

# Geography

## General Instructions

- Reading time – 5 minutes
- Working time – 3 hours
- Write using black pen
- Board-approved calculators may be used
- A Stimulus Booklet is provided with this paper
- Write your Centre Number and Student Number at the top of pages 9, 11, 13 and 15

## Total marks – 100

**Section I** Pages 2–6

### 20 marks

- Attempt Questions 1–20
- Allow about 35 minutes for this section

**Section II** Pages 9–15

### 40 marks

- Attempt Questions 21–24
- Allow about 1 hour and 10 minutes for this section

**Section III** Page 17

### 40 marks

- Attempt TWO questions from Questions 25–27
- Allow about 1 hour and 15 minutes for this section

## Section I

**20 marks**

**Attempt Questions 1–20**

**Allow about 35 minutes for this section**

**Refer to the Stimulus Booklet**

Use the multiple-choice answer sheet for Questions 1–20.

---

- 1** Which of the following terms is used to describe where things are and why they are there?
- (A) Spatial dimension
  - (B) Ecological pattern
  - (C) Environmental impact
  - (D) Sustainable development

Refer to Source A on page 1 of the Stimulus Booklet to answer Questions 2–4.

- 2** What is the barometric pressure at the location labelled **Z**?
- (A) Greater than 992 hPa and less than 996 hPa
  - (B) Greater than 996 hPa and less than 1000 hPa
  - (C) Greater than 1000 hPa and less than 1004 hPa
  - (D) Greater than 1004 hPa and less than 1008 hPa
- 3** How much rain has fallen in the location labelled **Z** over the six-hour period illustrated?
- (A) Between 1 mm and 2 mm
  - (B) Between 2 mm and 5 mm
  - (C) Between 5 mm and 10 mm
  - (D) Between 10 mm and 20 mm
- 4** What feature of the synoptic chart indicates that it was generated in summer?
- (A) Low rainfall over central Australia
  - (B) Lack of cold fronts over northern Australia
  - (C) Tropical cyclone over north-western Australia
  - (D) Low pressure cell over north-eastern Australia

Refer to Source *B* on page 1 of the Stimulus Booklet to answer Questions 5–6.

- 5 In which occupation was the smallest proportion of people employed in the Western Australian town in 2011?
- (A) Labourers
  - (B) Professionals
  - (C) Machinery workers
  - (D) Technicians and trades
- 6 What was the approximate number of professionals in the Western Australian town in 2011?
- (A) 1350
  - (B) 1550
  - (C) 2450
  - (D) 2750

Refer to Source *C* on page 1 of the Stimulus Booklet to answer Question 7.

- 7 What is the approximate percentage change in the total population of Western Australia between 2006 and the projection for 2021?
- (A) 7%
  - (B) 15%
  - (C) 24%
  - (D) 81%

Refer to Source *D* on pages 2–3 of the Stimulus Booklet to answer Questions 8–14.

- 8 What is the approximate latitude and longitude of the James Low Bridge at GR 955614?

	<i>latitude</i>	<i>longitude</i>
(A)	152°57'N	26°34'W
(B)	26°34'N	152°57'W
(C)	152°57'S	26°34'E
(D)	26°34'S	152°57'E

- 9** What is the grid reference of the spot elevation at Mount Ninderry in the north-east quadrant of the map?
- (A) 993631
  - (B) 993629
  - (C) 007631
  - (D) 007629
- 10** Which of the following is the most evident economic activity in AR 9657?
- (A) Mining
  - (B) Grazing
  - (C) Agriculture
  - (D) Manufacturing
- 11** What is the bearing of Mount Combe (AR 9459) from Fair Hill (AR 9764)?
- (A) 29°
  - (B) 151°
  - (C) 209°
  - (D) 231°
- 12** What is the general direction of flow of the South Maroochy River in AR 9361?
- (A) North east
  - (B) North west
  - (C) South east
  - (D) South west
- 13** Approximately how long will it take to walk from the sub station (AR 9456) to the ruins (AR 9060) along Image Flat Road and Kiamba Road at a speed of 5 km/h?
- (A) 1 hour 5 minutes
  - (B) 1 hour 25 minutes
  - (C) 1 hour 45 minutes
  - (D) 2 hours 5 minutes

