Cambridge Assessment International Education

Cambridge O Level

FASHION & TEXTILES **6130/01**

Paper 1 **October/November 2021**

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.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the October/November 2021 series for most Cambridge IGCSE™, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

[Turn over

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.

Social Science-Specific Marking Principles (for point-based marking)

1 Components using point-based marking:

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

a DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)

b DO credit alternative answers/examples which are not written in the mark scheme if they are correct

c DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons …).

d DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)

e DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities

f DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).

g DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Calculation questions:

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

4 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

Section A

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>1(a)(i)</td><td>The waistcoat in Fig1.1 is made from velvet fabric. Identify <u>two</u> different fibres that could be used to make velvet fabric.

Cotton, viscose/rayon, nylon, silk.</td><td>2</td></tr>
<tr><td>1(a)(ii)</td><td>Describe the appearance and handle of velvet fabric.

Appearance: smooth, has pile/nap, colour may appear differently from different directions in a nap fabric.

Handle: Drapes/hangs well. Soft.</td><td>2</td></tr>
<tr><td>1(a)(iii)</td><td>Identify a suitable fabric to line the waistcoat in Fig1.1.

Satin, Acetate/rayon/viscose/silk lining fabrics.

Accept any suitable thin, finely woven smooth fabric except nylon. Fibre describing lining fabric [e.g. acetate lining] is acceptable but not simply lining or fibre on its own.</td><td>1</td></tr>
<tr><td>1(a)(iv)</td><td>Give <u>two</u> reasons for your choice of lining fabric

• Lightweight/not bulky
• velvet is luxury fabric and the lining would match it
• available in wide variety of colours so can be matched [or dyed to match]
• comfortable for wearer
• slippery so makes it easy to put garment on and off
• inexpensive

1 Mark for each reason</td><td>2</td></tr>
<tr><td>1(a)(v)</td><td>Identify <u>one</u> component used in the waistcoat in Fig 1.1

Button</td><td>1</td></tr>
<tr><td>1(a)(vi)</td><td>Identify <u>one</u> type of pocket to use on the waistcoat. Give <u>one</u> reason for your choice.

<table><tr><th>Type of pocket</th><th>Reason for choice</th></tr><tr><td>Patch pocket</td><td>Easy to make, position can be chosen, could be contrasting colour/design feature.</td></tr><tr><td>[in] seam pockets</td><td>Inconspicuous, design feature, convenient position</td></tr><tr><td>Jetted/welt/bound pockets [with bag]</td><td>Design feature/traditional, neat,</td></tr></table>
Any other appropriate point</td><td>2</td></tr>
</table>

Question	Answer	Marks
1(a)(vii)	**State <u>three</u> ways to recycle the waistcoat in Fig 1.1.** • Pass on to someone else/give to charity shop • Up cycle/personalise/add decoration to make more fashionable • Unpick it and use the fabric in another garment e.g. pocket/trimming/ child's garment, accessory/patchwork. • Unpick and use as rags. • Shred and use as a mattress filling. 1 mark for each correct method	**3**
1(b)(i)	**State <u>four</u> factors to consider when buying a new iron.** • Type of iron/steam/spray or dry • Cost/budget • availability of electricity • bedplate finish/Teflon/non-stick or metal plate, • Size • ease of use of settings/size of lettering/weight • features- detachable water tank/easy to fill/types of steam features • thermostat control. • Safety features – e.g. retractable cord 1 mark for each correct point	**4**
1(b)(ii)	**Identify <u>three</u> different types of scissors used in making textile items.** • tailor's/dressmaker's shears, material/fabric scissors • snips, thread scissors. • embroidery scissors • pinking shears.	**3**

