

BoARD OF StUDIES
NEWSOUTH WALES

## HIGHER SCHOOL CERTIFICATE EXAMINATION

# 1995 <br> TEXTILES AND DESIGN 3 UNIT (ADDITIONAL) 

Time allowed - One hour and a half (Plus 5 minutes' reading time)

## Directions to Candidates

- Attempt TWO questions, ONE from each Section.
- All questions are of equal value.
- Answer each question in a separate Writing Booklet.
- Pages 11 and 12 contain outlines which may be used as a guide when answering questions. Do NOT hand in these sheets with the Writing Booklets.
- You may ask for extra Writing Booklets if you need them.


## SECTION I-SCIENCE AND TECHNOLOGY

Attempt ONE question.

## QUESTION 1. Fibre Structure

## EITHER

(a) In the manufacture of textile products, different fibre types may be used for the same enduse.

| Group A <br> - wool carpet <br> - nylon carpet | Group B <br> - polyester blouse <br> - linen blouse | Group C <br> - cotton jumper <br> - acrylic jumper | Group D <br> - viscose boxer shorts <br> - silk boxer shorts |
| :---: | :---: | :---: | :---: |

Select TWO groups from Groups A, B, C, and D.
For each of the fibres in the two groups selected, critically evaluate the molecular structure and fibre morphology that make it suitable for the stated end-use.

OR
(b) There has been growth in the Australian health and fitness industry. This has led to an increased demand for elastomeric fibres used in the production of active sportswear.
(i) Explain the morphological and molecular structures of both elastomeric and cotton fibres.
(ii) Describe in detail how the performance criteria for active-sportswear fabrics is achieved with cotton/elastomeric blending.

## QUESTION 2. Colour

## EITHER

(a) (i) Describe in detail ONE method to accurately measure colour.
(ii) Explain how the visual appearance of a colour may alter or change, depending on the type of illuminant present.
(iii) Under what conditions does metamerism occur and how is the problem overcome?
(iv) Explain the importance of metameric colour matching in the textile industry. OR
(b) Critically compare the Munsell system and the CIE system of colour measurement.

## QUESTION 3. Technological Developments

## EITHER

(a) Choose ONE technological development that has been introduced to the textile industry in the last fifty years.
(i) Name the technological development and the area of textile production with which it is associated.
(ii) Compare this technological development with conventional or traditional production techniques used to perform the same or a similar function.
(iii) Explain how this development has led to a more effective and competitive textile industry.

OR
(b) Select ONE specialized field of non-apparel textiles. Critically discuss this textile field with reference to:

- fibre selections
- production processes
- end-uses
- impact on the environment.

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## SECTION II—DESIGN

Attempt ONE question.

## QUESTION 4. History of Clothing Design

## EITHER

(a) 'The type of clothing worn is an expression of culture.'

Discuss this statement with reference to clothing worn in TWO cultures and/or subcultures.

OR
(b) Imagine that you have received this invitation.

## An invitation for you to view a special Fashion Parade

## 20th C entury F ashion

## featuring creations

from leading fashion designers.

Venue: The Designer Hotel

(i) Name TWO twentieth-century fashion designers whose designs you would expect to see in the parade.
(ii) For each designer nominated in part (i), sketch and label ONE design that reflects the style of the designer.
(iii) Explain the role of fashion parades in bringing clothing designs to the consumer.

## QUESTION 5. Theatrical Design

## EITHER

(a) A professional theatre company is to travel around NSW, and is scheduled to perform a play at a variety of indoor and outdoor venues.

You are to design a costume for the lead character in a one-act play. The play will be set in ONE of the following periods:

- past
- present
- future.
(i) Identify the period and the setting.
(ii) Design ONE costume for the lead character. Illustrate both front and back views. Label the design features that depict the qualities of the character.
(iii) Outline the functional criteria that the costume would require, given that it is to be transported from venue to venue.
(iv) Explain how the costume and setting could be enriched by lighting-techniques for BOTH indoor and outdoor performances.

OR
(b) A children's hospital will be raising funds by organizing a charity event. You have been commissioned to design a costume for the character that will lead the festivities.
(i) Name the character and describe the personality and physical features of the character.
(ii) Sketch front and back views of the costume design. Label style features, fabric(s), fabric structure(s), and the colour-scheme used.
(iii) Explain how the design of the costume reflects the personality of the character.
(iv) Suggest the functional aspects of the design that you would consider when selecting fabrics and constructing the costume.

## QUESTION 6. Fabric Design

## EITHER

(a) A restaurant in the centre of the Botanical Gardens is to be refurbished. The restaurant has large windows. You have been approached to design a series of fabrics that reflect the botanical theme.

Using the illustrations provided on page 9 as your main source of inspiration, answer the following questions.
(i) Create a design suitable for curtain fabric.
(ii) Sketch the fabric length to show the placement of the design. Label the sketch to indicate the colour-scheme.
(iii) Describe a method you could use to incorporate or apply the design.
(iv) Show how the design could be adapted for upholstery fabrics to be used in the foyer of the restaurant.
(v) Explain the design process that you used to adapt the design.

OR
(b) As a designer, create a design to be used for an exclusive fashion top.

Your design is to be:

> either

- applied to the fabric surface
or
- introduced as the fabric is being produced.

Using the illustrations on page 9 as your main source of inspiration, answer the following questions.
(i) Create a design suitable for the top.
(ii) Sketch and label your design as it would appear on the top.

Your sketch should indicate the fibre(s), fabric(s), colour(s) and decoration techniques that could be used.
(iii) Describe in detail the major decoration technique to be used for the design.
(iv) Show how you could vary the chosen technique to achieve a variety of textural effects.
(v) Identify factors that would influence the pricing and marketing of the fashion top.


These outlines may be used for guidance when answering questions requiring clothing designs.
Use for tracing only. Do NOT sketch on this sheet. Do NOT hand it in with Writing Booklets.


Please turn over

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