- 14 What is the approximate area of Poona Dam (AR 9058)?
- (A) 0.2 km<sup>2</sup>
  - (B) 0.4 km<sup>2</sup>
  - (C) 0.6 km<sup>2</sup>
  - (D) 0.8 km<sup>2</sup>
- 15 Which of the following sources from the Stimulus Booklet has the largest scale?
- (A) *H*
  - (B) *F*
  - (C) *D*
  - (D) *A*

Refer to Source *D* and Source *E* on pages 2–3 of the Stimulus Booklet to answer Questions 16–17.

- 16 Which of the following structures is labelled **X** in Source *E*?
- (A) Wappa Dam (GR 921611)
  - (B) Poona Dam (GR 911584)
  - (C) James Low Bridge (GR 955614)
  - (D) Water treatment works (GR 923579)
- 17 In which direction was the camera pointing when the photograph was taken?
- (A) North
  - (B) East
  - (C) South
  - (D) West

**18** An agricultural industry has started using chemicals to manage a pest infestation.

Which of the following is a possible outcome due to sociocultural influences?

- (A) Changes in profit for farmers due to higher yields
- (B) Food chain disruption due to the use of chemicals
- (C) Introduction of an export quota for products treated with chemicals
- (D) Decreased sales of products due to a preference for organic products

Refer to Source *G* and Source *H* on page 4 of the Stimulus Booklet to answer Question 19.

**19** At approximately what time of day was the photo taken in San Francisco?

- (A) 8 am
- (B) 12 pm
- (C) 3 pm
- (D) 7 pm

**20** A geographer is visiting a regional centre to investigate the impact of counterurbanisation.

Which of the following techniques would be most useful in gathering primary data for this investigation?

- (A) Survey local residents about recent home renovations
- (B) Annotate photographs of the commercial district of the regional centre
- (C) Interview local shopkeepers about sales performance in the last two years
- (D) Collect clippings from local newspapers about improved community infrastructure

BLANK PAGE

BLANK PAGE



--	--	--	--	--

Centre Number

**Section II**

--	--	--	--	--	--	--	--	--	--

Student Number

**40 marks**

**Attempt Questions 21–24**

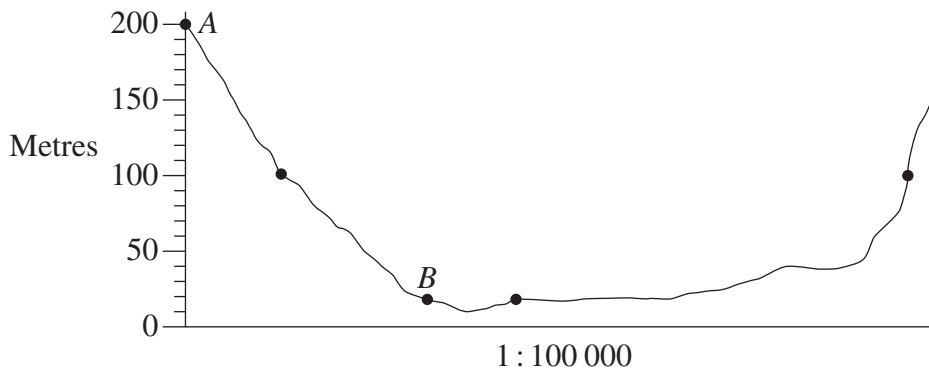
**Allow about 1 hour and 10 minutes for this section**

Use the Stimulus Booklet and your knowledge of geography to answer Questions 21–24 in the spaces provided. These spaces provide guidance for the expected length of response.

---

**Question 21 (7 marks)**

Use this cross-section to answer parts (a)–(b).



- (a) Calculate the average gradient between points *A* and *B* on the cross-section. **2**  
 Show all working.

.....

.....

.....

.....

- (b) Calculate the vertical exaggeration of this cross-section. Show all working. **2**

.....

.....

.....

.....

