



HOUSING AND DESIGN

Senior Secondary 5C

Subject Code: TE872

External Assessment

2005

Time: Three Hours

On the basis of your performance in this examination, the examiners will provide results on each of the following criteria taken from the syllabus statement:

Criterion 5 Demonstrate knowledge and understanding of the practical, sociological and psychological need for shelter for individuals, families and groups.

Criterion 9 Analyse factors affecting the layout, interior surfaces and furnishings of an area that is required for a specific function.

Criterion 10 Demonstrate knowledge and understanding of the factors which affect human comfort.

Pages: 7
Questions: 6
Attachments: Answer Sheets for Sections B and C

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CANDIDATE INSTRUCTIONS

Candidates **MUST** ensure that they have addressed **ALL** of the externally assessed criteria on this examination paper.

There are **THREE** sections to this paper.

Answer **ONE** question from each section.

Use the answer sheets provided for your answers to **Sections B and C**. You must clearly indicate which question you have answered.

SECTION A

Answer **ONE** question from this section.

Use a separate **answer booklet** for this section.

This section assesses **Criterion 5**.

Question 1

- (a) The Australian landscape has many examples of different housing styles. Select **TWO** housing styles prominent in Australia and for each discuss:
- key features
 - historical significance
 - suitability to Australian conditions. (34 marks)
- (b) Discuss how the practical, sociological and psychological housing needs of early European migrants (1788 – 1820) were met. (16 marks)

Question 2

To begin your tertiary education you need to move to another Tasmanian city.

- (a) List what you would consider to be your practical, sociological and psychological needs in your new housing. (5 marks)
- (b) You have the following housing options available:
- Student accommodation on campus catering for 60 people. You have your own bedroom but share kitchen, bathroom, lounge and recreational facilities. Meals are provided.
 - In response to a newspaper advertisement, private board with a family consisting of a single parent and two young children. You have your own bedroom and small sitting room, but share all other facilities with the family. All meals are provided. It is 40 minutes from the education facility, on a regular bus route.
 - In response to a student noticeboard advertisement, share house opportunity with two senior students, in CBD, 20 minutes from the education facility. You have your own bedroom, but share all other facilities.
 - Small, one bedroom self-contained flat above 24-hour takeaway shop, 10-minute walk from the education facility.

Select **THREE** of the above options and discuss how each of these could meet your needs, identifying advantages and disadvantages of each. (45 marks)

SECTION B

Answer **ONE** question from this section.

