



HIGHER SCHOOL CERTIFICATE EXAMINATION

**1996**

# **TEXTILES AND DESIGN**

**2/3 UNIT (COMMON)**

*Time allowed —Three hours  
(Plus 5 minutes' reading time)*

**DIRECTIONS TO CANDIDATES**

- This paper is divided into THREE Sections.
- Attempt FOUR questions, AT LEAST ONE question from each Section.  
The FOURTH question may be chosen from ANY Section.
- All questions are of equal value.
- Answer each question in a *separate* Writing Booklet.
- Pages 9 and 10 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****QUESTION 1. Dyeing and Printing**

- (a) Select TWO classes of dyestuff suitable for dyeing EACH of the following:
- (i) cotton;
  - (ii) nylon.
- (b) Describe the forces of attraction between the dyestuffs and fibres in part (a).
- (c) Name appropriate colourfast dyestuffs suitable for dyeing a cotton/nylon blend fabric. Explain the processes used to dye this fabric.

**QUESTION 2. Finishing**

Choose FOUR of the following fabric finishing processes:

- sanforising
- brushing
- decatizing
- antistatic
- Scotchgard.

For EACH of your choices:

- (a) describe the finishing process, and explain how it achieves the desired result;
- (b) name a fibre and a fabric type that will benefit from the finishing process;
- (c) identify a textile product that will benefit from the finishing process, and explain the benefit(s).

**QUESTION 3. Properties and Performance of Textiles**

Many of the properties attributed to a textile article are determined by the fibre and the fabric structure used in its construction.

- (a) Explain the effect of the fibre(s) and the fabric structure on the desired properties for **THREE** of the following:
- (i) a leotard (cotton/elastomeric);
  - (ii) a pair of gloves (acrylic);
  - (iii) a roof insulation batt (fibreglass);
  - (iv) a handkerchief (cotton).
- (b) For the **THREE** textile articles chosen above, suggest alternative fibre(s) for **EACH**, and give reasons for your choices.

**QUESTION 4. Properties and Performance of Textiles**

The construction of a sleeping-bag consists of three layers: the external cover, the insulation, and the internal lining.

- (a) For **EACH** of the **THREE** layers:
- (i) state the functional properties required;
  - (ii) name the fibre(s) that could be used to achieve these properties, and justify your choice(s);
  - (iii) sketch and label an appropriate fabric structure that could be used.
- (b) Name **TWO** appropriate finishes that could be applied to the external cover.

**SECTION II—TEXTILES AND SOCIETY****QUESTION 5. Culture and Textiles**

*EITHER*

- (a) Cultures, past and present, have textile items that reflect their customs, beliefs, and values.
- (i) Identify TWO cultures:
- one traditional
  - one contemporary or subculture,
- and select ONE textile item from each culture.
- (ii) Sketch and label your textile items.
- (iii) Compare the methods of production of the textile items.
- (iv) State how EACH textile item promotes the customs, beliefs, and values of that culture.

*OR*

- (b) With reference to a variety of cultures, and the human body, discuss how textiles may be used to achieve:
- modesty
  - protection
  - adornment.

**QUESTION 6. History of the Textile Industry***EITHER*

- (a) Technological developments in the textile industry during the twentieth century have influenced both the worker and the consumer.

Discuss this statement with reference to:

- (i) the worker:
- employment opportunities
  - training and development
  - working conditions;
- (ii) the consumer:
- wider choice of products
  - quality control
  - textile labelling.

*OR*

- (b) Choose THREE of the following technologies:

- dyeing
- printing
- knitting
- weaving
- spinning
- garment manufacture.

For each of your choices:

- (i) name and describe ONE major innovation that occurred before the twentieth century;
- (ii) discuss how the quality and availability of textiles were affected by the introduction of this innovation;
- (iii) name and describe a twentieth-century version of the innovation.

**QUESTION 7. The Australian Textile Industry**

*EITHER*

(a) Discuss the impact that computer technology has had in **THREE** of the following areas:

- fabric manufacture
- garment design
- marking and cutting
- garment manufacture
- garment surface decoration.

*OR*

(b) Changes in Australian society over the last two decades have affected the variety and consumption of textiles in Australia.

Discuss this statement with reference to **THREE** of the following:

- environmental issues
- sport and leisure
- marketing of textiles
- consumer buying practices
- government policies.

## SECTION III—DESIGN

### QUESTION 8

New fashion streetwear is often inspired by sportswear.

Select TWO of the following sports:

- surfing
- horse-riding
- skiing
- softball.