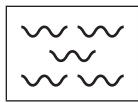
**Question 21 continues on page 10**

Question 21 (continued)

Refer to Source *F* on page 3 of the Stimulus Booklet to answer part (c).

- (c) Use the landforms along the 45 Northing to complete the key, then construct a transect between Eastings 11 and 21 using this key. **3**

**Key:**



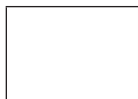
Ocean



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

Landform  
transect



**End of Question 21**

--	--	--	--	--

Centre Number

Section II (continued)

--	--	--	--	--	--	--	--	--

Student Number

Question 22 (12 marks)

Answer this question with reference to an economic activity and enterprise that you have studied.

<p>Economic activity: .....</p> <p>Economic enterprise: .....</p>
---

- (a) Outline the impact of ONE linkage associated with the economic enterprise. 2

.....

.....

.....

.....

- (b) Describe TWO ecological dimensions associated with the economic enterprise. 4

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 22 continues on page 12

Question 22 (continued)

(c) Explain how TWO global changes in the economic activity affect the future direction of the economic enterprise.

6

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

**End of Question 22**

--	--	--	--	--

Centre Number

Section II (continued)

--	--	--	--	--	--	--	--	--

Student Number

**Question 23** (11 marks)

Answer all parts of the question with reference to a large city in the developed world.

Large city: .....
-------------------

- (a) Describe the spatial patterns of advantage and disadvantage in this large city. **3**

.....

.....

.....

.....

.....

.....

.....

.....

.....

**Question 23 continues on page 14**

Question 23 (continued)

- (b) Contrast TWO urban dynamics of change operating in this large city. **4**

.....

.....

.....

.....

.....

.....

.....

.....

.....

- (c) Explain how an urban dynamic has affected the culture of place of this large city. **4**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

**End of Question 23**

--	--	--	--	--

Centre Number

Section II (continued)

--	--	--	--	--	--	--	--	--

Student Number

**Question 24** (10 marks)

- (a) Explain how biophysical factors influence where an ecosystem at risk is located. **4**

.....

.....

.....

.....

.....

.....

.....

.....

.....

- (b) How has ONE ecosystem at risk responded to natural stress? **6**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

BLANK PAGE



# Geography

## Section III

**40 marks**

**Attempt TWO questions from Questions 25–27**

**Allow about 1 hour and 15 minutes for this section**

Answer each question in a SEPARATE writing booklet. Extra writing booklets are available.

---

Your answers will be assessed on how well you:

- demonstrate geographical knowledge and understanding relevant to the question
  - communicate ideas and information using geographical terms and concepts appropriately
  - refer to case studies, illustrative examples and the Stimulus Booklet where appropriate
  - present a sustained, logical and cohesive response
- 

### **Question 25** (20 marks)

Contrast the nature and character of mega cities in the developing world with world cities.

### **Question 26** (20 marks)

Discuss how management strategies could be used to address human impacts that are placing TWO ecosystems at risk.