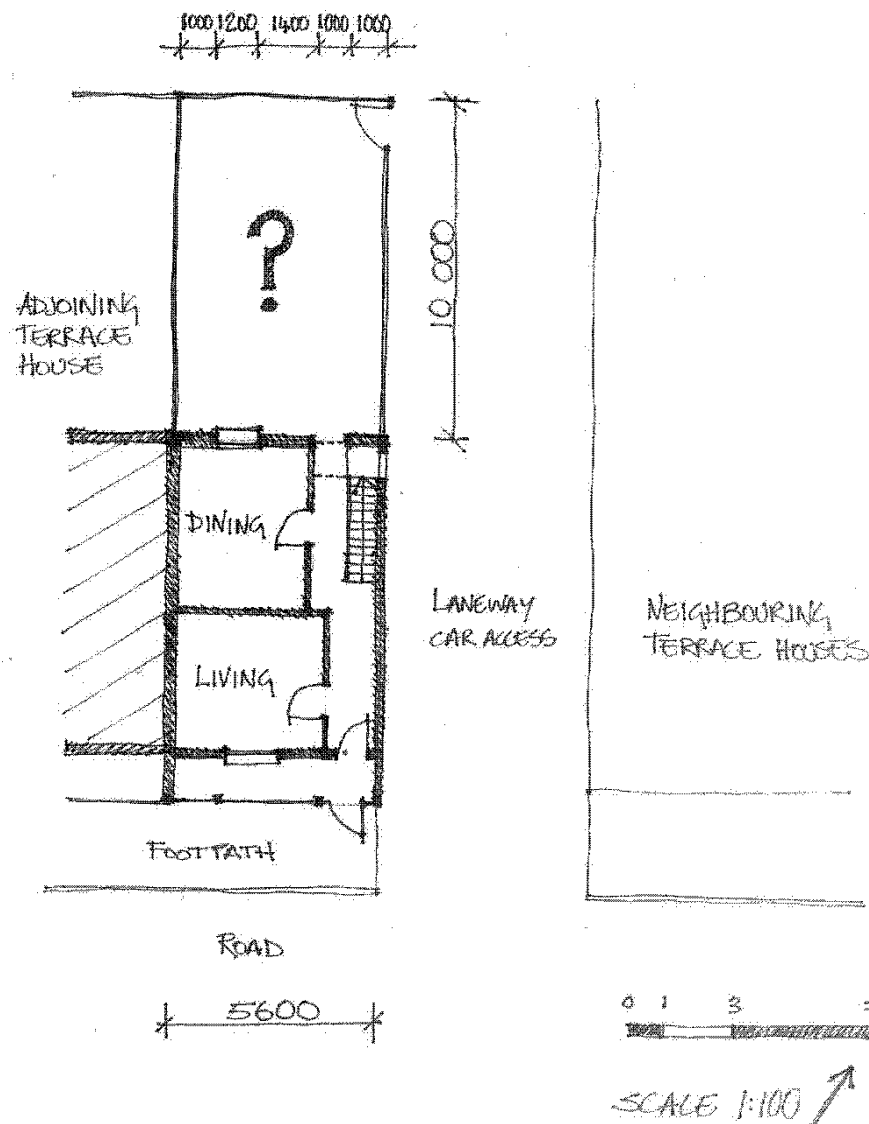
Use the **answer sheet** provided for your answer to this section.

This section assesses **Criterion 9**.

Question 3

A young couple with an 18-month-old toddler have bought an inner-city terrace house in Tasmania. The terrace house is heritage-listed and so the existing structure and rooms need to be maintained. A very small kitchen and bathroom was attached to the back of the house but this has been removed because of the asbestos sheeting and lead-based paint.

The clients ask you to provide a design for a modern extension containing a new kitchen and courtyard/BBQ space to the existing terrace house.



