

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

2010

**HIGHER SCHOOL CERTIFICATE
EXAMINATION**

Geography

General Instructions

- Reading time – 5 minutes
- Working time – 3 hours
- Write using black or blue 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, 15 and 17

Total marks – 100

Section I Pages 2–7

20 marks

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

Section II Pages 9–17

40 marks

- Attempt Questions 21–26
- Allow about 1 hour and 10 minutes for this section

Section III Page 19

40 marks

- Attempt TWO questions from Questions 27–29
- 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.

Refer to Source A to answer Questions 1–3.

- 1** What is the approximate distance along the highway between Broome and Derby?
 - (A) 90 km
 - (B) 120 km
 - (C) 160 km
 - (D) 220 km

- 2** What is located at approximately $17^{\circ}15'S$ $123^{\circ}06'E$?
 - (A) Bidijul
 - (B) North Cliffs
 - (C) Silent Grove
 - (D) Napier Downs

- 3** What direction is Derby from Broome?
 - (A) East
 - (B) South
 - (C) North-East
 - (D) South-West

Refer to the distance grid to answer Questions 4–5.

Distance grid (km) via the Great Northern Highway

Travelling times in hours

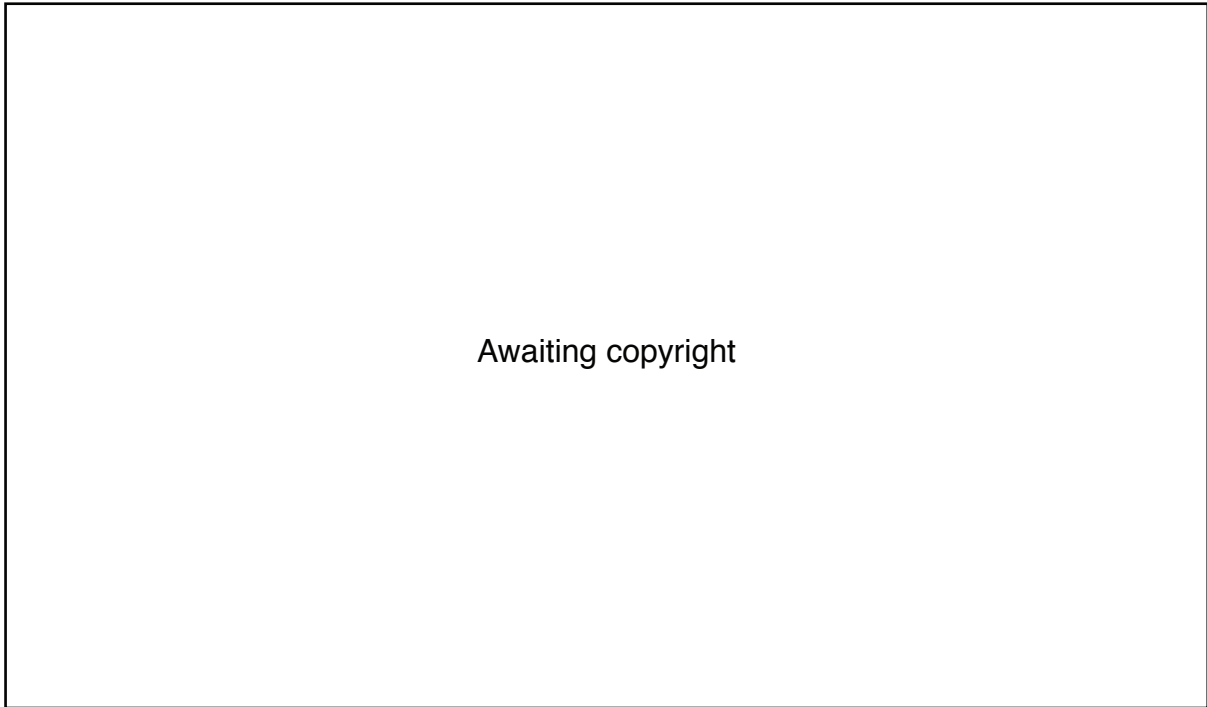
Perth	55 1	569 7	774 10	1194 15	1650 21	2245 28
Muchea	514 6	719 9	1139 14	1595 20	2190 27	
Mt Magnet	205 3	625 8	1081 13	1676 21		
Meekatharra	420 8	876 11	1471 18			
Newman	456 6	1051 13				
Port Hedland	615 8					
Broome						