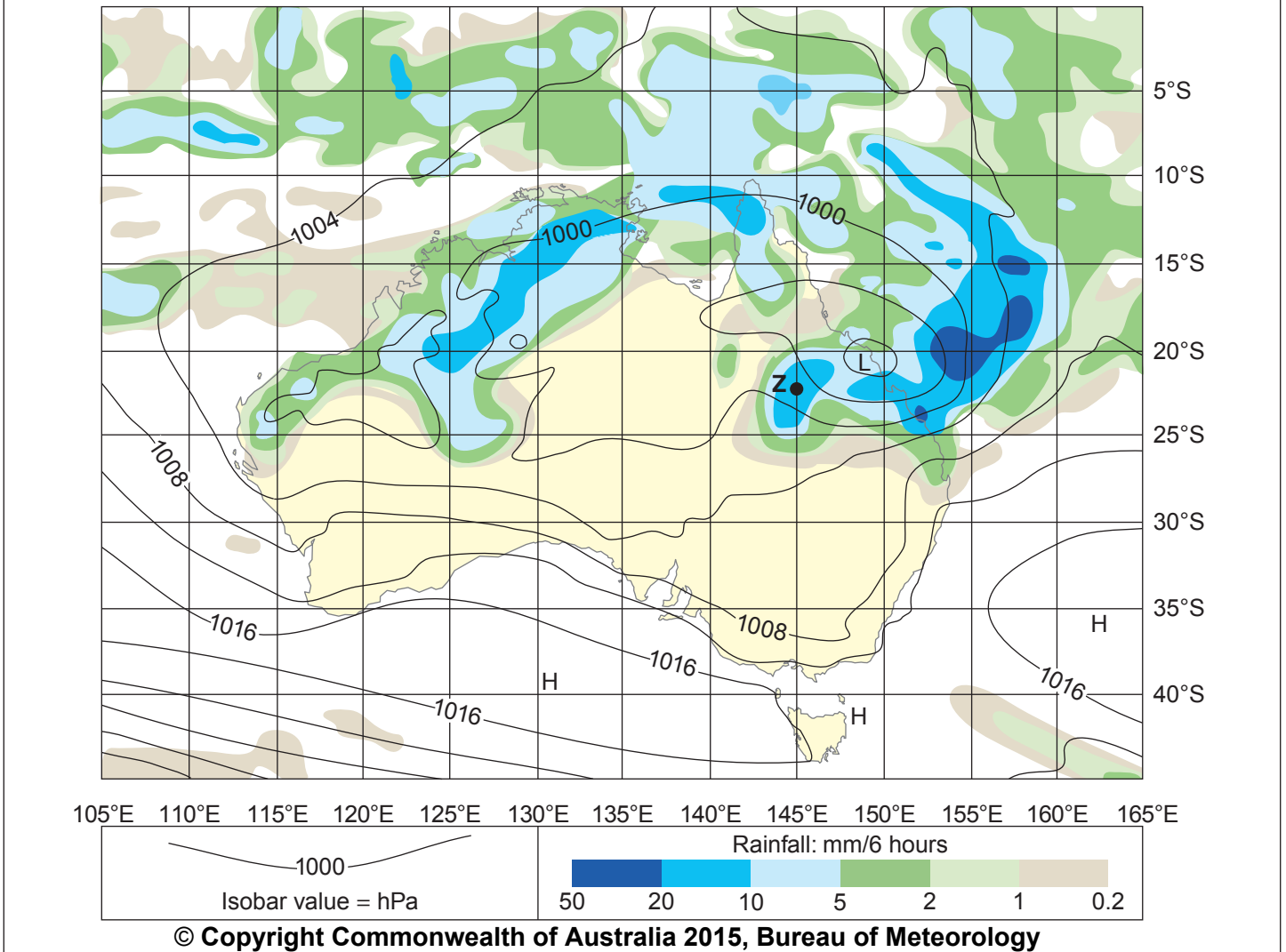
### **Question 27** (20 marks)

Analyse the environmental and social impacts of ONE economic activity.