Question	Answer	Marks
1(c)(i)	**Explain <u>two</u> ways in which fashion has an impact on the environment.** Fashion: • The use of materials to manufacture and transport often unnecessary fashion garments and accessories has a negative impact on the environment. • The purchase of fashion items to replace clothes and accessories that may be in good condition in order to follow the latest trends results in waste of resources. • Fast fashion – cheap poor quality clothes that may be worn once only before being thrown away. • Disposal of unwanted fashion items and textile waste to landfill. Impacts on the environment: • Manufacturing of fibres, fabrics and garments uses fuel/water. • Depletion of resources • Disposal of waste and dyes used in manufacture. • Transport of materials/ products uses fuel. • Landfill 1 mark for a point about fashion – max 2 marks. 1 mark for a relevant impact – max 2 marks 2 marks for a well explained point about fashion and an example of an impact.	**4**
1(c)(ii)	**Give <u>three</u> reasons to buy garments which are made from natural fibres** • Sustainable/renewable/ fibres can be grown over and over again • Less use of non-renewable resources/petrochemical resources in manufacture • More comfortable/breathable/warmer/non-irritant • May be available locally. • Organic option. • Biodegradable/landfill issues. 1 mark for each correct reason.	**3**
1(d)(i)	**Explain the importance of the information on the commercial paper pattern envelope.** • Shows quantity of fabric to buy so saves time working it out, avoids buying too much or too little • whether fabric can have a nap or matching pattern avoids buying unsuitable pattern/fabric. • Suggests suitable fabric and notions/trimmings/components to buy. Saves time and costly mistakes. • Body measurements to help make alterations. • body measurements to get correct size pattern closest to body measurements so easy to change. • Image to know what the garment will look like. 1 mark for a point, 2 marks for each well explained/justified point.	**4**

Question	Answer	Marks
1(d)(ii)	**Explain how to alter the paper pattern for the waistcoat in Fig .1.1 to make a V-shaped neckline. You may use diagrams to support your answer.** • Glue/place paper behind bodice pattern. • Measure the depth of V • Mark the bottom of the V on the paper pattern • Draw a line from the front shoulder seam to the bottom of the V. • Add/adjust seam allowances Reward information given in diagrams. • One mark for each correct step given.	**4**
1(d)(iii)	**Fig 1.2 below is the pattern piece for the front of the waistcoat shown in Fig 1.1.** **Draw and label three pattern markings on Fig 1.2.** • Straight grain line • buttonholes • dots to mark buttons – Must be at CF. • notches – at armhole, side or shoulder seam. • lines to mark the darts. • Seam allowance.  1 mark for each correctly drawn, labelled and placed symbol.	**3**
1(e)	**Explain how to attach fusible interfacing to a collar.** • Trim seam allowances from interfacing • Place wrong/shiny/glue side of interfacing and wrong side of collar/fabric together • Press with a hot iron [using a cloth] 1 mark for each correct point. Credit diagrams that describe one of the points.	**2**

Section B

Question	Answer	Marks
2(a)(i)	**Identify <u>one</u> synthetic fibre.** Polyester, polyamide (nylon), acrylic, elastane.	**1**
2(a)(ii)	**Identify <u>two</u> raw materials used to make the fibre identified in 2(a)(i)** **Polyester**: dicarboxylic acid and dihydric alcohol. 1 mark for each. **Polyamide/nylon**: hexamethylene diamine and adipic acid. One mark for polymer chips **Acrylic**: Polymers of acrylonitrile and chemicals, air, inert gas or solvents. 1 mark for each. **Elastane**: preformed polyester molecules and di-ifocyanate. One mark for petro-chemicals/monomers/polymers on their own.	**2**
2(b)	**Define the terms spinneret and filament fibre.** (i) **Spinneret**: Melted fibres are forced through holes in a spinneret to make filament fibre. (ii) **Filament fibre**: Long continuous fibres (e.g. silk and man-made fibres)	**2**
2(c)	**Thermoplasticity is a performance characteristic of synthetic fibres. Explain the meaning of the term thermoplasticity.** • Synthetic fibres are softened by heat. Different yarn/fabric textures can be made. E.g. crimplene. • Fabrics made from synthetic fibres can be heat set, then cooled to retain the shape made when heated. This means that the properties of the synthetic fabrics can be changed. E.g. permanent pleats can be heat set either by the fabric or garment manufacturer. • Permanent pleats. Accept other valid responses	**3**

