DESIGN AND TEXTILES **9631/03**

Paper 3 Textile Applications and Textile Technology **October/November 2018**

MARK SCHEME

Maximum Mark: 100

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Question	Answer	Marks
1(a)(i)	**Three factors which a consumer may consider when choosing children's playwear.** **Answer could include:** types of clothing e.g. Top/jumpsuit/trousers/etc.; age/gender of child; room for growth; colours (attractive for a child); washability; durability; trends/current fashions; seasons e.g. summer wear will need thinner fabrics than winter wear; type of play e.g. wet areas may need protective clothing such as waterproof apron; cost/amount of money in budget; comfort/non-allergic fabric/style; components/fastenings (safety) any other relevant style point. Up to 2 marks for each well explained factor No marks for flammability or absorbency	6
1(a)(ii)	**Sketch of the front view of one item of children's playwear. Style features clearly labelled and fabric named** **Answer could include:** clear sketch of front view; style features could include: fastenings; stitching e.g. surface decorative stitching such as top-stitching/functional reinforced stitching e.g. edge of pockets; buttonhole stitching/etc.; additional components used; decorative features e.g. applique decoration; etc. whether the garment is for boy/girl/unisex; name of **suitable** fabric for item/for children's playwear; 2 marks for each well explained/labelled style feature. 1 mark for good quality sketch of front view. 1 mark for named appropriate fabric	4
1(b)	**Explanation of how the child's playwear in (a)(ii) is fit for purpose.** **Answer could include:** the item should be suitable for the job it has been designed for; seams need to be strong because a child will play/move/be active and seams will be pulled/need to stand up to activity; fabric chosen needs to be suitable for children to wear e.g. using a natural fibre such as cotton jersey; not irritating; suitable for age of child; safety e.g. no cord at the neckline, etc.; non-toxic dyes used; dyes should not have loose dye in wear and when washing; fabric construction should be suitable for the age of child/type of playwear designed for; fabric must be washable if the label states this and care labels must be relevant to the fabric; suitable fabric finishes (e.g. flame resistance, stain resistance, crease resistance). any other relevant point. 1 mark for each well explained point	6

Question	Answer	Marks
1(c)	**Discussion of the fabric finishes that can alter the handle, drape and texture of fabrics which are suitable for children's playwear. Specific examples given to support the answer.** **Answer could include:** brushing; easy-care; softness/fabric softener used; plisse/seersucker finish for a textured surface; stain resistant – makes fabric shiny (texture) as well as stain resistant; waterproof/showerproof finish; safety for children – some fabrics may be flammable so may need to be flame-proofed, which may add stiffness to the fabric (texture); calendaring, mercerizing any other relevant points. <u>High band</u> – a wide ranging discussion showing detailed knowledge and understanding of the range of fabric finishes available for children's playweear which can alter the drape, handle, texture of fabrics. Specific detailed examples will be included (7–9 marks); <u>Middle band </u>– some discussion of some fabric finishes suitable for children's playwear which can alter handle, drape and texture. Specific examples will be included although some of the answer may be presented as a list of points. There may be inaccuracies. (4–6 marks); <u>Low band</u> – little or no discussion of fabric finishes which may be suitable for children's playwear. Few if any examples will be included, there will be errors and inaccuracies. (0–3 marks)	9

Question	Answer	Marks
2(a)	**Outline briefly how fabrics are prepared ready for dyeing.** **Answer could include:** correct selection of fabric for item; check for faults/imperfections whether fabric is from natural/man-made or blended fibres as this will influence which type of dye/printing ink to be used; washing fabric to remove surplus dust/dirt/size used during weaving/knitting process; bleaching fabric to make sure all colour defects are removed and a pure white background is present for a true colour/dye; mercerising may be done for cotton fabrics – this will help with uptake/absorbency of dyes; singeing to remove surface fibres fabric may need to be shrunk so that any pattern size is not affected after first washing; whether a mordant needs to be added to the fabric before dyeing e.g. alum based; salt based; etc.; correct choice of types of dyes to be used for fabric; any other relevant point. 1 mark for a brief point, 2 marks for a well explained point which may include a specific example. No marks for ironing/pressing	5