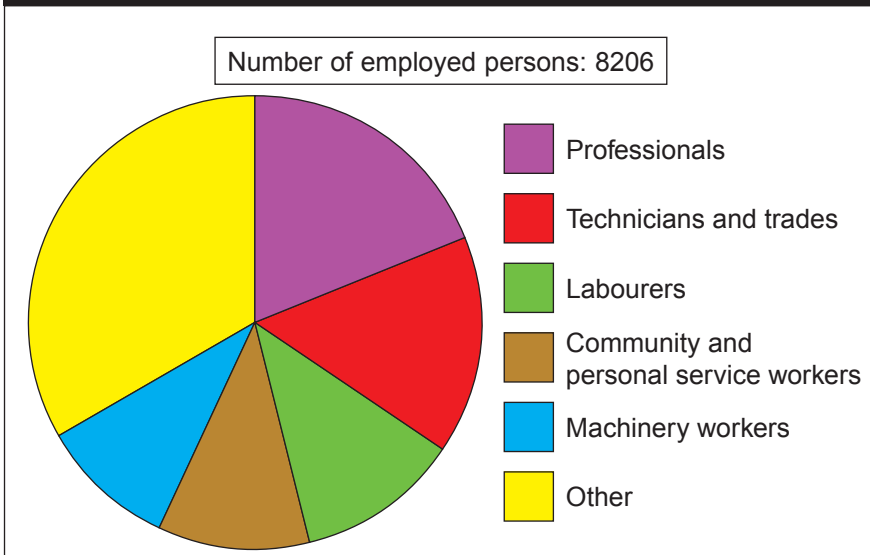
**End of paper**

BLANK PAGE

### Source A – Synoptic chart – Australia



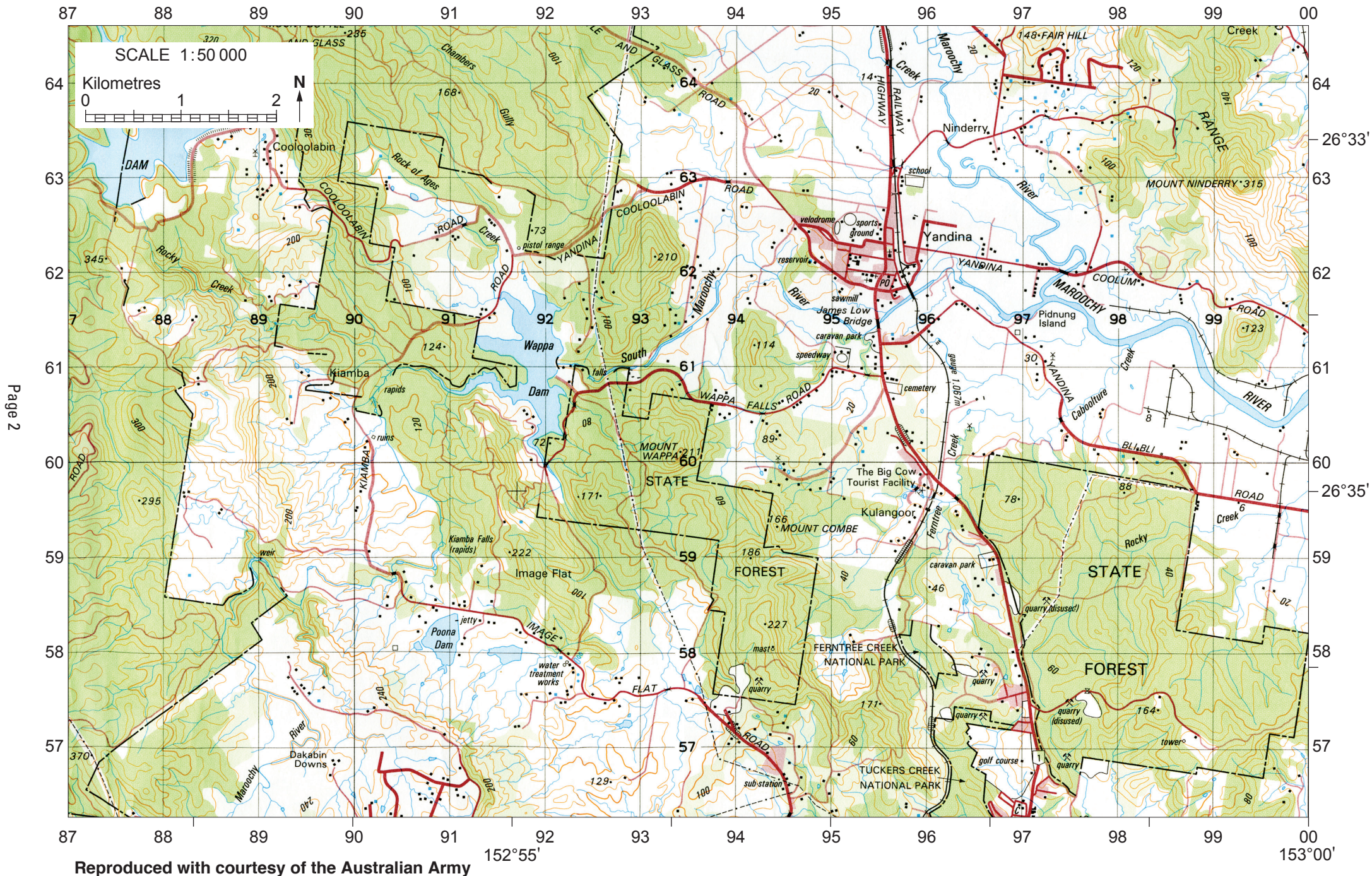
### Source B – Occupations of employed persons in a Western Australian town in 2011



