Western Australian Certificate of Education
Sample Examination, 2016
Question/Answer Booklet

GEOGRAPHY

Please place your student identification label in this box

Student Number:     In figures

In words

Time allowed for this paper
Reading time before commencing work: ten minutes
Working time for paper: three hours

Materials required/recommended for this paper
To be provided by the supervisor
This Question/Answer Booklet
Broadsheet
Multiple-choice Answer Sheet

To be provided by the candidate
Standard items: pens (blue/black preferred), pencils (including coloured),
sharpeners, correction fluid/tape, eraser, ruler, highlighters
Special items: approved drawing and measuring instruments (i.e. dividers, drawing compass,
string, protractor), up to three non-programmable calculators approved for use
in the WACE examinations

Number of additional answer booklets used (if applicable):

Important note to candidates
No other items may be taken into the examination room. It is your responsibility to ensure that
you do not have any unauthorised notes or other items of a non-personal nature in the
examination room. If you have any unauthorised material with you, hand it to the supervisor
before reading any further.
Structure of this paper

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Instructions to candidates

1. The rules for the conduct of Western Australian external examinations are detailed in the *Year 12 Information Handbook 2016*. Sitting this examination implies that you agree to abide by these rules.

2. Answer the questions according to the following instructions.
   - Section One: Answer all questions on the separate Multiple-choice Answer Sheet provided. For each question, shade the box to indicate your answer. Use only a blue or black pen to shade the boxes. If you make a mistake, place a cross through that square, then shade your new answer. Do not erase or use correction fluid/tape. Marks will not be deducted for incorrect answers. No marks will be given if more than one answer is completed for any question.
   - Sections Two and Three: Write your answers in this Question/Answer Booklet.
   - Wherever possible, you are encouraged to use relevant, fully-labelled sketch maps, diagrams and actual examples to illustrate and support your answers.
   - You must be careful to confine your responses to the specific questions asked and to follow any instructions that are specific to a particular question.
   - Spare pages are included at the end of this booklet. They can be used for planning your responses and/or as additional space if required to continue an answer.
     - Planning: If you use the spare pages for planning, indicate this clearly at the top of the page.
     - Continuing an answer: If you need to use the space to continue an answer, indicate in the original answer space where the answer is continued, i.e. give the page number. Fill in the number of the question that you are continuing to answer at the top of the page.
   - You are encouraged to refer to the sources on the Broadsheet to support your answer for any question. The Broadsheet is not to be handed in with your Question/Answer Booklet.
Section One: Multiple-choice 20% (20 Marks)

This section has 20 questions. Answer all questions on the separate Multiple-choice Answer Sheet provided. For each question, shade the box to indicate your answer. Use only a blue or black pen to shade the boxes. If you make a mistake, place a cross through that square. Do not erase or use correction fluid/tape. Shade your new answer. Marks will not be deducted for incorrect answers. No marks will be given if more than one answer is completed for any question.

Suggested working time: 30 minutes.

Refer to Source 1 to answer Questions 1–9.

1. Which of the following statements correctly describes the scale of the map?
   (a) One centimetre equals 250 metres.
   (b) One centimetre represents 250 metres.
   (c) One centimetre equals 2.5 kilometres.
   (d) One centimetre represents 2.5 kilometres.

2. Which of the following latitude and longitude coordinates is closest to the location of the winery (GR 653877) to the nearest minute?
   (a) 115°33'E 33°32'S
   (b) 115°32'S 32°30'E
   (c) 33°32'S 115°33'E
   (d) 32°30'S 115°32'E

3. John Hogg Road (AR 6890) is located
   (a) on a ridge.
   (b) in a valley.
   (c) on a plain.
   (d) on an escarpment.

4. The area of State Forest identified north of Stirling Road, east of Ludlow Road North, west of Gun Club Road and south of the Administrative Boundary line (refer to legend) is closest to
   (a) 1000 hectares.
   (b) 750 hectares.
   (c) 550 hectares.
   (d) 250 hectares.