- (a) Sketch a conventional outfit for EACH sport selected.
- (b) Explain the functions of the fabrics used in the TWO conventional sporting outfits.
- (c) Using the TWO conventional outfits as inspiration, sketch and fully label THREE modified items for streetwear. Give reasons for the modifications.
- (d) Combine the THREE items from part (c) to create your final streetwear ‘look’. Sketch and justify this ‘look’.

### QUESTION 9

A large shopping mall is about to open, and you are to design and supply textile items for sale in one of the specialty shops.

- (a) Identify the specialty shop, and list the textile items that you would expect to find in this shop.
- (b) From your list in part (a), select and design THREE different items. Sketch and fully label your items.
- (c) Outline the aesthetic qualities of your designs.
- (d) For ONE of your items, describe TWO processes that you could use in its manufacture.

**QUESTION 10**

Colour, proportion, and seam lines play an important part in how clothes can change the appearance of a person.

- (a) Design and sketch an outfit that uses colour to make a tall person look shorter.
- (b) Design and sketch an outfit that uses proportion to give emphasis to the upper part of the body.
- (c) Design and sketch an outfit that uses seam lines to make a slim person look wider.
- (d) Describe how colour, proportion, and seam lines have achieved the required effects in the above designs.

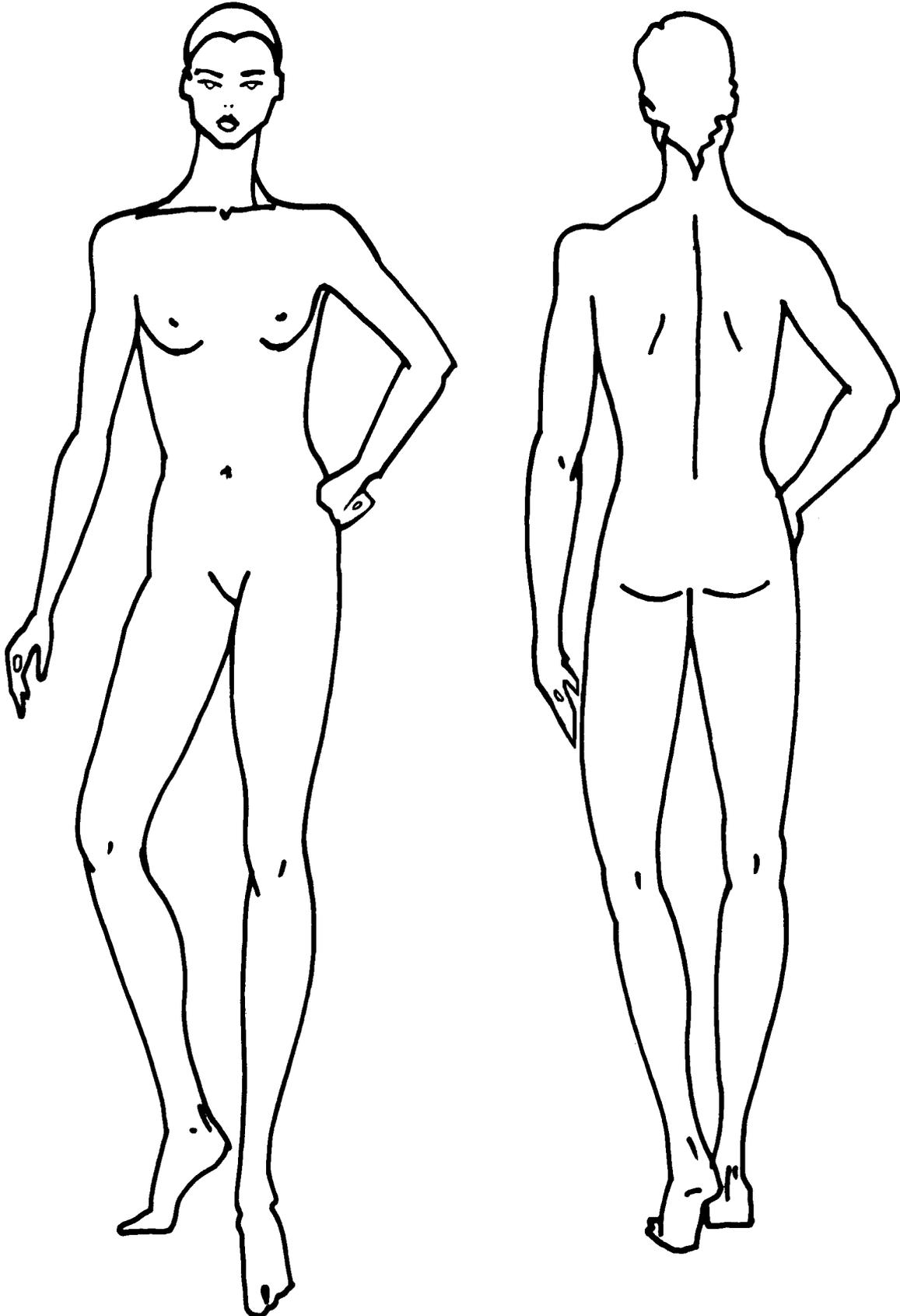
**QUESTION 11**

From a textile project you have completed:

- (a) state the original design brief, and outline the design situation;
- (b) sketch and fully label the original textile project, and include the technique(s) used;
- (c) using a design process, show how the original project ideas could be adapted to a new end-use item (illustrate your answer);
- (d) outline the manufacturing process(es) that could be used to mass-produce this new item.