### Source C – Total population for Western Australia

Year	Population
2006	2 048 500
2011	2 210 400
2016 (projected)	2 376 400
2021 (projected)	2 534 600

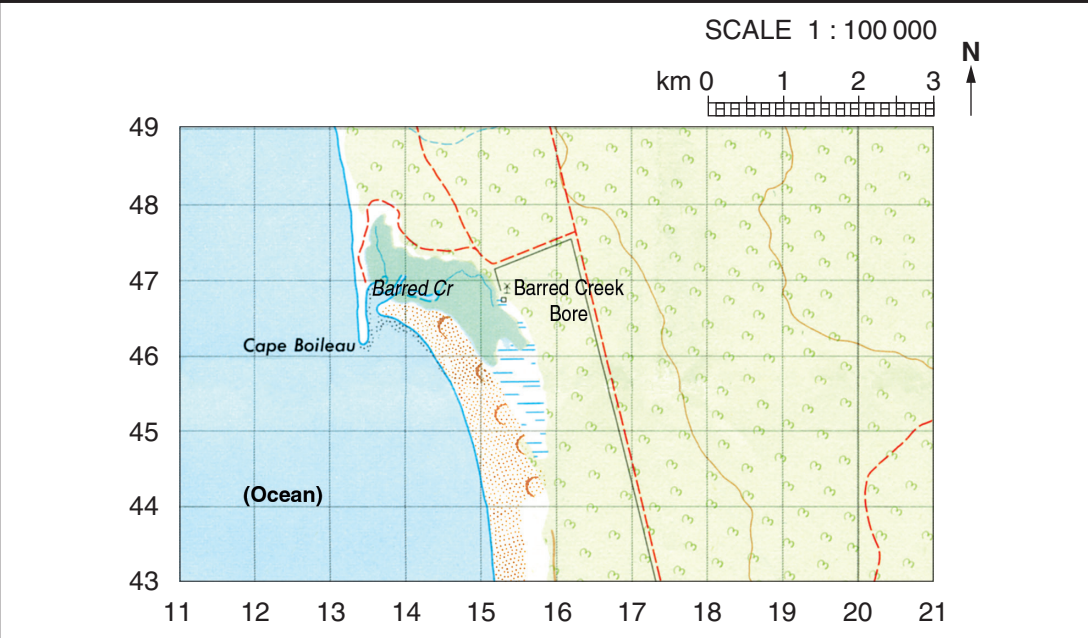
Source D – Yandina area (Queensland) topographic map



**Source E – Photograph taken in Yandina area**



**Source F – Cape Boileau (Western Australia) landform map**



Reproduced with courtesy of the Australian Army

**Legend for Sources D and F**

Built up area . . . . .	
Sealed road two or more lanes; National route marker . . . . .	
Sealed road one lane; Cutting; Embankment . . . . .	
Unsealed road two or more lanes; Culvert; Causeway . . . . .	
Unsealed road one lane; Approximate position (AP) . . . . .	
Vehicle track; Road bridge; Gate; Stock grid . . . . .	
Mine; Building; Ruin; Yard . . . . .	
Windmill; Communication tower . . . . .	
Fence; Horizontal control point; Spot elevation . . . . .	
Contour with value and cliff; Depression contours . . . . .	
Sand dunes; Sand ridges . . . . .	
Vegetation; Dense, medium, scattered . . . . .	
Scrub; Dense, medium, scattered . . . . .	
Land subject to inundation; Ricefield . . . . .	
Perennial lake; Watercourse . . . . .	
Intermittent lake; Watercourse . . . . .	
Creek; Falls; Spring . . . . .	
Tank or small dam; Waterhole . . . . .	
Dam wall . . . . .	

Source D Contour interval = 20 m

Source F Contour interval = 20 m

Awaiting copyright

Awaiting copyright