- 4 How long should it take to travel from Mt Magnet to Port Hedland?
- (A) 3 hours
(B) 6 hours
(C) 13 hours
(D) 21 hours
- 5 It took 10 hours to travel from Perth to Meekatharra. What was the average speed?
- (A) 52.5 km/h
(B) 68.3 km/h
(C) 77.4 km/h
(D) 79.6 km/h

Refer to Source C to answer Questions 6–10.

- 6** What is the length of the runway at Broome Airport?
- (A) 1000 m
 - (B) 2000 m
 - (C) 3000 m
 - (D) 4000 m
- 7** What is the building density at AR 1718?
- (A) 9 per km²
 - (B) 12 per km²
 - (C) 15 per km²
 - (D) 18 per km²
- 8** What is the grid reference for the Gantheaume Point Lighthouse in the south-west quadrant?
- (A) GR 129125
 - (B) GR 129128
 - (C) GR 130125
 - (D) GR 130128
- 9** Which transect is possible along the 16 Northing?
- (A) Beach – residential area – scattered vegetation – beach
 - (B) Beach – scattered vegetation – residential area – beach
 - (C) Beach – perennial lake – medium vegetation – mangroves
 - (D) Beach – residential area – medium vegetation – mangroves
- 10** What is the bearing from the zoological gardens (GR 172172) to the rodeo ground (GR 202186)?
- (A) 26°
 - (B) 64°
 - (C) 154°
 - (D) 244°

Refer to the synoptic chart below and Source B in the Stimulus Booklet to answer Questions 11–12.



- 11** What weather is likely to be experienced in Hobart in the next 24 hours?
- (A) Clear, sunny and calm
 - (B) Cloudy, windy with rain
 - (C) Calm with continued heavy rain
 - (D) Calm, dry with increasing humidity
- 12** What is the approximate air pressure of TC ‘Laurence’?
- (A) 1000 hPa
 - (B) 1004 hPa
 - (C) 1008 hPa
 - (D) 1012 hPa

Refer to Sources C, D, E and F to answer Questions 13–17.

- 13** What is the scale of the aerial photograph of Broome in 2007?
- (A) 1 : 50 000
 - (B) 1 : 100 000
 - (C) 1 cm to 1 km
 - (D) 1 m : 50 000 cm
- 14** With reference to Sources D and E, what urban dynamic of change has occurred in Broome between 1981 and 2007?
- (A) Urban decay
 - (B) Consolidation
 - (C) Suburbanisation
 - (D) Spatial exclusion
- 15** What is the percentage increase of the residential area in AR 1614 during the ten years from 1997 to 2007?
- (A) 0%
 - (B) 25%
 - (C) 50%
 - (D) 100%
- 16** What is the most likely reason for the increase in size of the sewage works in AR 1712 from 1997 to 2007?
- (A) The population has grown.
 - (B) The golf course requires sewage facilities.
 - (C) The scale of the map and aerial photograph are different.
 - (D) The tightening of environmental controls means they take up more space.

- 17** What changes have occurred in land use around the airport between 1981 and 2007?
- (A) The east-west runway has been removed.
 - (B) There is more housing west of the airport.
 - (C) Revegetation in the area has created a buffer zone for the airport.
 - (D) The north-south runway has been removed and replaced by housing.

Refer to Sources C and F to answer Questions 18–19.

- 18** What direction is the photographer of Source F facing?
- (A) East
 - (B) North
 - (C) South
 - (D) West
- 19** What is the feature labelled as **X** on Source F?
- (A) Jetties
 - (B) Cable Beach
 - (C) Cookes Pillar
 - (D) Dampier Creek
- 20** What is counterurbanisation?
- (A) A marked decline in total population
 - (B) The formation of distinctive residential districts
 - (C) A restriction in freedom of movement of urban dwellers
 - (D) The process whereby people move from urban areas to rural areas

BLANK PAGE

Geography

--	--	--	--	--

Centre Number

Section II

40 marks

Attempt Questions 21–26

Allow about 1 hour and 10 minutes for this section

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

Student Number

Use the Stimulus Booklet and your knowledge of geography to answer Questions 21–26 in the spaces provided. These spaces provide guidance for the expected length of response.