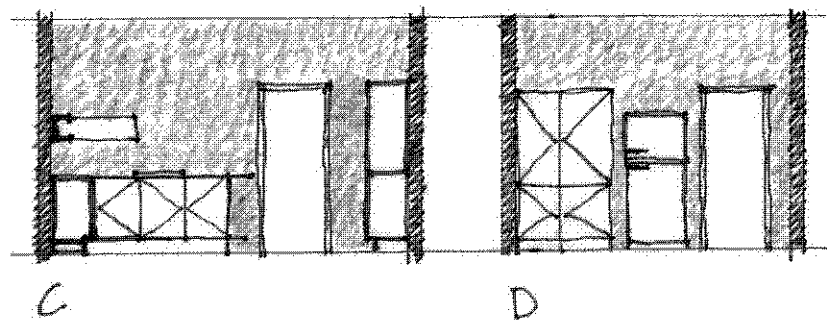
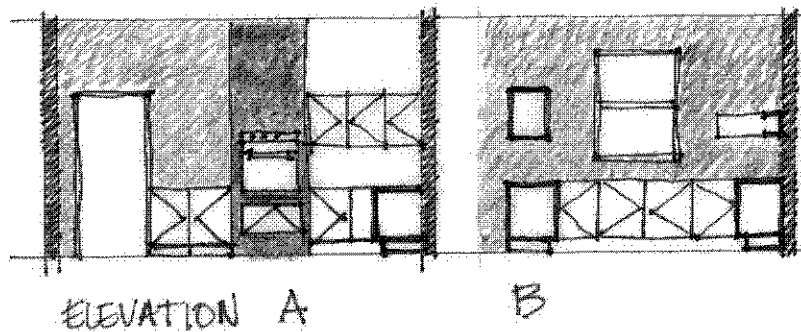
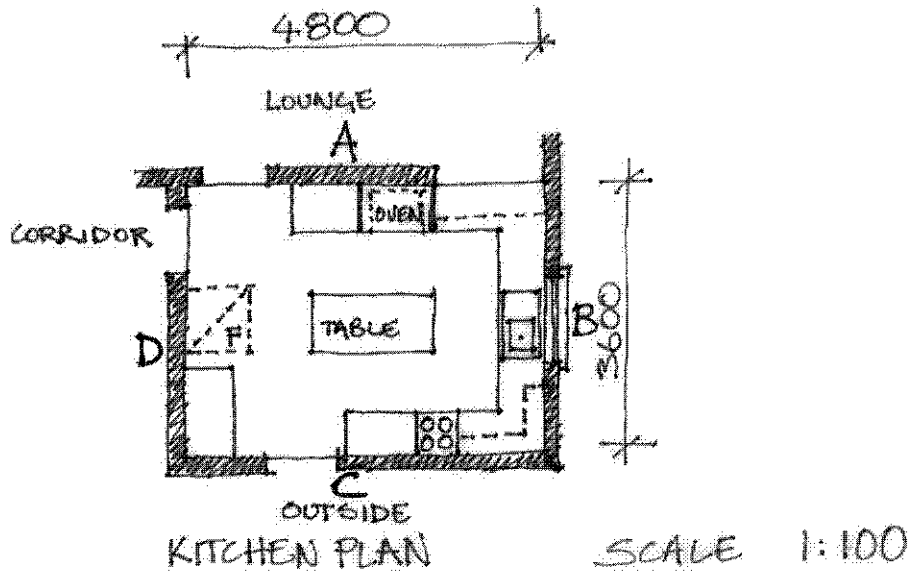
Answer this question by drawing your design for the terrace house extension in plan and at a scale of 1:50. Annotate your drawing explaining layout (fittings and furniture).

Section B continues opposite.

Section B (continued)

Question 4

During the past few years, Murray has operated a successful market stall making traditional fudge. Six months ago, Murray had an accident, losing the use of his legs and now needs to use a wheelchair. Murray has asked for your design advice in renovating his kitchen to allow wheelchair access. A plan of the old kitchen is drawn below.



Answer this question by drawing your design for Murray's renovated kitchen in plan and at least one key section at a scale of 1:50. Annotate your drawings explaining layout and ergonomic considerations. Include suggestions for surface finishes.

SECTION C

Answer **ONE** question from this section.