Question	Answer	Marks
2(d)	**Explain how the performance characteristics of synthetic microfibres make them suitable for fabric for outdoor clothing. Give examples to support your answer.** Properties: • Very fine, lightweight – do not affect performance, comfortable to wear • strong, – not torn easily in outdoor contact sports • water repellent good for outdoor wear in rain or snow • breathable – comfortable, don't trap sweat, cooler when running outdoors etc • good insulators – keep competitors warm in winter • absorbent – comfortable, less sweaty, • good handle/drape, look good/fashionable • washable, dry quickly/easy care/no ironing – outdoor sports clothes often get very dirty. Examples: goretex, sympatex, polar fleece 5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of a wide range of performance characteristics of synthetic microfibres and their suitability for a range of different types of outdoor clothing. Shows a high level of skill in selection of appropriate examples to illustrate the answer. Very good organisation of the answer with skilled use of technical textile terms. 3–4 marks Good attempt, wide knowledge of two or more performance characteristics and their suitability for one or two types of outdoor clothing. Selects some appropriate examples, shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks Valid, satisfactory attempt, fair knowledge of one or more performance characteristics. methods. Competent selection of some examples. Moderate organisation with some use of technical textile terms.	**6**

Question	Answer	Marks
2(e)	**Evaluate <u>two</u> chemical finishes that might be used to improve the performance characteristics of fabrics made from synthetic fibres. Give examples to support your answer** • Anti-static – stops electrical charges that make fabric cling to itself or to the wearer. Many synthetic fabrics have excessive electricity. Lingerie mainly. • Stain resistance – A coating on the fabric to make washing easier or less frequent/washing can be at lower temperatures. Used on children's garments, aprons, workwear. • Flame resistance-used for children's clothes and night attire. Reduces the risk of clothes catching fire/for safety. Required by law. • Water repellency – fabric coated with laminate, vinyl or polyurethane/ PVC,wax. Means garments can be worn in light rainfall. May reduce risk of stains. Dry faster. Some water repellent finishes still allow the air to pass through the fabric. Sports wear, raincoats, aprons, workwear, protective clothing. 5–6 marks Very good/excellent attempt demonstrates detailed knowledge of two chemical finishes and most ways in which they can improve the performance characteristics of several fabrics made from synthetic fibres. Shows a high level of skill in selection of appropriate examples to illustrate the answer with some advantages and disadvantages for each finish. Very good organisation of answer with skilled use of technical textile terms. 3–4 marks Good attempt, wide knowledge of one chemical finish or less detailed knowledge of two finishes, selects some appropriate examples of fabrics and may mention advantages and disadvantages. Shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks Valid, satisfactory attempt, fair knowledge of one chemical finish. Competent selection of relevant examples. May not consider advantages and disadvantages. Moderate organisation with some use of technical textile terms.	**6**

Question	Answer	Marks
3(a)(i)	**Sketch and label a design for a hand embroidered embellishment based on the photograph of the starfish in Fig.3.1. Your design should be labelled to show the colours used and three embroidery stitches.** Embroidery stitches: • Running/back stitch/stem stitch/blanket/loop stitch as an outline of starfish. • Running/back stitch/stem stitch/chain stitch, fly stitch for the 'spine' of each leg. • Satin stitch used for the 'legs' or central pattern • Lazy daisy/petal stitch/French knots for the central pattern. • Any other suitable embroidery stitch One mark for each named stitch used appropriately to a maximum of three marks 3 marks Labelled sketch showing colours and stitches used. 1 mark Appropriate use of colour. 1 mark	**5**
3(a)(ii)	**Sketch a repeat pattern based on the design sketched in answer to 3(a)(i).** Shows a repeat pattern – linear or a repeat in square, circle or any appropriate shape. 1 mark	**1**
3(a)(iii)	**Sketch <u>one</u> way that the repeat pattern sketched in 3(a)(ii) could be used on a garment or fashion accessory.** Neat and recognisable sketch of a garment or accessory. 1 mark Depending on the repeat design in **3(a)(ii)** this could be a border along hem, cuff, on CF, neckline etc. Repeat motif could be used in centre of a jacket back, at hem of skirt or trousers. Any appropriate use of the repeat design on the garment. 1 mark	**2**