   Note: 1 square kilometre = 100 hectares
5. What natural feature is located at GR 615885?
   (a) channel
   (b) swamp
   (c) sealed road
   (d) scattered vegetation

6. The difference in altitude between the elevation at the horizontal control point at
   GR 683909 and sea level at the Peppermint Grove Beach is closest to
   (a) 20 metres
   (b) 21 metres
   (c) 25 metres
   (d) 26 metres

Refer to the following diagram of a road sign to answer Question 7.

![Road sign diagram]

7. A motorist towing a boat wants to launch it from the ramp at Peppermint Grove Beach
   (GR 614898). The motorist arrives at a road junction displaying the road sign which is at
   (a) location A.
   (b) location B.
   (c) location C.
   (d) location D.

8. A motorist driving from location C (GR 641896) to location D (GR 647880) would
   predominantly be heading in what direction?
   (a) north-west
   (b) north
   (c) south-east
   (d) south

9. A motorist driving from location C (GR 641896) to location D (GR 647880) at an average
   speed of 60 km/hr would complete the journey in
   (a) 1 minute and 45 seconds.
   (b) 7 minutes.
   (c) 10 minutes and 45 seconds.
   (d) 17 minutes and 30 seconds.
Refer to Sources 1 and 2 to answer Questions 10, 11 and 12.

10. Which of the following statements is correct?

(a) The scale of the aerial photograph is larger than that of the topographic map.
(b) The scale the topographic map is larger than that of the aerial photograph.
(c) The scales of the aerial photograph and the topographic map are the same.
(d) The scale of the topographic map is twice as large as that of the aerial photograph.

11. Which of the following describes the cultural feature at Location E on the aerial photograph?

(a) built up area
(b) plantation
(c) mine works
(d) dairy factory

12. Which of the following urban processes accounts for the presence of the new development at location F on the aerial photograph?

(a) congestion
(b) renewal
(c) inertia
(d) invasion and succession

13. Which describes the increasing percentage (or proportion) of a population, living in the urban areas of a country?

(a) urban sprawl
(b) urbanisation
(c) changing demographics
(d) population growth

14. Which of the following challenges are most likely to be faced by Indigenous communities in rural and remote places in Australia?

(a) fly-in/fly-out work patterns
(b) urban sprawl
(c) social exclusion
(d) congestion

15. Which term relates to the quality of space and the built environment?

(a) urbanisation
(b) sustainability
(c) liveability
(d) socio-spatial inequality

See next page
Refer to Source 3 to answer Question 16.

16. Over the total time period shown on the graph, which of the following describes the global temperature change covered by the instrumental record?

(a) Global temperature moves from the unprecedented low point to the unprecedented high point.
(b) Global temperature moves from the unprecedented low point to a point below the historical high.
(c) Global temperature moves from a point above the historical low to a point below the historical high.
(d) Global temperature moves from a point above the historical low to an unprecedented high point.

Refer to Source 4 to answer Question 17.

17. Which of the following statements describes the general pattern shown by the data in Source 4?

(a) Global temperatures generally warm and cool at similar rates.
(b) Global temperatures tend to remain high for longer periods than cooler periods remain.
(c) Global temperatures generally warm more rapidly than they cool.
(d) Global temperatures generally cool more rapidly than they warm.

Refer to Source 5 to answer Question 18.

18. Which parts of Australia are shown to represent an anthropogenic biome?

(a) central-eastern and northern Australia
(b) north-eastern and north-western Australia
(c) central-western and southern Australia
(d) south-western and south-eastern Australia

Refer to Source 6 to answer Question 19.

19. Which parts of Australia represent the most ecologically-sensitive landscapes?

(a) Southern Australia
(b) Northern Australia
(c) Central Australia
(d) North-eastern Australia
Refer to Sources 5 and 6 answer Question 20.

20. Which world biomes are most ecologically sensitive to future climate change?

(a) coniferous forest and cultivated land
(b) tundra and coniferous forest
(c) desert and grassland
(d) tropical forest and temperate forest
Section Two: Short response  

This section has 10 questions. Answer all questions. Write your answers in the spaces provided.

Spare pages are included at the end of this booklet. They can be used for planning your responses and/or as additional space if required to continue an answer.

- Planning: If you use the spare pages for planning, indicate this clearly at the top of the page.
- Continuing an answer: If you need to use the space to continue an answer, indicate in the original answer space where the answer is continued, i.e. give the page number. Fill in the number of the question that you are continuing to answer at the top of the page.