Question	Answer	Marks
2(b)	**Comparison of one craft method of printing and one resist method of dyeing for a scarf in terms of:** • **suitability** • **aesthetic/decorative effect.** **Answer could include:** craft methods could include: block printing; stencil printing; hand screen printing, potato printing, transfer printing, any other suitable method; resist methods of dyeing: batik; tie dye; space dyeing; silk painting; stencilling; tritik; flour paste, Ice dyeing; any other resist methods comparison points could include: types of fabrics used; types of dyes/printing inks used; ways to fix the dyes/printing inks e.g. oven, ironing (craft method); method of application; amount of fabric processed (craft method limited to a few metres. techniques available to the manufacturer for dyeing synthetic fibres/fabrics e.g. special dyes/mass pigmentation of polymer before extrusion of fibres, etc.: time taken; suitability of design for method; comparison points must be made for full marks; if no comparisons but lists of points made for both craft dyeing/resist dyeing methods, maximum 5 marks. 1 mark for a brief point, 2 marks for a well assessed point; Not accepting repeated answers from **2(a)**.	10
2(c)	**Discuss the opportunities for consumers and manufacturers to recycle textiles. Give specific examples to support your answer.** **Answer could include:** for the consumer: give to charity; unpick and make something new; up-cycle with other items; remove components and re-use on other items; renovate the unwanted item and re-use or sell; dye the item/fabric and re-use; use the fabric for patchwork; etc. for the manufacturer: sell new waste fabric; use new waste fabric for small items e.g. facing for the neckline of sleepwear; reduce waste in the first place i.e. use computer controlled layouts to be more efficient; fabric can be broken down and either re-spun into fibres, blended with new fibres or used to make new fabrics or fillings e.g. for mattresses. Some unsuitable for recycling. any other appropriate point 1 mark for a brief point, 2 marks for a well explained point. High band – a wide ranging discussion showing detailed knowledge and understanding of the opportunities for the consumer and the manufacturer to recycle textiles. Specific detailed examples will be included (7–10 marks); Middle band – some discussion of the opportunities for recycling fabric for the consumer and the manufacturer. Specific examples will be included although some of the answer may be presented as a list of points. There may be inaccuracies. (4–6 marks); Low band – little or no discussion of opportunities for recycling fabric for the consumer and the manufacturer. Few if any examples will be included, there will be errors and inaccuracies. (0–3 marks)	10

Question	Answer	Marks
3(a)	**A range of fabrics could be used for fashion items.** **Sketch of a front and back views of a fashion top which would be suitable for summer wear. Include** • **the use of two different fabrics** • **detailed labelling of style features** Answer could include: style features could include: collar/neckline finish; sleeves/sleeveless; fastening; seam lines; hem lines; darts/other shaping e.g. gathers/pleats etc.; decorative features e.g. top stitching/embellishment etc.; 1 mark for well labelled back; 1 mark for well labelled front. 1 mark for each accurate/well labelled style feature; 1 mark for each appropriate fabric used (max 2 marks); fabrics need to be suitable for the style and must be able to be used together;	6
3(b)	**An explanation of the value of carrying out testing and sampling of textiles techniques when developing ideas for the fashion top in 3 [a]. Specific examples to be included in the answer.** **Answer could include:** testing/sampling different fabrics to find out if the techniques in the design is suitable; e.g. Thin chiffon-type fabric may not be suitable for a heavy type of beading or other embellishment; if a medium weight cotton satin is used for beading, this may be able to take heavy beading better than chiffon; if fabrics fray easily (e.g. silk georgette) some types of seam finish may be more suitable than others; e.g. overlocking may be too dense and heavy so a French seam may be more suitable; does the colour combination work together; does the weight of component/stitching/fabric work together; time taken to produce the technique – if too time consuming, another method could be tested; time taken testing is worthwhile for the manufacturer – if the design/techniques does not work/is not suitable for the fabric it will save the manufacturer loosing profit if a large mount of items had been made and had not been tested; any mistakes/changes can be made at the testing stage to save production problems later; choice of thread; need for stabiliser/interfacing; any other appropriate point / example; <u>High band</u> – a wide range of points and examples given with detailed knowledge and understanding when explaining the value of testing textile techniques in the development of ideas. [6–7 marks] <u>Middle band</u> – some relevant points and some examples given when explaining the value of testing textile techniques in the development of ideas. [3–5 marks] <u>Low band</u> – few if any relevant points given for the value of testing textile techniques in the development of ideas. The answer may be presented as a list with no assessment. [0–2 marks].	7

Question	Answer	Marks
3(c)	**An assessment of the choice of different fabrics available for fashion tops, considering performance characteristics and aesthetics.** **Answer could include:** performance could include: strength; laundering/washability; comfort; how hardwearing/durability; drape; answer may be dependent on fibres used; aesthetics could include: creasing (how creased/smooth); appearance eg shiny/crepe finish and how durable the new appearance remains; patterns, colours, textures. any other relevant point; give credit for specific examples High band – a detailed assessment of the choice of different fabrics available for fashion tops, when considering performance characteristics and aesthetics Detailed examples given showing knowledge and understanding. [9–12 marks] Middle band – some assessment of the choice of different fabrics available for fashion tops, when considering performance characteristics and aesthetics. Some specific examples will be given although there may be errors and inaccuracies. [5–8 marks] Low band – few if any examples of the choice of different fabrics available for fashion tops, with little or no reference to performance characteristics or aesthetics. [0–4 marks]	12