Question	Answer	Marks
3(b)	**Discuss the factors to consider when selecting fabrics for a skirt.** • Cost, may have a budget • Availability choice may be limited locally • Colour to suit the wearer or coordinate with other garments or cultural choices • who will wear the skirt/age needs to be age appropriate. E.g. child's skirt shorter to allow movement • what fabric is fashionable/traditional, this depends on the wearer's taste • the season/climate, lightweight cool fabrics for hot climate/seasons, warmer, thicker fabrics like wool for cooler times • type of fibre, performance characteristics needed by the wearer • care considerations, Is it washable etc. depends on wearer. Dry cleaning is expensive so may influence choice. • weight of fabric, drape of fabric will depend on the style of skirt chosen. E.g. gathered skirt fabric needs to be fine and gather easily. • where it will be worn/occasion. May want a more ostentatious choice for a special occasion or evening wear for example. Everyday skirt may need to be more hardwearing and easy care. 5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of a wide range of factors to consider when choosing fabrics for a skirt. Shows a high level of skill in selection of reasons given to support and illustrate the answer. Very good organisation of answer with skilled use of technical textile terms. 3–4 marks Good attempt, wide knowledge of two or more factors to consider when choosing fabrics for a skirt. Gives appropriate reasons to support their answer, shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks Valid, satisfactory attempt, fair knowledge of one or more factor to consider when choosing fabrics for a skirt. May be a list. Competent reasons given to support the answer. Moderate organisation with some use of technical textile terms.	**6**

Question	Answer	Marks
3(c)	**Compare <u>two</u> different methods of printing fabrics.** **Block printing:** • The design is transferred to a block which might be vegetable, wood, metal, polystyrene/any suitable material • The design is cut into the block • The block is inked with a fabric ink or dye • It is stamped onto the fabric, may be repeated many times • The dye/ink is fixed, usually with heat. • Hand method which is time consuming and expensive. Used in traditional crafts. Easy to do. Simple equipment. **Stencilling** • The design is drawn onto card or plastic • The design is cut out to make a stencil • The stencil is fastened to the fabric • Paint/ink is applied with a brush through the stencil • Stencil removed • Dye/ink is fixed • Can smudge easily, difficult to get design in correct place, • simple, requires little equipment or investment of money. • Time consuming **Roller printing** • Industrial method or may describe home-made roller. • A series of metal rollers are engraved photographically/digitally with the design. • Several colours can be used on different rollers • A separate roller is used for each colour • Accurate • Fast but expensive for short runs Any of the print methods above may be used. Accept other valid responses. Only two methods should be considered when marking. 5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of two different printing methods. Shows a high level of skill in comparing the two and also in selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms. 3–4 marks Good attempt, wide knowledge of one printing method or less detailed knowledge of two methods. Makes a comparison. May give examples of uses. Shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks Valid, satisfactory attempt, fair knowledge of one or more printing method. May mention examples. Little or no attempt at a comparison. Moderate organisation with some use of technical textile terms.	**6**

Question	Answer	Marks
4(a)(i)	**Identify <u>one</u> textile product that would be made using mass production.** Any simple product that is in continuous demand, but which doesn't change with fashion such as school trousers, uniforms, shirts, undergarments, plain T shirts, socks etc. One mark for any appropriate textile product	**1**
4(a)(ii)	**Explain <u>three</u> advantages of using mass production to make the textile product named in 4(a)(i)** • Saves time • Cheaper • can be automated/use CAM/less labour needed • no changes to production lines • may operate 24/7 optimising overheads. • Identical products 1 mark for each well explained advantage. Max two marks for a simple list of three advantages. One mark for one or two advantages without explanation.	**3**
4(a)(iii)	**State <u>one</u> disadvantage of using mass production to make the textile product named in 4(a)(i)** Big investment in machinery, power failures, worker boredom, dependent on a limited range of products.	**1**
4(b)	**Identify <u>three</u> reasons for pressing a textile item during and after construction** • To improve quality/make neat generally • to press seams open • darts to one side • to make a hem • turn in/fold a facing etc. • to make pleats.	**3**

Question	Answer	Marks
4(c)	**Discuss the advantages to the manufacturer of using CAD/CAM when laying out fabric ready for cutting.** • Economy/saves money. • saves fabric (environment/profits) • saves labour,(costs, less workers needed) • can be done virtually without having to physically make patterns and move them, (environment and cost) • accurate/ easy to control patterns going on straight grain therefore economical/can calculate wastage and its cost. • Can calculate the number of layers that can be cut. • Can lay the fabric automatically on the cutting area using robot. • Can calculate % wastage. • Lay plan can be saved • Lay plan can be sent to cutting machine electronically. 5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of most of the advantages to a manufacturer of using CAD/CAM to lay out fabric. Shows a high level of skill in selection of appropriate advantages and examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms. 3–4 marks Good attempt, knowledge of several advantages of using a CAD/CAM to lay out patterns. May give some appropriate examples. Shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks Valid, satisfactory attempt, fair knowledge of one or more advantages of using CAD/CAM. Competent selection of relevant advantages. May simply explain the meaning of CAD/CAM or give a list. Moderate organisation with some use of technical textile terms.	**6**