Question 21 (7 marks)

Identify an economic activity from the sources on page 4 of the Stimulus Booklet.
--

(a) Describe ONE factor related to the nature of this economic activity. 3

.....

.....

.....

.....

.....

.....

(b) Describe TWO environmental impacts of this economic activity. 2

(i) 2

.....

.....

.....

(ii) 2

.....

.....

.....

BLANK PAGE

BLANK PAGE



--	--	--	--	--

Centre Number

Section II (continued)

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

Student Number

Question 23 (5 marks)

Identify ONE world city:.....

How is this world city dominant over other urban centres?

5

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



--	--	--	--	--

Centre Number

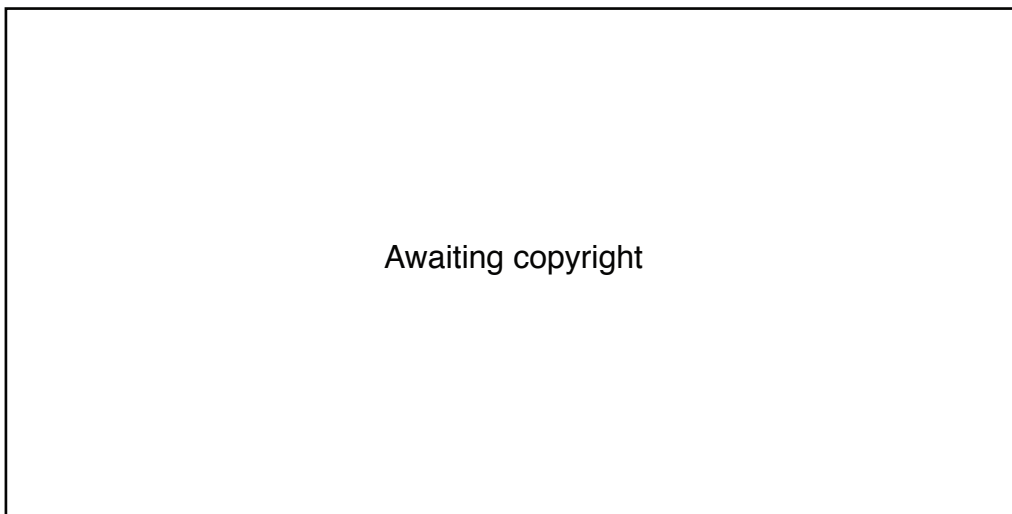
Section II (continued)

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

Student Number

Question 25 (8 marks)

The following article gives details of a conservation and land management scheme in the Kimberley region of Western Australia.



- (a) How does a geographical understanding of ecosystems at risk help rangers in the Kimberley apply traditional and contemporary management strategies? **4**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 25 continues on page 16

Question 25 (continued)

- (b) With reference to an ecosystem you have studied, describe the use of ONE traditional and ONE contemporary management strategy.

4

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

End of Question 25



--	--	--	--	--

Centre Number

Section II (continued)

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

Student Number

Question 26 (8 marks)

- (a) Outline the nature and character of mega cities in the developing world. **4**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 26 continues on page 18

Question 26 (continued)

- (b) Describe ONE challenge of living in a mega city. Include examples in your answer.

4

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

End of Question 26

Geography

Section III

40 marks

Attempt TWO questions from Questions 27–29

Allow about 1 hour and 15 minutes for this section

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

In your answers you 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 27 (20 marks)

To what extent have global changes affected an economic enterprise you have studied?

Question 28 (20 marks)

‘An ecosystem at risk is both vulnerable and resilient to natural stress and human induced modifications.’

Discuss this statement.

Question 29 (20 marks)

Analyse ONE of the urban dynamics of change operating in a country town or a suburb.

End of paper

BLANK PAGE

Awaiting copyright

Awaiting copyright

Awaiting copyright

Awaiting copyright

Awaiting copyright

Awaiting copyright

Awaiting copyright

Awaiting copyright