any one answer) 1 mark	An embroidery thread; piece of machine thread; knitting yarn; yarn for weaving; (any one answer) 1 mark
Fabric	A textile which has been woven or knitted from yarns/threads (or bonded directly from fibres) 1 mark	lawn; jersey; tricot, gabardine, Vilene interfacing, felt (or any appropriate fabric name) 1 mark not just name of fibre

#### (e) Assess the importance of buying fabric from a sustainable source.

Renewable; will not run out, less damage to environment from production, less greenhouse gases in production, can be replenished, not using up finite resources – coal and oil. Are biodegradable so do not add to landfill, less non-renewable resources used in production Cotton, wool, linen, silk, viscose and variations e.g. Lyocell;

1 mark for each well-discussed point; answers must mention specific effects; Give 1 mark for a general understanding of less harm to the environment.

#### [Total: 20]

#### 3 (a) Sketch and label the front and back view of a school dress suitable for a young child. Include a zip fastener in your design. [4]

Front view – labelling to show style feature such as: neckline, sleeves or sleeveless, waistline; darts; belt; etc.

back view – may show zip fastener; neckline, sleeves, darts, etc.; zip fastener to be shown on centre back, or side seam, or centre front;

1 mark for each well sketched and correctly labelled style feature; Max 3 marks if no zip fastener or if clearly not a school dress. [4]

[6]

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### (b) Name <u>one</u> fabric made from a plain coloured polyester/cotton blend and give <u>two</u> explanations of why this fabric is suitable for a child's school summer dress.

[3]

Name of fabric	Poplin; gabardine; lawn; 1 mark Do not allow organdie, polycotton or gingham
Explanation 1	Polyester in the blend reduces creasing; cotton in the blend gives comfort/absorbency; easy fabric to look after/wash; 1 mark
Explanation 2	Lightweight fabric can be gathered or pleated easily; any other correct point; 1 mark

Explanations that relate to properties of either polyester or cotton must state the fibre referred to. General properties such as handle and drape do not need to refer to fibres.

# (c) Name <u>one</u> suitable fabric finish which could be applied to the fabric named in 3(b). Explain how it improves the performance characteristic of the fabric. [3]

One fabric finish	One from: easy care; flame resistant, stain resistant, crease resistant; any other suitable finish; Do not allow shrink resistant 1 mark
Explanation	Easy care: less creasing so less ironing needed; flame resistance – safer for children if there is a fire; 1 mark for each well-explained point (up to 2 marks) – must be relevant to example given. (give credit for correct properties for fabric named in <b>3(b)</b>

# (d) (i) Write an order of work for the correct sequence of inserting a zip fastener into the dress. [5]

(tack seam together – optional) For concealed zip: fold back the seam allowance by 1.5 cm on each side of seam where zip is to be inserted; stitch the seam up to the point where the zip is to be inserted; pin then tack one side of the zip tape to the seam allowance; machine the zip tape to the seam allowance using a zip foot on the sewing machine, change needle position if required; place seam allowance fold to zip tape on other side, overlapping the zip teeth; pin, tack and machine in place; secure ends of the zip tape to the seam allowance. (or any other appropriate method) e.g. working from right side only with or without closing seam first
1 mark for each correct point – must be in the correct sequence. (Up to 5 marks)

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### (ii) Explain <u>two</u> ways in which the dress in 3(a) could be recycled and made into <u>two</u> new accessories. [2]

	How the dress could be recycled to make two new accessories
Accessory 1 e.g. bag; belt; hat; etc.	Cut out the least worn sections of the fabrics and cut bag pattern pieces from the fabric; 1 mark
Accessory 2 (different example)	Unpick and re-use any of the components from the dress e.g. buttons, zip, lace, trimmings, belt, etc. and insert on a bag; 1 mark

(for both answers, accept a correctly labelled sketch) No marks for simply naming accessories.

#### (iii) Discuss how smart and/or modern fabrics could be used in <u>one</u> of the accessories.

[3]

Name of accessory Bag, belt, hat, etc. (no marks)

Use of any of the following: reflective materials could be used to make a safer item which lights up in the dark;

fabrics with UV light indicator (dye changes colour) could be used for an accessory for a young child e.g. hat which changes colour when it is too hot; GPS for sports/children's wear;

use of micro-encapsulation e.g. scented oil used in a hat; LEDs for cycling gloves; 1 mark for each well discussed point, up to 3 marks. Not fluorescent. 1 mark for general understanding of definition of smart/modern fabrics.

#### [Total: 20]

### 4 (a) Sketch and label <u>one</u> design for an appliqué suitable for the hat below, which could be worked by machine. Show the use of <u>two</u> different fabrics for the appliqué. [4]

Any suitable design but needs to be labelled appropriately for full marks; two fabrics to be used e.g. cotton poplin and cotton corduroy, or any other suitable fabrics; sketch must be well sketched;

(up to 2 marks for fabrics; 1 mark for colour/stitches; 1 mark for labelled sketch)

### (b) Explain <u>two</u> ways in which the appliqué fabric could be attached to the background fabric before machining. (You may use labelled sketches in your answer). [4]

Pin and then tack the fabric in place using tacking stitch by hand; up to 2 marks for good quality explanation; use Bondaweb (type of fabric adhesive) to permanently attach the fabric before machining; up to 2 marks for good quality explanation;

Give credit for labelled diagrams

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### (c) Name and sketch <u>two</u> suitable machine stitches for attaching the appliqué and give <u>one</u> reason for your choice of each. [6]

Name of machine stitch	Sketch of machine stitch	Reason for choice
Straight stitch; 1 mark	1 mark	Gives a neat continuous line and is secure if Bondaweb has been used; 1 mark
Zig-zag; satin stitch; decorative stitching; 1 mark	1 mark	Finishes the edge securely and stops the fabric fraying; decorative stitching gives the edge a more interesting finish; 1 mark

#### (d) Discuss how the appliqué design could be developed to make it suitable for <u>batch</u> production. [6]

Points which could be included:

simplify the design;

make the design from one piece of fabric instead of two;

make a shaped cutting template so that it is easier for an automatic cutter to cut the fabric in layers;

same design could be used but cut out from different fabrics to give more variety for a different batch;

embroider some design onto the appliqué shape before cutting out;

use a pre-embroidered fabric before cutting out the design;

make the design with finished edges so it could be stitched only in the centre, not all the way around the edge; could have a print instead of appliqué;

any other relevant point;

up to 6 marks, points to be well-discussed.

