

**GEOGRAPHICAL ASSOCIATION OF WESTERN AUSTRALIA** [Inc.]

**GEOGRAPHY – Year 11 ATAR Unit 1 Examination**

**Semester 1, 2019**

**Question/Answer Booklet**

**Student Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Student Number:**

(if required)

**Teacher Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Time allowed for this paper**

Reading time before commencing work: ten minutes

Working time: three hours

**Materials required/recommended for this paper**

***To be provided by your teacher/supervisor***

This Question/Answer Booklet

Broadsheet

Multiple-choice answer sheet

Examination writing booklet/writing paper, if supplied by your teacher/supervisor.

***To be provided by candidate***

Standard items: pens (blue/black preferred), pencils (including coloured), sharpener,correction fluid/tape, eraser, ruler, highlighters

Special items: approved drawing and measuring instruments (i.e. dividers, drawing compass, protractor and string), non-programmable calculators approved for use in this examination.

***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 material. If you have any unauthorised material with you, hand it to your teacher/supervisor **before** reading any further.

**2.**

**Structure of this paper**

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| --- | --- | --- | --- | --- | --- |
| **Section** | **Number of questions available** | **Number of questions to be answered** | **Suggested working time**  **(minutes)** | **Marks available** | **Percentage of**  **examination** |
| Section One  Multiple-choice | 20 | 20 | 30 | 20 | 20 |
| Section Two  Short response | 10 | 10 | 70 | 40 | 40 |
| Section Three Extended response  Part A: Natural Hazards | 2 | 1 | 40 | 20 | 20 |
| Section Three Extended response  Part A: Ecological Hazards | 2 | 1 | 40 | 20 | 20 |
| **Total marks** | | | | | **100** |

**Instructions to candidates**

1. The rules for the conduct of this examination are as detailed by your teacher/supervisor. Sitting this examination implies that you agree to abide by these rules.

2. Write your answers in this Question/Answer Booklet or on the lined paper provided by your teacher/supervisor, preferably using a blue/black pen. Do not use erasable or gel pens.

3. 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. Do not use erasable or gel pens. If you make a mistake, place a cross through the 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.

Section Two: Answer all questions. Write your answers in this Question/Answer Booklet.

Section Three: Consists of two parts, each with two questions. You must answer one question from each part. Tick the box next to each question you are answering. Write your answers in this Question/Answer Booklet or on the lined paper provided by your teacher/supervisor.

4. Wherever possible, you are encouraged to use relevant, fully labelled sketch maps, diagrams and actual examples to illustrate and support your answers.

1. You must be careful to confine your answers to the specific questions asked and to follow any instructions that are specific to a particular question.

6. Supplementary pages for the use of planning/continuing your answer to a question have been provided at the end of this Question/Answer Booklet or the lined paper provided by your teacher/supervisor. If you use these pages to continue an answer, indicate at the original answer where the answer is continued, i.e. give the page number.

7. You are encouraged to refer to the sources on the Broadsheet to support your answer for any question.

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**3.**

**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. Do not use erasable or gel pens. If you make a mistake, place a cross through the 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.

Suggested working time: 30 minutes.

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Refer to **Source 1:** Dongara topographic map 2014 to answer Questions 1 to 9.

1. The area of the Earth’s surface covered by the topographic map is closest to
2. 48 square kilometres.
3. 56 square kilometres.
4. 66 square kilometres.
5. 78 square kilometres.
6. The map scale of the Dongara topographic map 2014 as a statement in words is
7. one centimetre represents 2.5 metres.
8. one centimetre represents 25 metres.
9. one centimetre represents 250 metres.
10. one centimetre represents 25 000 metres.
11. The latitude and longitude of the motor racing track in AR 0360 is closest to
12. 29° 16’ S 114° 59’ E.
13. 60° 06’ S 03° 07’ E.
14. 114° 04’ S 29° 14’ E.
15. 114° 59’ S 29° 16’ E.
16. The map symbol which covers a large portion of AR 9957 represents
17. a quarry.
18. a spur.
19. an area of exposed sand.
20. an area of cleared land.
21. The direction of the level crossing at GR 016609 from the Church at GR 989624 is
22. east-southeast.
23. northwest.
24. southeast.
25. west-northwest.

