

Textiles and Design

Section II (continued)

Marks

Question 12 — Design (10 marks)

- (a) Distinguish between functional and aesthetic design. 2

Functional design is the structural design of an object that allows it to fit the performance criteria, eg. darts for shape & fit. Aesthetic design is applied ~~once~~ after the functional design, and refers to the aspects of design which make the object more decorative/aesthetically pleasing eg. Brills.

- (b) (i) Identify ONE of the principles used in textile dyeing. 1

Mordanting: the use of a mordant to fix colour.

- (ii) Describe and evaluate how an experiment you have conducted demonstrated this textile dyeing principle. 3

The experiment carried out was ~~not~~ using natural onion dye on two samples of the same cotton fabric. One sample was dyed with a mordant (alum/crocin of tartar) in the bath, the other was not. Once the samples had been dyed & dried, they were washed to see whether the mordant really made a difference in wash fastness. The results were conclusive: the mordant dyed sample retained a rich brownish colour, whereas the other faded to a very pale brown. This experiment clearly shows that mordants are an important factor when dyeing cellulosic & regenerated cellulosic fibres.

Question 12 continues on page 8

Question 12 (continued)

- (c) Identify and describe a process of applying colour to textiles used by a culture of your choice.

4

Culture JAPAN

Process SHIBORI - a form of resist dyeing, traditionally carried out in Japan. A fabric is folded, gathered or bunched in patterns, using simple running stitches to hold the pattern & act as a resist. Some patterns include circles (Japanese larch) or tiny dots within a square, which are created by placing a grain of rice on the fabric & binding it with thread. After being stitched, the fabric is dyed, typically in Indigo DYE, also a traditional Japanese custom. Once the fabric has been dyed, rinsed and dried, (this takes a few days) the threads are untied, and a white design is apparent where the threads were tied.

End of Question 12