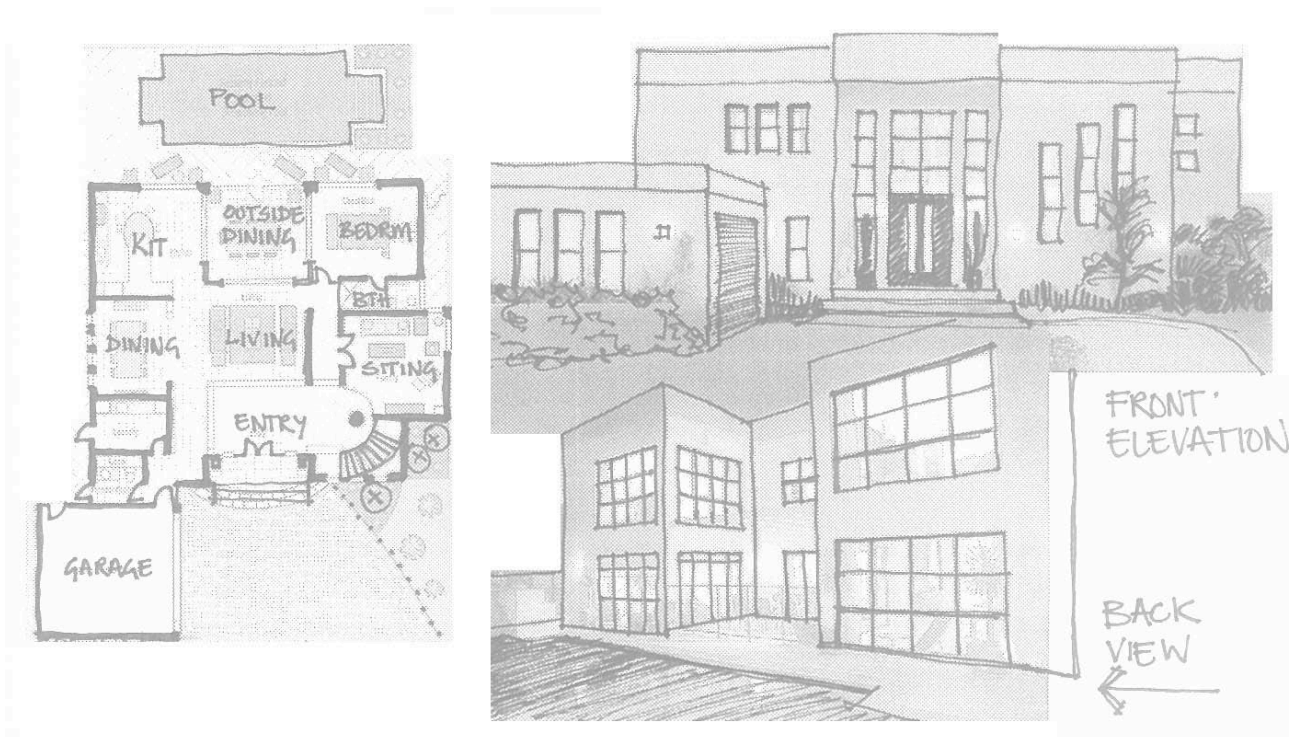
Use the **answer sheet** provided for your answer to this section.

This section assesses **Criterion 10**.

Question 5

Your favourite aunt Dee, who lives in Melbourne has recently bought a block of land in Cairns. She has decided to build a house there to live in during the winter months, as cold weather affects her asthma. Dee has sent some pictures of the house she would like to build, but she is unsure whether this is appropriate because some builders have commented that the house may require ducted air-conditioning, and Dee's asthma is made worse by air conditioning.

Dee found this house from a charity raffle brochure.



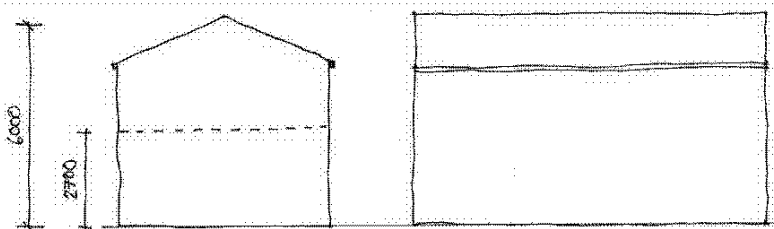
- (a) Using dot points and diagrams explain to your Aunt Dee why this house design would be inappropriate for the hot, humid climate of Cairns and why it may need air conditioning. (25 marks)
- (b) Provide a sketch of a more appropriate building type for a hot, humid climate, with annotations detailing the design principles and ways to achieve good energy-efficiency and environmental comfort. (25 marks)

Section C continues opposite.

Section C (continued)

Question 6

Chris and Lee are beginning a new business on the north-west coast of Tasmania, growing local native flowers. As most of their money is tied up in the establishment of this business they have bought a large farm shed to fit out as their home. They have drawn a rough sketch of the shed and have asked your advice in how to ensure that their home will be energy-efficient and environmentally comfortable. They have stressed their desire to make use of the shed's existing cladding (corrugated iron) and structure.



Use annotated diagrams and sketches to explain recommendations for:

- orientation of the shed
- positions of windows, doors and porch (covered entry awning)
- additional material choices and construction that are energy-efficient and provide environmental comfort.