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**4.**

1. Which one of the following would be closest to the compass bearing on a direct line from the Lit Beacon at GR 984607 to the Lit Beacon at GR 975595?
2. 40 degrees
3. 140 degrees
4. 180 degrees
5. 220 degrees
6. The Irwin River is best described as a
7. major perennial river
8. river that continuously provides drinking water.
9. river that flows after seasonal rainfall.
10. watercourse that flows continuously all year round.
11. A site factor that helps to explain the location of the railway line found in the eastern half of the map, would be
12. the line is located southeast of the town of Dongara.
13. the line follows predominantly flat land between areas of slightly higher land.
14. the line was easy to build due to the cleared farming land.
15. the line was built to the east of Dongara to prevent noise pollution.
16. The time taken for a train travelling at 75 kilometres per hour along the railway line between the intersection with Kailis Drive at GR 033552 and the intersection with Brand Highway at GR 018623 would be nearest to
17. 2 minutes.
18. 4 minutes.
19. 6 minutes.
20. 8 minutes.

Refer to **Source 1** Dongara topographic map 2014 and **Source 2** Dongara satellite image 2018 to answer Question 10.

1. The western and eastern borders of **Source 2** most closely align with **Source 1** along Eastings
2. 610 and 585.
3. 612 and 562.
4. 970 and 040.
5. 970 and 013.

**5.**

Refer to **Source 1** Dongara topographic map 2014, **Source 3** Dongara oblique aerial photograph 2011 to answer Questions 11 - 13.

1. Based on evidence from the sources, which direction was the photographer facing when taking the photograph?
2. North.
3. South.
4. East.
5. West.
6. The cultural feature located at Location A on **Source 3** is
7. a raceway.
8. a runway.
9. an industrial area.
10. Commonage Road.

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1. Identify which of the following Grid References on **Source 1** is the correct location of the Caravan Park found at Location B on **Source 3**.
2. GR 980622
3. GR 982603.
4. GR 984605.
5. GR 991629.
6. In relation to hazards, a pandemic refers to
7. an animal transmitted disease.
8. an organism that lives off or in another organism, causing illness.
9. the rapid spread of a disease across a region or group of people.
10. the worldwide spread of a new disease.
11. A biological or chemical hazard that has the potential to impact adversely on the wellbeing of people or on the environment more generally, is known as
12. an atmospheric hazard.
13. an ecological hazard.
14. a human hazard.
15. a natural hazard.
16. In relation to hazards, vulnerability refers to
17. how close to a hazard you are.
18. how often a hazard occurs.
19. susceptibility to harm or change.
20. the strength and size of a hazard.

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**6.**

Refer to **Source 5:** World deaths from infections of currently non-eradicable diseases to answer questions 17 and 18.

1. In the year 2000, the non-eradicable disease responsible for the most deaths was
2. HIV/AIDS.
3. Malaria.
4. Rabies.
5. Tuberculosis.
6. Based on the data and trends presented in **Source 5**, which one of the following forecasts is most likely within the next five years?
7. HIV/AIDS is likely to cause fewer deaths than Malaria.
8. Malaria is likely to become the leading cause of death.
9. Rabies is likely to become the leading cause of death.
10. The number of deaths caused by Tuberculosis is likely to increase.

Refer to **Sources 6, 7 and 8:** showing global hazard exposure and risk distributions to answer question 19.

1. Which one of the following statements is most accurately reflected by the data shown in these sources.
2. Australia experiences a low level of exposure to hazards, low mortality risk and medium to high economic risk.
3. Australia experiences a medium level of exposure to hazards, low mortality risk and medium to high economic risk.
4. South-East Asia experiences a low level of exposure to hazards, only medium mortality risk and medium economic risk.
5. South-East Asia experiences a medium level of exposure to hazards, only high mortality risk and medium economic risk.
6. Magnitude, duration, frequency and probability are all factors that may influence the
7. exposure to and impact of both natural and ecological hazards.
8. location and impact of only natural hazards.
9. severity and impact of only natural hazards.
10. severity and impact of both natural and ecological hazards.

**END OF SECTION ONE**

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**7.**

**Section Two: Short response 40% (40 marks)**

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

Supplementary pages for planning/continuing your answers to questions are provided at the end of this Question/Answer Booklet or the lined paper provided by your teacher/supervisor. If you use these pages to continue an answer, indicate at the original answer where the answer is continued, i.e. give the page number.

Suggested working time: 70 minutes.

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**Question 21 (2 marks)**

Describe **two (2)** characteristics of the situation of the waste water processing/sewage treatment plant located at GR 001606.

**Situation characteristic 1:**

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**Situation characteristic 2:**

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**8.**

**Question 22 (8 marks)**

1. In the frame below draw a sketch map of the area on **Source 1** bordered by Easting 970 to the west, Easting 994 to the east, Northing 590 to the south and Northing 610 to the north. Include any map conventions not already present.

(2 marks)

(b) Locate and label by using an appropriate symbol or colour, the following features on your sketch. Complete the key below.