#### [Total: 20]

#### 5 (a) (i) Draw a labelled sketch of a bag which shows the use of a contrasting binding. [3]

Any well-labelled bag design; contrasting binding could show different colour of stripe or other decorative edge; sketch must be labelled for full marks; 1 mark for each well-labelled feature, up to 3 marks

#### (ii) Using labelled sketches, explain how to cut a crossway strip.

[4]

Labelled diagrams to be shown for full marks; find the true cross on the fabric (45 degree to the warp/weft threads); draw a line along the 45 degree line in chalk on the fabric; decide on the width of the binding e.g. 5 cm and draw a second line; cut along the chalk lines; 1 mark for each well-labelled step, up to 4 marks. Max 2 marks if no sketches

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### (iii) Using labelled sketches, explain how to attach the crossway strip as a binding to the bag. [4]

Find centre line of the binding; press each seam allowance raw edge towards the centre line so the raw edges meet; open out one side of the binding and pin and tack along the crease so that the seam lines match; machine along the seam line; remove tacking and press binding towards raw edge; fold binding over the raw edge so that there are equal amounts on both sides of the fabric; stitch the remaining binding edge by hand or machine.

give credit for correctly labelled sketches;

# (b) Discuss <u>three</u> advantages of using a self-prepared binding rather than a commercial binding. [6]

Self-prepared binding	Commercial binding
Can choose own fabric;	Only certain colours available usually plain;
Can choose any width of binding;	Standard width available only;
Can make sure the fabric is of the correct weight for the garment/item;	low quality thin binding available only;
Can make exact amount required;	Can be wasteful if small amount needed;
Can recycle old fabrics to make binding;	Environmental issues;
Cheaper; Any other relevant point	

2 marks for each well discussed point or 1 mark for each point up to 6 marks

### (c) Explain <u>three</u> advantages of using <u>CAD (Computer Aided Design)</u> when designing bags.

A design can be modified from a previous design so saving time; all variations of a design can be stored and used later; can see virtual model of bag; 3-D model; see-through view; different colourways can be trialled and the best one chosen – this saves time; many variations can be shown to the client quickly; a presentation can be shown to the client; the designs can be emailed to the client; any other relevant point; 1 mark for each well-explained point up to 3 marks.

[Total: 20]

[3]

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### 6 (a) Name <u>two</u> cutting tools which can be used for garment making, and give <u>one</u> specific use for each. [4]

Name of cutting tool	One use for cutting tool
Embroidery scissors;	Trim threads;
Unpicker;	Cut buttonholes after machine stitching;
Any other appropriate cutting tool (such as tailor's shears, laser cutters, snips; dressmaking scissors, pinking shears)	use must be correct for example given;

Do not allow just scissors or paper scissors;

1 mark for each tool up to 2 marks and 1 mark each use up to 2 marks even if tool not named.

(b)	State two ways to	store cutting tools	giving <u>one</u> reason	for each.
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Way to store cutting tool	Reason
Keep in a dry place	To stop the metal going rusty and marking the fabric;
Keep in a box or store with blades closed	To keep blades in good condition and make sure they do not get damaged; store out of the reach of children

[1 mark for each correct point, up to 4 marks]

[4]

### (c) Explain the main steps for working a buttonhole, using the sewing machine. You may use labelled diagrams in your answer. [4]

Measure size of button Mark position of buttonhole with chalk or tacking; put buttonhole foot on machine; set machine to buttonhole or correct zig-zag stitch; stitch all four sides of the buttonhole, which has different zig-zag widths; fasten ends of machining; cut the buttonhole between two lines of stitching; make bar tacks at end of buttonholes; logical order 1 mark for each correct point up to 4 marks

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### (d) Outline <u>two</u> safety rules which need to be followed when using an iron, giving <u>one</u> reason for each.

Rule	Reason
make sure the leads are in good condition;	to stop electrocution if lead is touched;
do not touch leads with wet hands; do not fill a steam iron when it is plugged in;	to stop getting electric shock;
do not leave cable trailing;	to prevent trip hazard;
replace broken cable;	to avoid electric shock/fire hazard;
switch iron off when not in use/keep iron on stand when hot rather than face down on ironing table;	<ul> <li>to reduce fire hazard;</li> <li>reduce risk of burns;</li> </ul>
do not touch the base of the iron;	risk of burns;

[1 mark for each point up to 4 marks]

### (e) Discuss <u>four</u> of the factors you would need to consider when choosing manufactured components for garments. [4]

What sort of fabrics are being used; availability; what colour is needed; other design considerations; how many components are needed; when the components are needed (date);

how difficult it is to attach the components; sizes; functionality of components. E.g. Velcro might be chosen for childrenswear; same wash/care qualities as fabrics any other relevant point. Do not allow cost.

1 mark for each well-discussed point, up to 4 marks

[Total: 20]

[4]