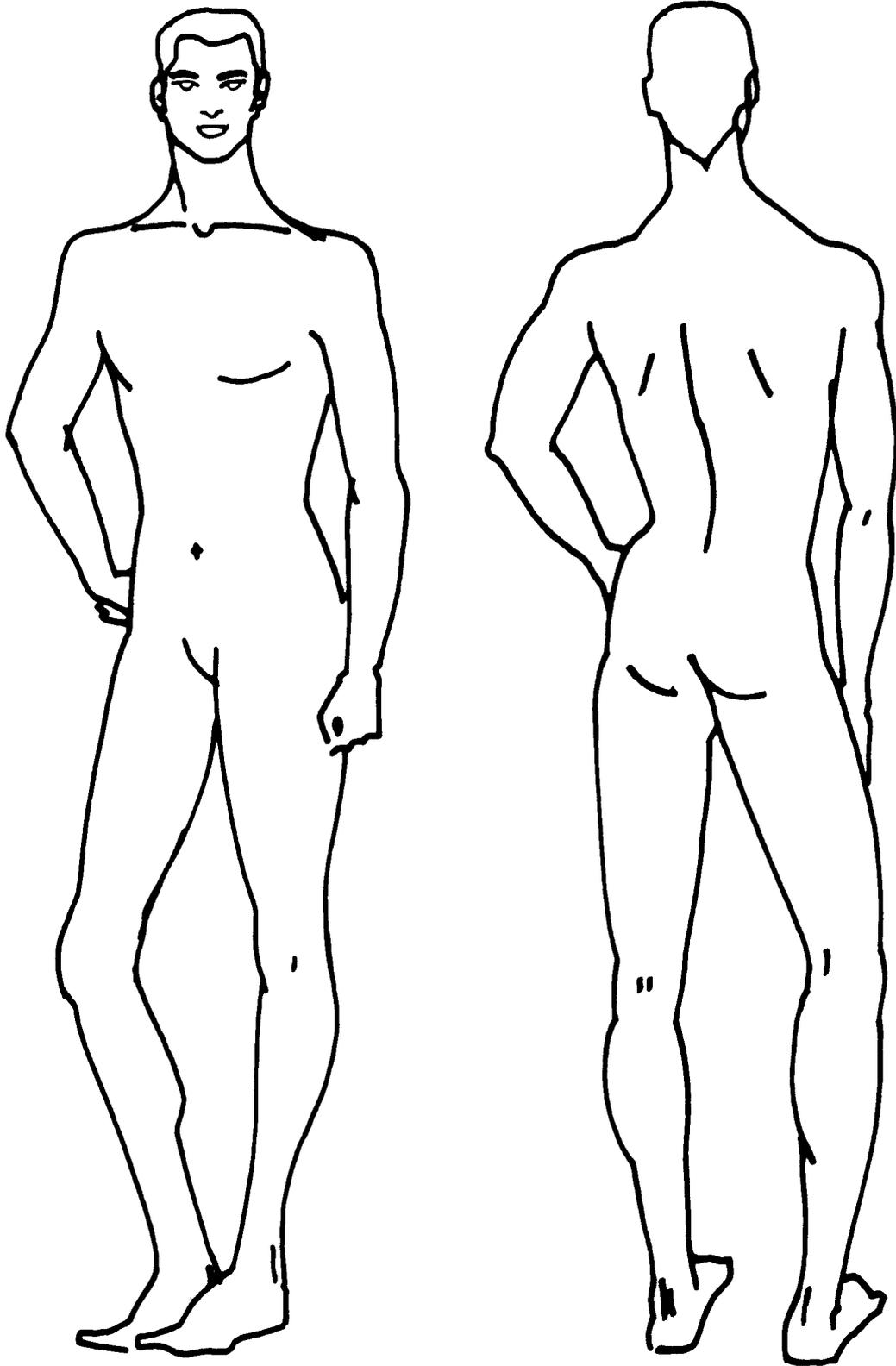
These outlines may be used for guidance when answering questions requiring clothing designs.

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