

## Textiles and Design

## Section II (continued)

Marks

## Question 13 — Properties and Performance of Textiles (10 marks)

- (a) Explain how a finishing technique can be used to enhance fabric performance for a specific end-use. 2

Finishing techniques can be used to enhance fabric performance. Finishes such as water-resistant and fire retardant and many others allow the fabrics to look better and last longer by preventing their demise.

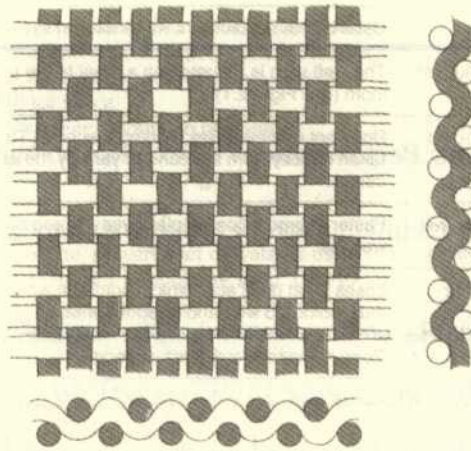
- (b) Explain the impact ONE technological advance in machinery has had on the production of textiles. 2

The electronic sewing machine has allowed the production of textiles to not only be <sup>of a</sup> better quality, but also reduces time and in turn reduces ~~the~~ the cost of production.

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Question 13 (continued)

- (c) Identify the fabric structure in the diagram. Explain why it is an appropriate structure for a cotton hat. 2



The fabric structure in the diagram is plain weave. This is appropriate for a cotton hat as it allows it to be absorbant, comfortable, and has ease of care.

- (d) (i) Identify a specific end-use that requires excellent abrasion resistance in a fabric. 1

Towel

- (ii) Describe how the fabric structure, yarn structure and fibre content optimise abrasion resistance. 3

The fabric towel has a loop pile. It is made from 100% cotton with a 65% crystalline 35% amporous structure with which allows it to be strong and resist abrasion.

End of Question 13