(6 marks)

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| 1. Kailis Drive | 1. the golf course | 1. the industrial area |
| 1. the groynes | 1. the urban area | 1. the area of reef   that is awash |

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**9.**

Refer to **Source 1** Dongara topographic map 2018 and **Source 2** Dongara satellite image 2018 to answer Questions 23 and 24.

Q**uestion 23 (2 marks)**

Locate and describe **one (1)** example of a change in land use that can be observed in **Source 2** when compared to **Source 1**.

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**Question 24 (2 marks)**

With the aid of **Source 1 and Source 2**, describe the spatial relationship that can be observed between settlement/land use and topography in the area east of the Golf Course and west of Springfield Road compared to the area between Springfield Road and the railway line.

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**10.**

Refer to **Source 3:** Dongara oblique aerial photograph 2011 to answer Question 25.

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**Question 25 (2 marks)**

Identify and locate **one (1)** piece of evidence from **Source 3** that would suggest that the population of the town of Dongara is growing.

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**Question 26 (4 marks)**

Define the following terms and give an example of each.

**Atmospheric hazards:**

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**Hydrological hazards:**

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**11.**

**Question 27 (4 marks)**

Identify **two (2)** different natural hazards and describe the nature of each hazard.

**Natural hazard 1** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Natural hazard 2:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**12.**

**Question 28 (4 marks)**

Identify **two (2)** different ecological hazards and describe the nature of each hazard.

**Ecological hazard 1**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Ecological hazard 2:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**13.**

Refer to **Source 4:** Short-term and long-term activities within the hazard management cycle to answer Question 29.

**Question 29 (6 marks)**

Explain how **one (1)** of the factors listed as Short-term action and **one (1)** of the factors listed as Long-term action on **Source 4** may contribute to the management of hazards.

Support your answer with examples.

**Short-term action:**

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**Long-term action:**

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**14.**

Refer to **Source 7:** Global hazards mortality risk distribution and **Source 8:** Global hazards total economic loss risk distribution to answer Question 30.

**Question 30 (6 marks)**

Referring to specific locations or regions shown on **Sources 7** and **8,** explain **two (2)** factors that have contributed to the patterns of mortality risk distribution and economic loss risk distribution shown.

**First contributing factor:**

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**Second contributing factor:**

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**END OF SECTION TWO**

**15.**

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**16.**

**Section Three: Extended response 40% (40 marks)**

Section Three consists of **two** parts, Part A: Unit 1 Depth Study 1 and Part B: Unit 1 Depth Study 2.

Part A: Unit 3 Depth Study 1 consists of Questions 31 And 32 and Part B: Unit 3 Depth Study 2 consists of Questions 33 And 34.

Answer **one** question from Part A and **one** question from Part B.

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**PART A: Unit 1 Natural Hazards** Choose **either** Question 31 or Question 32

Indicate the question you will answer by ticking the box next to the question. Write your answer on pages 17-21 (or on the lined paper provided by your teacher/supervisor). When you have completed Part A: Natural Hazards, turn to page 22.

Suggested working time: 40 minutes.

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**Question 31 (20 marks)**

1. Describe the typical locations and causes of a natural hazard you have studied.

(8 marks)

1. Identify two (2) stakeholder groups affected by a natural hazard you have studied and evaluate their values and viewpoints on recovery and adaptation measures undertaken.

(12 marks)

**OR**

**Question 32 (20 marks)**

1. Describe **two (2)** ways in which the activities of people can intensify the impacts of a natural hazard you have studied.

(8 marks)

1. Evaluate the sustainability of risk management policies and practices, deployed in both the short and long term, designed to reduce the impacts of a natural hazard you have studied.

(12 marks)

Question number:

**17.**

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**PART B: Ecological Hazards** Choose **either** Question 33 or Question 34

Indicate the question you will answer by ticking the box next to the question. Write your answer on the following pages 23-27 (or on the lined paper provided by your teacher/supervisor).

Suggested working time: 40 minutes.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Question 33 (20 marks)**

(a) Describe the nature of the risks to be managed for an ecological hazard you have studied in relation to:

* the impacts on physical and mental health and
* the effects on the economy.

(8 marks)

(b) Evaluate why the environmental, economic and social impacts of an ecological hazard you have studied will be different in a developed country such as Australia compared with those in at least one less developed country or region.

(12 marks)

**OR**

**Question 34 (20 marks)**

1. Describe the nature of an ecological hazard you have studied by referring to it’s:

* duration and frequency, and
* the scale of its spatial impact

(8 marks)

(b) Identify **two (2)** stakeholder groups affected by an ecological hazard you have studied and evaluate their values and viewpoints on recovery and adaptation measures undertaken.

(12 marks)

**23.**

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