



GCE A LEVEL

A601U10-1



WEDNESDAY, 5 JUNE 2024 – AFTERNOON

DESIGN AND TECHNOLOGY – A level component 1
Fashion and Textiles

3 hours

A601U101
01

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.

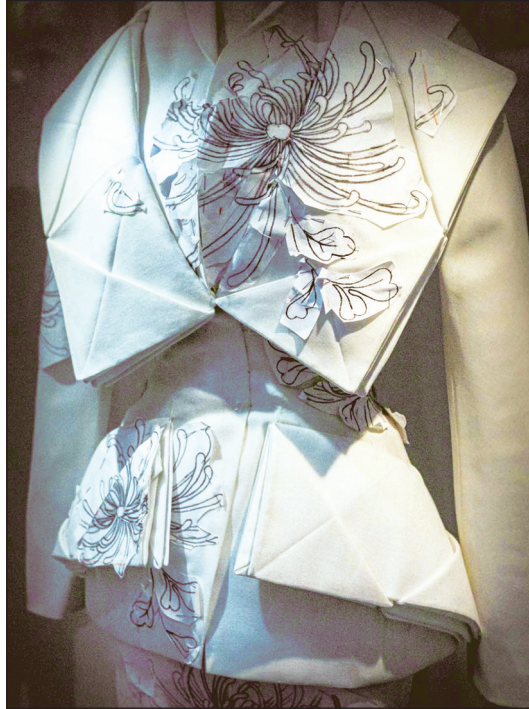
The number of marks available is 100.

You are reminded of the need for good English and orderly, clear presentation in your answers.

You may use a calculator in this examination.

Answer **all** questions.

1. The production of a toile forms an essential part of the iterative process in fashion design.



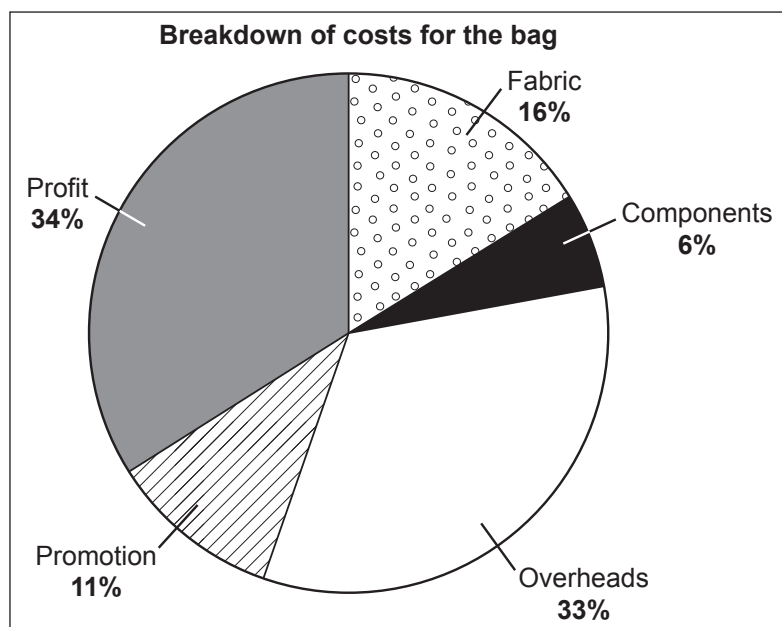
Explain how the toile pictured above supports the designer in the development of the following features:

- (a) Aesthetics. [4]
- (b) Construction. [4]

2. The backpack-style bag shown below has been designed to hug the natural curve of the spine.



- (a) Explain the importance of ergonomics in the design and development of this bag. [5]
- (b) Whichever way the bag is worn, including cross body or on either shoulder, the main zip is always against the user's body. Justify the reason to place the zip in this position. [3]
- (c) The retail price for one bag is £65. The chart below shows the breakdown of all costs as a percentage (%) of the retail price. [3]



- (i) Calculate the profit in pounds (£) that the manufacturer will make on 550 bags. [4]
Show all your workings.
- (ii) In a sales promotion, the retail price of the bag is reduced to £49.95. The profit margin will be reduced but all other costs remain the same. Calculate the new percentage profit per bag for the manufacturer. [3]
Show all your workings.

3. Silk fibre, as pictured below, is the only naturally produced continuous filament.



- (a) Describe the differences between raw silk and spun silk. [3]
- (b) Explain how the structure of the raw silk fibre gives silk very specific properties that influence end use. [5]

4. The lay-flat cosmetic pouch shown below has been created from a circular piece of fabric with a drawstring cord closure which, when drawn up, holds the contents in place.



- (a) The circular piece of fabric that forms the main part of the cosmetic pouch is 48 cm in diameter.
Calculate how many circular pieces of fabric can be cut from a 50 m length of fabric which is 150 cm wide.
Show all your workings. [4]
- (b) Calculate how much drawstring cord will be needed to form the closure for one cosmetic pouch. Allow 18 cms for the section that remains outside the drawstring closure. [4]
Show all your workings.
- (c) The fabrics used to make the cosmetic pouch have a water-resistant finish. Explain how this finish improves the functionality of the cosmetic pouch. [4]

5. The corset shown below has been 3D printed (additive manufacture).



- (a) Explain how 3D printed technology is revolutionising the way clothes are made. [5]
- (b) Explain how market-pull influences the development of new textile products such as the 3D printed corset. [5]

6. Feasibility studies are carried out before new fashion and textile products are brought to the market place.

Explain what a feasibility study would include and how it could impact on the development of new products. [5]

7. Modern technical textiles include aramid fibres such as Nomex and Kevlar.

- (a) Evaluate the use of Nomex in the manufacture of protective clothing, particularly where extreme heat is a hazard. Exemplify your response with named applications. [6]
- (b) Analyse the use of Kevlar in the manufacture of protective clothing used specifically by military personnel or the police. [6]

8. Quality assurance includes the rigorous testing of fabrics prior to manufacture.

Evaluate the importance to the manufacturer and consumers of conducting tests on fabrics for use in clothing and furnishings as part of a quality assurance guarantee.

Exemplify your answer.

[9]

9. Coco Chanel once said, "Only those with no memory insist on their originality".

Discuss this statement with reference to contemporary fashion over recent decades.

[9]

10. Standard fashionable clothing has traditionally been designed for a particular target market with a specific gender and personality profile. However, there is a growing demand for fashion to be more inclusive.

Analyse how fashionable clothing can be developed to be more inclusive in its design and meet the diverse needs and wants of consumers.

[12]

END OF PAPER

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