Question	Answer	Marks
4(d)	**Discuss the importance of following safety rules when using a sewing machine.** Safety rules are important for the safety of the machinist/prevent accidents. There are consequences of accidents to employer and employee. Examples may be given of named accidents relevant to each point. E.g. water and electrocution. Safety rules are: • Tie long hair back so it does not scalp the operative • wear overall/PPE to prevent clothing being sewn. • one person to a machine, so not distracted • good lighting to avoid injury because you can't see what you are doing. • follow instructions to avoid improper use of machinery that may lead to injury • keep water away from machine, risk of electric shock as water and electricity don't mix • tidy workspace to avoid tripping hazards • always use safety guards so body parts aren't trapped in moving machinery • Dust extraction when overlocking/well ventilated work area to avoid inhalation of dust particles from fabrics. 5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of the importance of most safety rules. Shows a high level of skill in selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms. 3–4 marks Good attempt, wide knowledge of the importance of following three or more safety rules. Selects some examples to illustrate the rules. Shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks Valid, satisfactory attempt, fair knowledge of one or more safety rules. May simply list rules with no discussion of their importance. Moderate organisation with some use of technical textile terms.	**6**

Question	Answer	Marks
5(a)(i)	**State the correct order of work to make the shorts in fig 5.1** 1 Stitch side seam 2 Stitch crotch seams/CF+CB seams 3 Stitch inner leg seams 4 Make casing either by attaching casing or folding the waist edge of the shorts in. 5 Hem the bottom of the legs 6 Insert elastic One mark for each point in logical order. Reward the longest correct sequence of processes that would mean the shorts could be made up. E.g. casing could be done before inner legs.	**6**
5(a)(ii)	**Identify <u>two</u> hand-worked stitches that might be used when making the shorts in Fig 5.1** • Tailors tacking/tacking • hemming/slip hemming • running stitch used as top stitching • oversewing to join elastic. 1 mark for each correct stitch.	**2**

Question	Answer	Marks
5(a)(iii)	**Compare <u>two</u> different methods of neatening the seams of the shorts in Fig 5.1.** Zig zag, narrow hem, pinking, overlock, binding • Zig zag – advantages: fast, neat, reliable/doesn't come undone Disadvantages: needs a machine that can zigzag, need to plan ahead to do it before the garment is constructed/ difficult to zig zag up to where seams join. • Narrow hems – advantages: neat. Can be done by hand or machine with straight stitch Disadvantages, fiddly, may be bulky and show through fabric when pressed • Pinking – advantages: quick, can be done at same time as cutting out so saves a process Disadvantages – sometimes frays with wear, must be done before construction • Overlock – advantages: Quick, effective/wears well/doesn't come undone Disadvantages: generally has to be done before construction, removes part of seam allowance so may reduce accuracy when sewing garment, skill needed. • Bound edges. Advantages, useful on bulky fabrics, Disadvantages, bulky, time consuming, may need to be done before construction, time consuming. 5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of **two** methods used to neaten seams and compares the advantages and disadvantages of each. Shows a high level of skill in selection of appropriate advantages, disadvantages and examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms. 3–4 marks Good attempt, wide knowledge of **one** neatening method or less detailed knowledge of **two** methods, selects and compares some advantages and disadvantages, shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks Valid, satisfactory attempt, fair knowledge of one neatening method. Competent selection of some relevant advantages and disadvantages. May state two methods of neatening seams but not describe the method or make a comparison. Moderate organisation with some use of technical textile terms.	**6**

