

Surname	Centre Number	Candidate Number
First name(s)		2



GCE AS/A LEVEL

2602U10-1



S24-2602U10-1

MONDAY, 13 MAY 2024 – AFTERNOON

DESIGN AND TECHNOLOGY – AS unit 1 Fashion and Textiles

2 hours

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.	8	
2.	8	
3.	8	
4.	8	
5.	8	
6.	40	
Total	80	

ADDITIONAL MATERIALS

A calculator, ruler, pencils and coloured pencils.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use gel pen or correction fluid.

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 80.

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 6(c).



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Answer **all** questions.

1. The bags shown below have been made by school students using equipment commonly found in a textile classroom.



The teacher has a responsibility to ensure the safety of students when using hazardous substances and equipment. Some of the items of equipment used to make the bags are listed below:

- Batik pot
- Sewing machine
- Steam iron
- Rotary cutter

- (a) Choose **one** item from the list above and explain the potential risks it may pose to the user. [2]

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(b) Teachers would carry out a five-step risk assessment when planning for practical tasks. Discuss what a teacher would need to include in their five-step risk assessment in order to maintain the safety of students. [6]

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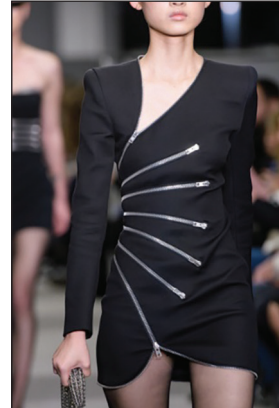
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03



3. Zips are a simple way to fasten two edges together. They can be both functional and decorative.



(a) Name **two** types of zip and explain why they are suitable for use in a specific textile product. 2 x [3]

Type of zip 1:

Suitability:

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Type of zip 2:

Suitability:

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(b) Explain **one** advantage to the manufacturer of using bought-in components such as a zip when making textile products. [2]

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4. The toiletry bag shown below is made from 100% polyester.



(a) Describe the specific properties of polyester that make it suitable for the toiletry bag. [2]

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(b) Explain why the drawstring method of opening and closing the toiletry bag is a practical solution for this type of product. [2]

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(c) Use notes and sketches to explain how you would construct the drawstring feature on the toiletry bag shown above. [4]



5. The pyjama top shown below is made from cotton jersey and the letters have been cut out using a laser cutter.



- (a) The pyjama top features letters and a decorative motif. Explain how the material choice of cotton jersey may compromise the durability of these decorative features over time. [2]

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- (b) Cotton Jersey is a knitted fabric. Explain **two** steps that you would take to ensure a high-quality finish when laser cutting cotton jersey. 2 x [2]

Step 1:

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Step 2:

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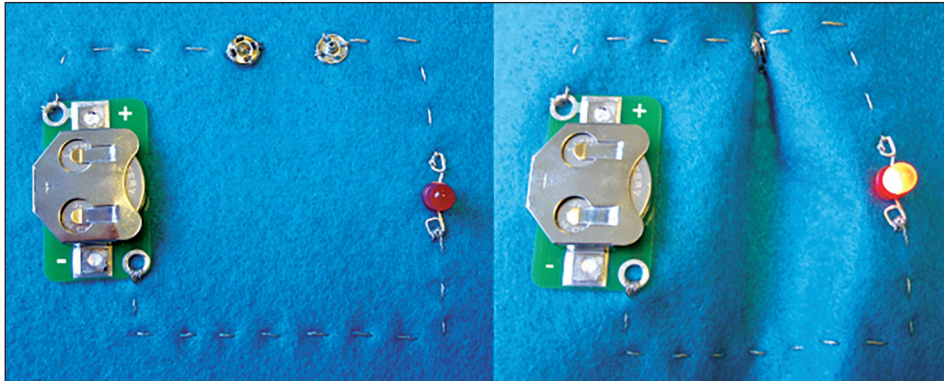
- (c) Describe an alternative stitched method of applying the letters to the pyjama top that would maintain the aesthetic appeal of the product over time. [2]

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6. The image below shows a basic e-textiles circuit with a Light Emitting Diode (LED).



- (a) Describe the function of the components used that allow the LED to be turned on and off. [4]

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- (b) Describe the checks you would make if the LED did not light up once you had completed the sewing of your e-textiles circuit and activated the switch. [4]

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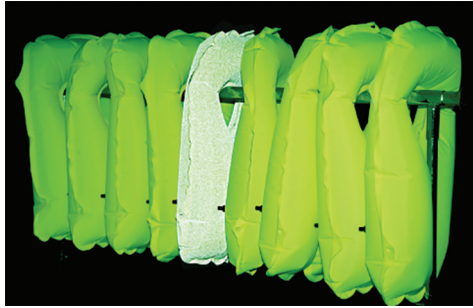
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- (c) The life jackets and cycling jacket shown below are made from technical fabrics. They use reflective technology and e-textiles to enhance the visibility of products designed to keep the user safe.



Evaluate the advantages and disadvantages of reflective technology and e-textiles in the manufacture of textiles products designed to keep us safe. [8]

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

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- (d) You have been asked to design an innovative fashionable textile product that embraces reflective technology and/or e-textiles for a situation of your own choosing.

Your design must include:

- **two** specifically named appropriate materials
- reflective technology and/or e-textiles
- at least **one** style detail that enhances the function of the product
- at least **one** decorative technique that enhances the aesthetics of the product.

Using notes and sketches, present your idea in the space provided to include all appropriate views.

Note: There is no need to render/colour your idea.

Marks will be awarded for:

- | | |
|---|-----|
| (i) quality of communication in terms of an annotated fashion illustration | [6] |
| (ii) an innovative fashionable design for your chosen situation | [5] |
| (iii) the justified use of two specifically named appropriate materials | [4] |
| (iv) creative and imaginative use of reflective technology and/or e-textiles | [5] |
| (v) the use of an appropriate style detail that enhances the function of the product | [2] |
| (vi) the use of at least one decorative technique that enhances the aesthetics of the product. | [2] |



Present your innovative fashionable textile product in the space below.

Chosen situation:



