

B O A R D O F S T U D I E S
NEW SOUTH WALES

HIGHER SCHOOL CERTIFICATE EXAMINATION

2000

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, 10 and 11 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) With reference to the following items:

- printed woven cotton-polyester check tablecloth
- dyed woven cotton-polyester check tablecloth

(i) describe the method of applying colour to each of these items;

(ii) explain how each method of colour application used will affect the quality and appearance of the two items.

(b) Explain the purpose of fixation processes in printing.

QUESTION 2 Finishing

Choose THREE of the following textile items that could be used in cinema environments.

- cotton velveteen curtain
- cotton uniforms
- acrylic upholstery fabric for seating
- nylon carpet.

For EACH item chosen, select a DIFFERENT finish.

(a) Name the finish that would enhance the item's properties.

(b) Describe the method of application.

(c) Explain how the finish achieves its purpose.

(d) Explain how you would test the effectiveness of the finish.

QUESTION 3 Properties and Performance of Textiles

Many of the properties attributed to textile articles are determined by the fibre and the fabric structure used in their construction.

Select THREE of the following textile articles:

- swimming costume
- snow-ski jacket
- gymnastics leotard
- horse-riding jodhpurs
- sports socks.

- (a) Identify the performance criteria of the selected articles.
- (b) Choose an appropriate fibre or fibre blend suitable for EACH of the selected articles. Give reasons for your choice.
- (c) Choose an appropriate fabric structure for EACH of the selected articles. Give reasons for your choice.
- (d) Give examples of tests that could be used to assess the effectiveness of the fibre and fabric structure for each of the articles chosen.

QUESTION 4 Properties and Performance of Textiles

- (a) Describe each of the following:
 - (i) staple fibre;
 - (ii) continuous filament;
 - (iii) textured yarn.
- (b)
 - (i) Give an example of a synthetic textile product made from:
 - a staple fibre;
 - a continuous filament.
 - (ii) Compare and contrast the properties of each of these products.
- (c) Describe THREE methods of producing textured yarn.
- (d) Explain the properties created by texturising yarn.

SECTION II—TEXTILES AND SOCIETY

All questions in Section II have TWO parts.

Answer EITHER Part (a) OR Part (b).

QUESTION 5 Culture and Textiles

EITHER

(a) With reference to TWO cultures, compare and contrast the following influences on textile production methods:

- social organisation
- technological development
- resources
- cultural traditions.

OR

(b) It is thought that traditional textile crafts are in decline. Discuss how changes in lifestyle, and improved communications and technology, have led to a changed role for traditional textile crafts in a culture that you have studied.

QUESTION 6 History of the Textile Industry

EITHER

- (a) (i) Describe the operation of TWO of the following technological developments.
- Spinning jenny
 - Open-end spinning machine
 - Self-twist spinning machine
 - Flying shuttle
 - Jacquard loom
- (ii) Explain how each technological development selected in part (i) influenced the quality and quantity of textiles produced.
- (iii) Discuss how each technological development selected in part (i) impacted on the variety of textile products available.

OR

- (b) Identify THREE textile developments from the twentieth century. Describe these developments and discuss how these developments have influenced the role of the textile worker, and the consumer of textile products.

QUESTION 7 The Australian Textile Industry

EITHER

(a) Discuss the influence of:

- (i) environmental issues
- (ii) government policies
- (iii) technological developments in the last twenty-five years

on the production of EITHER wool OR cotton in the Australian textile industry.

OR

(b) Discuss how the Australian textile industry has responded to changes in society and the economy. In your answer, consider:

- changing patterns of fibre consumption
- effects of the increasing number of tourists
- marketing of Australian textile products.

SECTION III—DESIGN

QUESTION 8

A new restaurant has been established with the business name ‘alphabet’.

- (a) Sketch a design motif which could be used as corporate identification in the decor of the restaurant.
- (b) With the aid of sketches, show how the motif could be incorporated in the design of THREE separate textile items in the restaurant, eg carpets, walls, tablecloths, blinds and serviettes.
- (c) Explain the technique of applying the motif to the THREE items you have identified in part (b).
- (d) Explain how the desired functional and aesthetic attributes have been achieved for ONE of the items you have identified in part (b).

QUESTION 9

A new preschool named after the comet ‘temple-tuttle’ is celebrating its opening with a promotional theme party. Children will be given a costume to wear, based on aliens and space travel.

- (a) Sketch and fully label TWO outfits suitable for this theme (front and back views).
- (b) Outline the safety features of both of your designs.
- (c) Identify the fabric(s) suitable for each design, and justify your choices.
- (d) Describe TWO suitable construction techniques which allow for quick costume change and durability for future use.

QUESTION 10

The quality of textile items can be determined by construction techniques, fabric choice and colour.

With reference to a textile project that you completed for the HSC course:

- (a) sketch and fully label your textile product, indicating construction techniques, fabric choices and colour(s);
- (b) describe how the construction techniques and fabric choices contribute to the functional and/or aesthetic qualities of the final product;
- (c) explain how your colour choice(s) contribute to the aesthetic and/or functional qualities of the product;
- (d) discuss how you would alter the construction techniques to enable the textile product to be mass-produced.

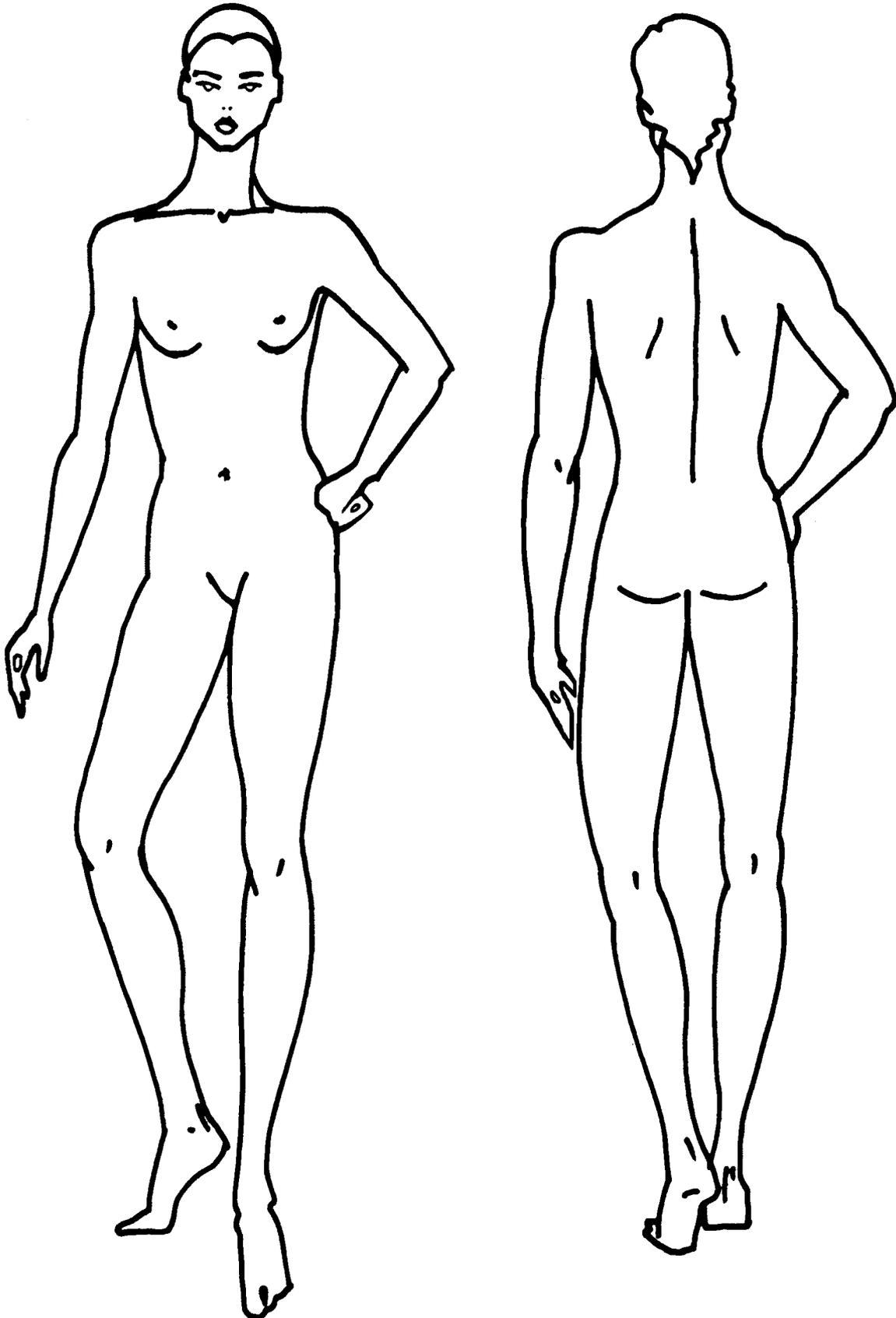
QUESTION 11

You are a textile consultant who has been approached by a maternity-clothing production company to design a range of suitable clothing for sale on an Internet home shopping site.

- (a) Describe the criteria that you might consider when designing maternity garments.
- (b) Sketch and fully label ONE maternity garment that is to be included on this home shopping site (front and back views).
- (c) Explain how the principles and elements of design have been used to meet the needs of the consumer group interested in buying maternity garments.
- (d) The maternity-clothing production company is planning to include a fact sheet on each garment. List the information it will contain.

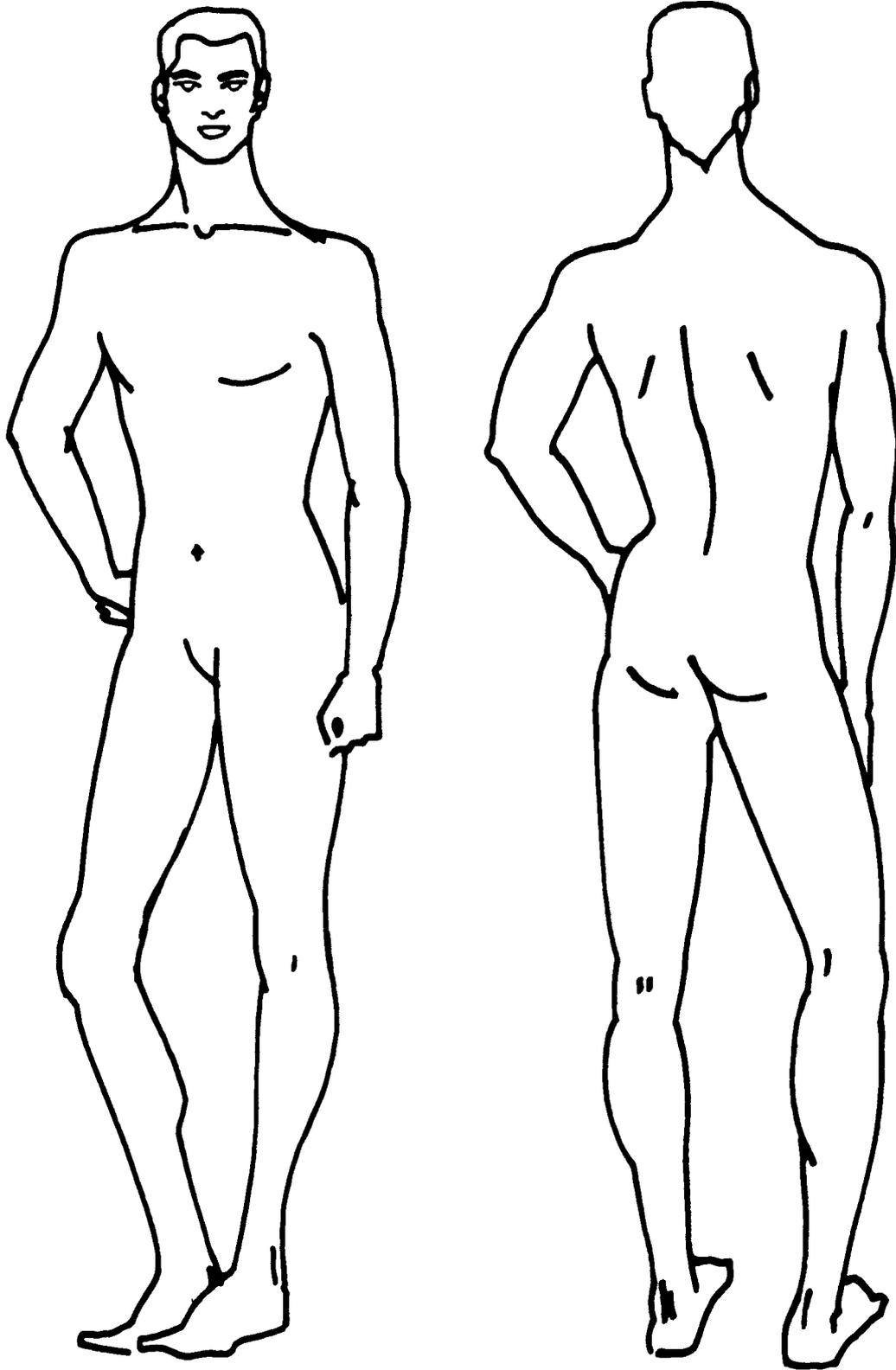
These outlines may be used for guidance when answering questions requiring clothing designs.

Use for tracing only. Do NOT sketch on this sheet. Do NOT hand it in with Writing Booklets.



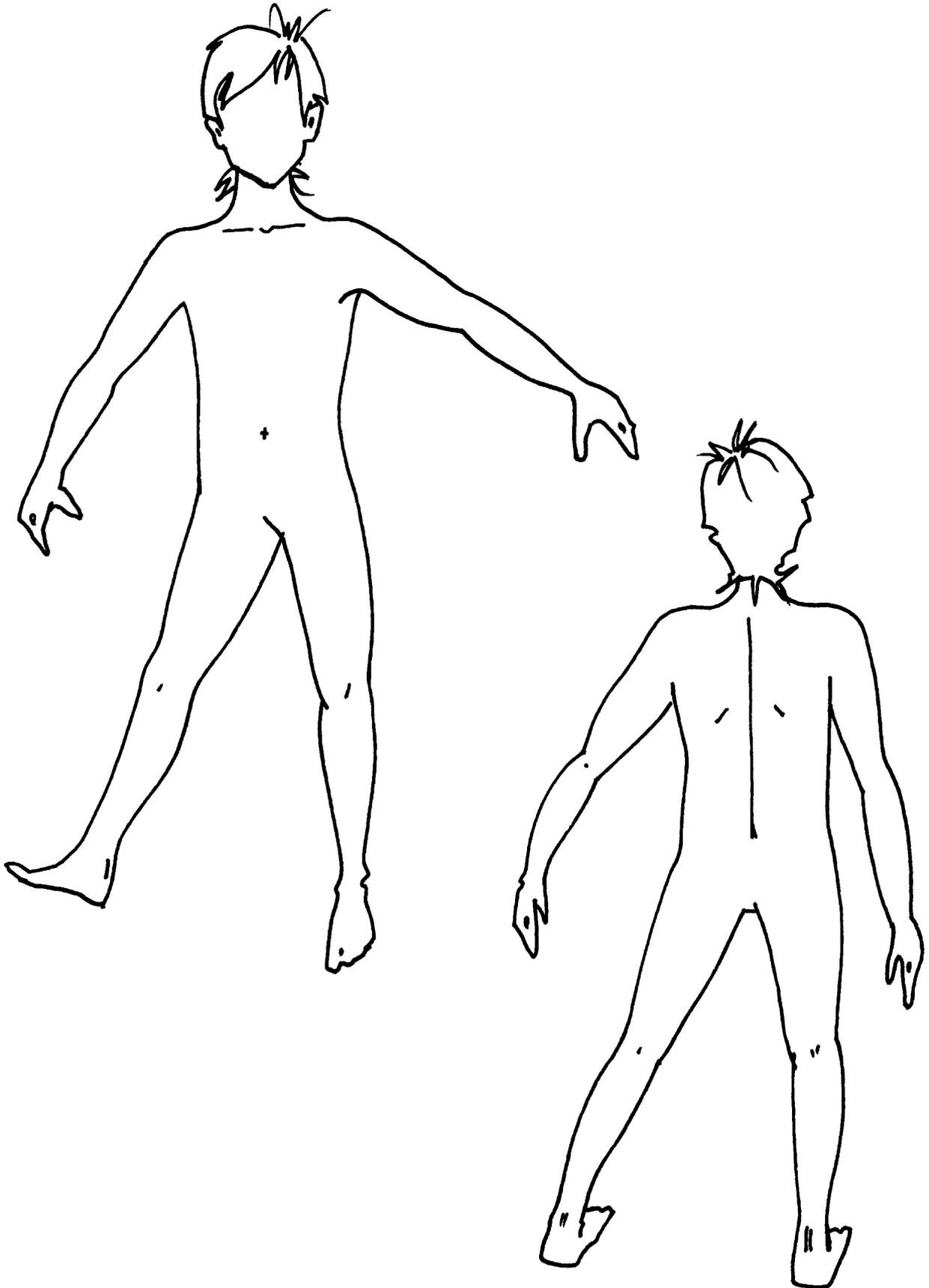
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