Question	Answer	Marks
4(a)	**An assessment of the range of materials/trimmings (other than fabric) which are available to the consumer when making textile items for the home. Specific examples given of how these item can be applied to fabric.** **Answer could include:** types of additional materials/trimmings could include: lace, embroidery thread, braid, bias binding, piping, components such as beads, buttons, items used as fastenings e.g. hooks, eyes, elastic, zips, sequins, etc.; many colours can be produced – e.g. nylon buttons can be dyes any colour to match fabrics; different constructions methods used for fabric based trimmings (eg lace) such as warp knitted/braiding/twisted/etc.; ways of attaching the trimmings to textile items e.g. sewing by hand (beading/hooks/buttons); attaching items by machine e.g. button machine; elastic attached using zig-zag stitch; beading machine for attached small beads continuously; types of threads used to attached the additional materials e.g. strong polyester machine thread to attach buttons or a contrasting coloured embroidery thread to attach a zip so the stitching becomes part of the decorative effect; Any other appropriate point. High band – a detailed explanation of a wide range of materials/trimmings available for textile items with a wide range of how they are applied to textile items. Detailed and relevant examples. [10–13 marks] Middle band – some explanations of a range of materials/trimmings available for textile items with a range of how they are applied to textile items. Some relevant examples given and there may be omissions. [5–9 marks]. Low band – few if any examples given of materials/trimmings available for textile items and very limited knowledge of how they are applied to textile items. There will be errors and omissions. [0–4 marks].	13

Question	Answer	Marks
4(b)	**Compare the value of using the care labelling scheme for textiles items from the point of view of:** • **a consumer of textile products:** • **a home launderer** • **a professional launderer** **Answer could include:** a consumer of textile products: will be a shopper who is looking for a specific item of clothing or household textile; the care label will probably not be the first consideration as colour/trend/season are much more likely to be important to the consumer at the time of choosing the item for purchase; whether the garment is washable or has to be dry cleaned – cost/convenience; may not look at labels therefore no value to the consumer, hand or machine wash – some people will not buy if hand wash; a home launderer: will have a wide variety of textile items at home as clothing (shirt, trousers, jumpers) or home items (cushion cover, bed linen etc.); some things may need to be washable at high temperature for hygiene; items are likely to be laundered in a domestic washing machine or by hand; care labels will be needed to find out whether items can be machine or hand washed; what temperature the items need to be washed at; whether bleach can be used; can the item be dry cleaned; how can the item be dried; if ironing is needed, what temperature should be used; the home launderer will need to look at labels every time the items need to be laundered because it is likely that a different mix of items will be laundered each time; a professional launderer will wash/dry clean items together and as the volume of items is likely to be large with large washing machines/dry cleaning machines; if there is enough of the same type of items with the same care label (e.g. white cottons to be washed at 60 C), it will be easier to make sure the correct procedure is used; dry cleaning chemicals to use; reduced risks of problems/damaging clothes; hand washing will be unlikely as any delicates are likely to be dry cleaned; size of item; any other relevant points; give credit for specific wash codes if accurate and relevant to answer. High band – a detailed comparison of the value of the care labelling scheme for the consumer, home launderer and professional launderer. Detailed and relevant examples will be given. [9–12 marks] Middle band – some comparison of the value of the care labelling scheme for the consumer, home laundered and professional launderer. There may be omissions and some of the answer may be a list of care labels. Some examples may be given. Some information will be inaccurate and there will be errors. [4–8 marks] Low band – little if any comparison of the value of care labelling, there will be few if any examples given and the information may be presented as a list with no explanation. [0–3 marks]	12

