# GCE A LEVEL

A601U10-1

O21-A601U10-1

**MONDAY, 11 OCTOBER 2021 – MORNING**

# DESIGN AND TECHNOLOGY – A level component 1
## Fashion and Textiles

3 hours

A601U101
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**ADDITIONAL MATERIALS**

In addition to this paper you will need:
a WJEC pink 16-page answer booklet, a calculator, ruler, pencil and coloured pencils.

**INSTRUCTIONS TO CANDIDATES**

Use black ink or black ball-point pen.
Answer **all** questions.
Write your answers in the separate answer booklet provided.

**INFORMATION FOR CANDIDATES**

When and where appropriate, answers should be amplified and illustrated with sketches and/or diagrams.
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 number of marks available is 100.
You are reminded of the need for good English and orderly, clear presentation in your answers.
You may use a calculator in this examination.

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*Answer* **all** *questions.*

**1.** Technology has influenced the design of the training shoe shown below, both in the materials used and through the use of digital knitting technology.



Product details:

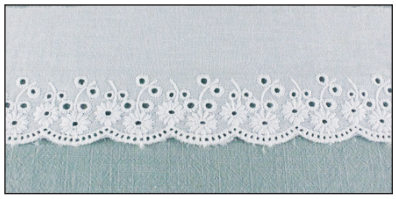
- Digitally knitted one piece upper eliminates all seams
- Lightweight memory foam sole provides cushioning

*(a)* Explain how the design of the training shoe shown above would increase the comfort factor for the user. [4]

*(b)* Explain how advances in technology are influencing developments in the fashion and textile industry. [4]

**2.** The designer of the circular skirt shown below intends to add a narrow Broderie Anglaise trim to the hem.





Broderie Anglaise trim

*(a)* Using notes and sketches, explain how to gather the Broderie Anglaise trim to make a frill and how it could be neatly attached to the hemline. [4]

*(b)* Calculate the length of Broderie Anglaise trim needed for the hem in metres if the trim is gathered on a ratio of 3:1. [7]

- The skirt length is 55 cm
- The waist measurement is 36 cm

*You must show all your workings.*
*Round your calculations to a whole number.*

*(c)* The skirt has been made from a cotton sateen fabric. Discuss the suitability of this fabric for the skirt. [4]

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**3.** The source and stages in the production of fibre for Tencel are outlined below.



trees wood pulp fibre

*(a)* Explain why Tencel is only considered semi-natural. [4]

*(b)* Describe the properties of Tencel that make it a suitable fabric for clothing. [4]



**4.** Plastic bottles are recycled to make the fleece fabric for the gilet shown below.



*(a)* Discuss the environmental impact of the gilet at the end of its useful life. [4]

*(b)* Thirty plastic bottles are recycled to make a one metre length of fabric, 150 cm wide. The templates for one and a half gilets can be cut from a one metre length of fabric.

Calculate how many plastic bottles are needed to make a small batch of 120 gilets. [4]
*Show all your workings.*

*(c)* For every metre of fabric used to make the batch of 120 gilets, 15 % of the fabric is cut to waste. If the fleece fabric costs £9.50 a metre, calculate the value in pounds (£) of fabric waste. [4]
*Show all your workings.*

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**5.** French seams are often used in the construction of a designer blouse like the one shown below.



*(a)* Using notes and sketches, explain how you would construct a French seam. [5]

*(b)* Study the blouse above and explain why careful consideration should be given to the methods of construction used. [5]

**6.** Advances in Computer Aided Design (CAD) have brought many benefits to the fashion and textile industry.

Discuss the advantages to the manufacturer of using a CAD programme to develop a lay plan in the commercial manufacture of contemporary clothing. [5]

**7.** The role of organisations such as the BSI (British Standards Institute) is to set standards that all fashion and textile products have to meet in order to be considered safe to use.

*(a)* Evaluate the purpose of the Lion mark when applied to children's toys. [6]

*(b)* Analyse the significance of the label shown below when applied to upholstered furniture. [6]




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**8.** The needs, wants and values of users and potential clients are an important aspect in the development of fashion and textile products.

Analyse the importance of engaging with users or clients throughout the iterative process of designing fashion and textile products. [9]

**9.** Fashion designers take inspiration from historical influences and design movements resulting in fashions reappearing many times years later. Fashion cannot therefore ever be considered truly 'new'.

Discuss this statement with reference to contemporary fashion in recent years. [9]

**10.** Product analysis is a design strategy that designers use in the development of fashion and textile products.

Evaluate the use of 'above the line' and 'below the line' analysis of existing products in the development of active sportswear. [12]

**END OF PAPER**

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