



Surname	Centre Number	Candidate Number
First name(s)		0



GCSE

3602U10-1



WEDNESDAY, 18 JUNE 2025 – MORNING

DESIGN AND TECHNOLOGY

**Unit 1
FASHION AND TEXTILES**

2 hours

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.	10	
2.	15	
3.	14	
4.	15	
5.	19	
6.	27	
Total	100	

ADDITIONAL MATERIALS

In addition to this examination paper, you will need a calculator.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use gel pen or correction fluid.
You may use a pencil for graphs and diagrams only.
Write your name, centre number and candidate number in the spaces at the top of this page.
Answer **all** questions.
Write your answers in the spaces provided in this booklet. If you run out of space, use the additional page(s) at the back of the booklet, taking care to number the question(s) correctly.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question. You are advised to divide your time accordingly.
The total number of marks available is 100.
You are reminded of the need for good English and orderly, clear presentation in your answers.
The quality of your written communication, including appropriate use of punctuation and grammar, will be assessed in your answer to question **2(c)**.



3602U101
01

Answer **all** questions.

1. Textile fabrics can be embellished using different techniques.

(a) The image below shows an example of silk painting.



(i) Complete the following sentences:

2 × [1]

In this silk painting technique, the design is outlined with gutta first, which
..... the silk paint from spreading beyond the flower outline.

This is referred to as a method of painting.

(ii) Batik is another method of applying colour and pattern to textile fabrics.
Explain how patterns can be applied to textile fabrics using batik.

[3]

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- (iii) Give **one** reason why fabric paints have to be set once applied to textile fabrics and describe a method of achieving this.

Reason: [1]

Method: [1]

- (b) Explain how a laser cutter can be used creatively to add pattern and texture to textile fabrics. [3]

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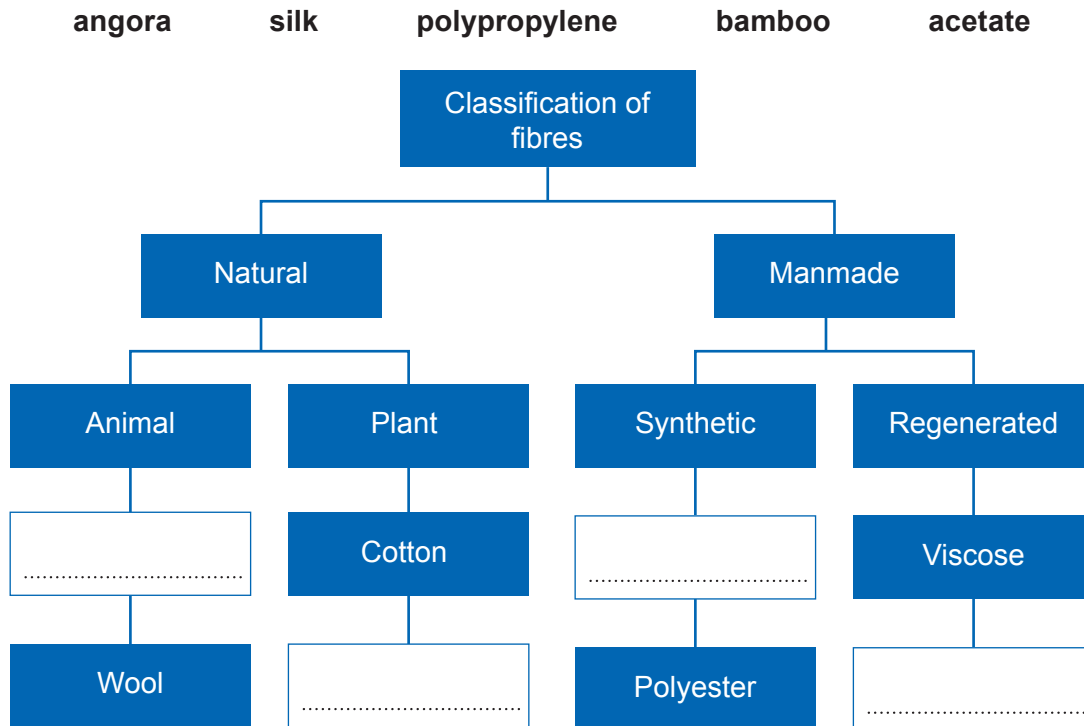
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2. Textile fibres are classified according to their source.

- (a) Complete the chart below by selecting the correct fibre listed and placing it under its correct classification. 4 × [1]



- (b) (i) Describe a textile fibre.

[2]

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- (ii) Describe the main differences between regenerated and synthetic fibres.

[4]

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- (c) Analyse the impact synthetic fibres have on the environment following disposal. [5]

Marks will be awarded for the content of the answer and the quality of written communication.

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3. The natural world is often the source of inspiration in fabric technology and for fashion and textile designers.

- (a) For each of the smart materials listed in the table below, explain why each has been used for the named products.

Smart material	Product	Explanation
Micro-encapsulated with essential oils	Bedlinen	 [2]
Thermochromic dye	Soldiers' combat uniform	 [2]

- (b) Plant leaves have inspired the development of new materials and finishes.



- (i) State the term used to describe taking inspiration from nature.

[1]

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- (ii) Describe **two** reasons why a fashion or textile designer might observe and study nature when seeking a solution to a design problem.

Reason 1:

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..... [2]

Reason 2:

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..... [2]

- (iii) Explain how nature inspired Orla Kiely's textile designs. [5]

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4. Study the knitted beanie hat pictured below, which has a built-in LED (light emitting diode).



Product information

- LED: rechargeable from any USB port
- Run time: 2–4 hours
- Function: high – medium – flash
- Beam distance: 10 m (high), 5 m (medium)
- One size fits all

- (a) (i) Explain why the rechargeable feature of the LED will appeal to users. [2]

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- (ii) Discuss how technology push has influenced the development of the beanie hat with the built-in LED feature. [3]

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- (b) (i) Evaluate the effectiveness of the built-in LED in supporting the safety of users in a specific named situation. [5]

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- (ii) Evaluate how smart technology integrated into clothing can support athletes in training. Include named examples in your response. [5]

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5. All consumers require high-quality construction in fashion and textile products.

- (a) (i) Complete the following sentence:

The standard seam allowance measurement used in textiles is

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[1]

- (ii) Explain the importance of using a consistent seam allowance throughout the manufacture of a fashion or textile product.

[2]

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- (iii) The machine pictured below is an overlocker.



Give **two** reasons for using an overlocker in the construction of a seam.

Reason 1:

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[2]

Reason 2:

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[2]



- (iv) The picture below shows a method of finishing an edge.



Name this method and explain why this is suitable for finishing an edge.

Name: [1]

Explanation:

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..... [2]

- (b) Ethical factors related to the manufacture of fashion and textile products are important to workers and consumers.

- (i) Explain what this logo means to the workers employed to manufacture fashion and textile products. [5]



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- (ii) Explain the role of the BSI (British Standards Institute) and how this impacts consumer confidence when purchasing fashion and textile products. [4]