Question	Answer	Marks
5(a)	**Creative embroidery techniques for textiles are always popular.** **Draw one design to decorate a ladies' jacket. You should include:** • **two different machine embroidery techniques** • **position on the jacket** • **colour** • **stitches to be used** **Answer could include:** Drawing to be accurate and show one design which will be suitable for the stated ladies jacket. The design to be suitable for embroidery and to combine two different embroidery techniques. Techniques could include: free machining, CAD/CAM embroidery, automatic patterns, machine beading; textured yarns on bobbin of machine; hand stitched techniques; Ideas for designs could be a combination of creative techniques e.g. stencil the design and then embroidery it; accept any relevant creative ideas, but must be relevant to chosen textile item. (optional: Stitches could include: hand embroidered e.g. chain stitch, running stitch, etc.; machine stitches could include lockstitch (straight stitch, using a thicker thread – top stitching; zig-zag stitch, decorative overlocking if appropriate for the item/position on item/ etc.) any suitable position on textile item, needs to be illustrated/described accurately; colour may be referred to if relevant; named suitable fabrics, details of any stabilisers (if needed); 1 mark for design, 1 mark for position on jacket, 1 mark for colour, 2 marks for 2 different machine embroidery techniques, 1 mark for other stitches used (top stitching, hand embroidered stitches etc.)	6

Question	Answer	Marks
5(b)	**A comparison of how both the embroidery techniques in 5 [a] would be carried out during production by a manufacturer when making a small quantity of the ladies jackets.** **Answer could include:** suitable order of work e.g. where in the production process/sequence of work for chosen item; detailed specification for embroidery e.g. stitch size/stitch settings/etc.; refer to answer in **5(a)**. suitable preparation of fabric e.g. reinforce/stabilise the fabric before stitching; marking the fabric with position of design and indication of where to stitch the design; batch production would be the chosen method for a small quantity of items; correct/appropriate description of techniques for batch production (may have a number of specialist workers, each working a specific part of the technique); two chosen embroidery techniques need to work together; suitable order of work/consideration of how both techniques will be worked; any other relevant point;	7

	E.g. Free embroidery	**e.g. CAD**
Considerations such as: Fabric preparation	Stabiliser fabric used; fabric in a frame/hoop.	Stabiliser fabric used; fabric in a frame/hoop.
Order of work	Flexible as could be done before or after the item is made up;	Most likely to be done after the item is made;
Equipment needed	Sewing machine with drop feed; thread colour needs to be changed each time;	CAD machine with several colours loaded and colour changes are done automatically;
Settings	Mostly straight stitch or zig zag; needs to be changed each time;	Automatically programmed before starting the embroidery;
Time	Slower as not computerised;	Computerised so faster and more efficient for a large quantity;
Separate skills	Skilled worker needed;	Operator needed to work machines – usually several machines are supervised by one operator;
Finishing (e.g. pressing threads)	manual	manual
Final pressing	manual	manual

Question	Answer	Marks
5(b)	<u>High band</u> – a detailed comparison of how both embroidery techniques will be worked on a small number of chosen items; specific detailed examples of processes/techniques will be given. [6–7 marks] <u>Middle band</u> – some comparison of how both embroidery techniques will be worked on a small number of chosen items; some detail may be given; there may be errors and inaccuracies. [3–5 marks] <u>Low band</u> – little if any comparison with limited points may be listed with errors and omissions. [0–2 marks]	
5(c)	**Assess the range of surface texture decorative techniques which are available to embellish textile items. Give specific examples in your answer.** **Answer could include:** automatic machine embroidery e.g. select pre-programmed patterns on a computerised sewing machine; CAD/CAM embroidery machine can produce an original design which has been scanned and saved on a USB stick e.g. Janome, brother, Bernina, Singer, Pffaff, etc.; free embroidery machining (pre-programmed or not), working from a drawing/design more, suitable for one-off designs as it may not be possible to replicate the exact same design again; quilting: English, Trapunto; applique, Mola work; Cornelli machine – produces chain stitching, suitable for large areas of embroidery which can be stitched on large areas of fabric which will then be cut out to make textile items; raised embroidery; shisha work; Kantha; types of yarns used for each of the above – some yarns are more suitable than others e.g. viscose thread will produce a shiny finish, good for areas of satin stitch; can include natural fibres, regenerated fibres and synthetic fibres; textured yarns not usually suitable for machine embroidery because the machine needle has a small eye and thread needs to pass easily through; however, textured yarns can be wound onto a bobbin/spool and tension on sewing machine adjusted; beading can be carried out by machine and many accessories are available for various embroidery techniques e.g. couching; hand stitched effects achieved by altering top and bottom tensions; free machining; tucks/pleats/cutting surface; fabric manipulation; use of vanishing fabric; applique, patchwork examples could include sketches; <u>High band</u> – a detailed assessment of a wide range of methods of embroidery techniques available to embellish textiles. Specific and relevant examples will be given. [9–12 marks] <u>Middle band</u> – some assessment of methods of some embroidery techniques available to embellish textiles. Some examples will be given and there may be errors and inaccuracies. [5–8 marks] <u>Low band</u> – little if any assessment of embroidery techniques. There will be a list of a few relevant points although there will be errors and omissions. [0–3 marks].	12