Question	Answer	Marks
5(b)	**Discuss the differences between pleats and tucks. Give examples of how both processes could be used in different garments.** Both are methods of disposing of fullness. Both are made from folded fabric. Pleats: • Folded layers of fabric to give extra width/movement in a garment • Three layers of fabric. • May hang freely from a supporting band or may be stitched down for part of the length • Synthetic fabrics may be permanently pleated • Inverted pleats/Box pleats in skirts/shorts • Kick pleats in skirts • May be topstitched Tucks: • Like pleats but stitched down along the entire length of the fold. • Can be used vertically or horizontally Small stitched folds of varying widths • Worked on right or wrong side of garment. • Used to dispose of fullness/give shaping. • Can be used to reduce length/size of a garment and let out later to increase length/size. • Used for decoration • Pin tucks Credit sketches which are used to communicate any point in the answer. 5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of both pleats and tucks and the differences between them and the advantages and disadvantages of each. Shows a high level of skill in explaining the differences in making and using both. Gives examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms. 3–4 marks Good attempt, wide knowledge of either pleats or tucks or less detailed knowledge of both. May make an adequate comparison of both or a detailed explanation of the uses of one method only. May give limited examples to illustrate the answer. Shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks Valid, satisfactory attempt, fair knowledge of one or both methods. May give superficial explanation of differences in making pleats or tucks but not give examples. Moderate organisation with some use of technical textile terms.	**6**

Question	Answer	Marks
6(a)	**Smart materials may contain pigments that allow changes to the appearance of fabrics.** **Identify what makes the following pigments change the appearance of fabrics.** **(i) Thermochromic pigments** **(ii) Photochromic pigments.** Thermochromic – affected by heat. E.g. heat of hand on t shirt produces an image of a hand Photochromic – affected by light/ ultraviolet or sunshine. May reveal a hidden image	**2**
6(b)	**Explain how to make linen yarn from flax fibres.** 1 Retting: the flax is soaked in water to rot away the woody covering of the stems 2 Scutching: the fibres are cleaned, seeds and stems removed. 3 Hackling: the fibres are combed and straightened 4 Fibres are formed into a sliver 5 The fibres are passed through hot water to loosen the gum on fibre 6 Spinning: the fibres are twisted together. One mark for each point in correct order. Credit the longest correct sequence.	**6**

Question	Answer	Marks
6(c)	**Compare <u>two</u> construction methods used to make knitted fabrics. You may use labelled diagrams in your answer.** Warp knitting: • only machine made • vertical loops where the yarn is carried up through the fabric in the warp direction (vertically), each loop created by a separate yarn. E.g. tricot and raschel. • More expensive. • Tighter than weft knits • does not ladder easily • stretches lengthways only. Weft knitting: • Hand or machine made, • circular or flat bed methods/machines • one continuous yarn • front has wales/vertical columns and back horizontal rows/courses • jersey fabric • stretches both ways • Hand knitting may have many patterns. 5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of two construction methods. Shows a high level of skill in comparing the methods and the characteristics of each type of fabric. Gives examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms. 3–4 marks Good attempt, wide knowledge of one construction methods or less detailed knowledge of both methods. Makes a valid comparison, shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks Valid, satisfactory attempt, fair knowledge of one method. May mention some relevant advantages and disadvantages. May simply name two methods of knitting with no further explanation. Moderate organisation with some use of technical textile terms.	**6**

Question	Answer	Marks
6(d)	**Evaluate the importance of care labels on garments** If the instructions on care labels are not followed garments may be ruined/made unwearable. • Different fibres and fabrics have different tolerances to heat, water and agitation. • Care labels show guidance for: washing, ironing, drying, dry cleaning, use of bleach. • If the correct care is not used the garments may be damaged. Could be returned to manufacturer. • Gives guidance when buying as may not want expense of dry-cleaning or may not want to have to iron garments. • If wash is too hot garment can shrink/be ruined. • If iron too hot a hole can be burnt in the garment. • Some garments will shrink or be damaged by the heat of a tumble drier, • Some garments made from wool may need to be dried flat to prevent distortion of shape, • It might be necessary for garments to be washed at high temperatures for hygiene reasons • Environmental considerations – low temperatures 5–6 marks Very good/excellent attempt, demonstrates detailed knowledge of care labels and the reasons they are needed on garments. Shows a high level of skill in selection of appropriate examples to illustrate the answer. Very good organisation of answer with skilled use of technical textile terms. 3–4 marks Good attempt, wide knowledge of the importance of three or more pieces of information found on care labels or less detailed knowledge of all care information, selects some appropriate examples, shows knowledge of technical textile terms with good organisation and presentation skills. 1–2 marks Valid, satisfactory attempt, fair knowledge of one or more items of information on care labels. Competent selection of some relevant examples. May offer a list of care symbols with no explanation. Moderate organisation with some use of technical textile terms.	**6**