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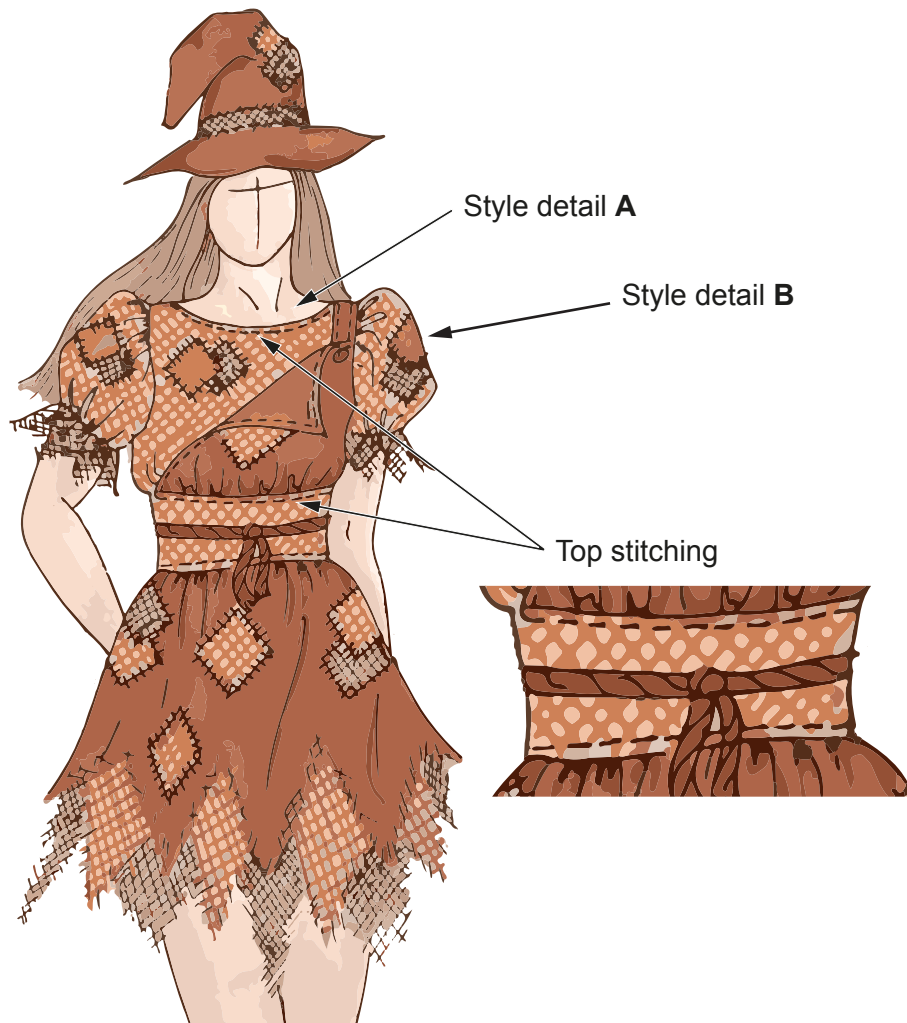


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6. The sketch below is a fashion student's interpretation of a fancy-dress costume based on the character of Scarecrow from the film *Wizard of Oz*.



- (a) (i) State the name of the style details labelled as **A** and **B** on the above sketch.

2 × [1]

Style detail **A**: neckline

Style detail **B**: sleeve

- (ii) The broken lines featured on parts of the sketch indicate top stitching.
Give **one** reason for using top stitching on the costume.

[1]

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- (iii) Explain what is significant about the thread used specifically for top stitching. [2]

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- (iv) The head of the sleeve has been gathered to create the style detail. Using notes and sketches, explain how you would create the gathers in the head of the sleeve. [4]

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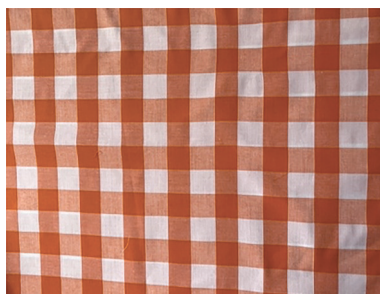
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- (b) The three plain weave fabrics that make up the main part of the design are shown below.



Plain polycotton



Gingham (cotton)



Jute

- (i) The hemline of the skirt part of the costume will be unfinished with the intention that the edges will fray. Explain why a plain weave fabric will achieve this look. [2]

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- (ii) Using notes and sketches, explain how the checks are created in the gingham fabric. [4]

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- (iii) The fashion student has carefully considered fabric choice with the intention of being as environmentally friendly as possible.

Analyse the choice of fabrics in meeting this requirement.

[5]

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- (c) A manufacturer is considering producing a small batch of the fashion student's Scarecrow fancy-dress costume; however, this means the design has planned obsolescence.

- (i) Describe the disadvantages of planned obsolescence for the manufacturer.

[4]

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- (ii) Describe the disadvantages of planned obsolescence for the environment.

[3]

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