Suggested working time: 70 minutes.

Refer to Sources 1 and 2 to answer Questions 21 and 22.

Question 21  

Identify three examples of land use change between 1985 and 2004 in the area shown on the aerial photograph.
Question 22  
(5 marks)

In the frame provided, construct a simple annotated sketch map of the Capel aerial photograph. Identify and label the following:
- the Capel River
- one major transport route
- the Capel town site showing the boundary of the built up area
- one recreational facility
- one special purpose area.

**Sketch map of Capel (2004)**

North

Approximate scale 1:10 000

Key (use as required)
Question 23 (4 marks)

Identify one significant challenge in either metropolitan Perth or a regional urban centre in Western Australia. Discuss briefly the views and attitudes of two major stakeholder groups who will be affected.

Significant challenge

________________________________________________________________________

________________________________________________________________________

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Question 24

(4 marks)

Describe two characteristics of the site and two characteristics of the situation of either metropolitan Perth or a regional urban centre in Western Australia.

Name of urban place

______________________________________________________________

Site

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

Situation

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

See next page
Question 25  (4 marks)

Identify one megacity of your choice. Explain briefly the extent to which one planning strategy can be used to address one challenge.

Name of megacity

Question 26  (4 marks)

Explain the concept of climate change.
Question 27
(4 marks)

Explain the concept of biodiversity loss.
Question 28  (3 marks)
Identify and describe briefly one major type of evidence for climate change, or biodiversity loss, through geological time.

Refer to Source 5 to answer Question 29.

Question 29  (3 marks)
Describe three characteristics of the spatial distribution of the world’s biomes.
Question 30  (6 marks)

Explain briefly two impacts of land cover change on local and/or regional environments.
Section Three: Extended response 40% (40 Marks)

This section contains four (4) questions. You must answer two (2) questions: one (1) from Part A: Unit 3 and one (1) from Part B: Unit 4. Write your answers on the pages provided.

Spare pages are included at the end of this booklet. They can be used for planning your responses and/or as additional space if required to continue an answer.

- Planning: If you use the spare pages for planning, indicate this clearly at the top of the page.
- Continuing an answer: If you need to use the space to continue an answer, indicate in the original answer space where the answer is continued, i.e. give the page number. Fill in the number of the question that you are continuing to answer at the top of the page.

Suggested working time: 80 minutes.

Part A: Unit 3 – Answer either Question 31 or Question 32 20% (20 marks)

Question 31 (20 marks)

Refer to Source 7 if you choose loss of biodiversity or to Source 8 if you choose climate change, to answer Question 31(a).

(a) Explain the effects of either loss of biodiversity or climate change in natural and anthropogenic biomes, and comment on the projected impacts of these changes. (10 marks)

(b) Evaluate two strategies proposed and/or implemented to mitigate the adverse effects of either global climate change or loss of biodiversity. (10 marks)

or

Question 32 (20 marks)

Refer to Source 7 if you choose loss of biodiversity or to Source 8 if you choose climate change, to answer Question 32(a).

(a) Explain the anthropogenic causes of either loss of biodiversity or climate change and comment on the effects of these changes in natural and anthropogenic biomes. (10 marks)

(b) Evaluate the sustainability of a program designed to address the impacts of land cover change on local and regional environments. (10 marks)
Part B: Unit 4 – Answer either Question 33 or Question 34 20% (20 marks)

Question 33 (20 marks)

(a) Identify one challenge facing metropolitan Perth or a regional urban centre in Western Australia, and one different challenge in a megacity of your choice. Describe the nature, scope and causes of each of these challenges. (8 marks)

(b) Assess one planning strategy that has been used to address one challenge facing metropolitan Perth or a regional urban centre in Western Australia. Comment on how this strategy compares with responses implemented in other places. (12 marks)

or

Question 34 (20 marks)

(a) With reference to specific examples, describe one challenge facing rural and remote places in Australia, and one different challenge in a megacity of your choice. (8 marks)

(b) Evaluate the extent to which two planning strategies adopted in metropolitan Perth, or a regional urban centre in Western Australia have enhanced liveability. (12 marks)
Question number: ________________
Question number: ___________
Question number: ____________

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Additional working space