

## 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

Stitchguarding is applied to fabric usually cotton, for when the fabric is used on outdoor furniture. This helps stop mildew, <sup>+ items</sup> damp and <sup>and</sup> the UV rays from the sun from breaking down the fabric. However over a period of time the fabric will breakdown. ~~Stitchguarding~~ is also showerproof and wind proof.

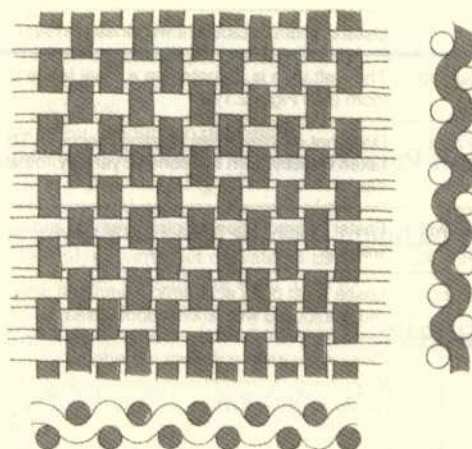
- (b) Explain the impact ONE technological advance in machinery has had on the production of textiles. 2

Computers - CAD + CAM as had a massive impact on production of textiles. Computer run and controll machines which produce the garments/items. This making production faster and abling for "mass production". ~~The~~ Computers are making items ~~with~~ high quality and are quality control machines.

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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



Fabric structure is a "Plain weave"

Its an appropriate structure for a cotton hat as its a strong fabric structure, cheap and easy to produce. Allowing the hat to breath, however keep the sun off the face. Best fabric structure as a hat gets a lot of wear and tear.

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

Work ~~ing~~ clothing - "Hardly yakka"

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

To have excellent abrasion resistance in an item the fabric structure should be a twill weave, which is the strongest structure. The yarn carded or combed cotton which is high spun. Therefore the fibre should be cotton as is strong, breathable, absorbant, easy care and high tenacity. However the item eg work clothing needs a flame-retarded finish To the fabric as cotton is highly flammable.

End of Question 13