

# Geography AQA

## Paper 1. Section B – The Living World

### Hot Deserts

#### Exam Booklet

##### 3.1.2.3 Hot deserts

| Key idea                                                                     | Specification content                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hot desert ecosystems have a range of distinctive characteristics.           | <p>The physical characteristics of a hot desert.</p> <p>The interdependence of climate, water, soils, plants, animals and people.</p> <p>How plants and animals adapt to the physical conditions.</p> <p>Issues related to biodiversity.</p>                                                                                    |
| Development of hot desert environments creates opportunities and challenges. | <p>A <b>case study</b> of a hot desert to illustrate:</p> <ul style="list-style-type: none"><li>• development opportunities in hot desert environments: mineral extraction, energy, farming, tourism</li><li>• challenges of developing hot desert environments: extreme temperatures, water supply, inaccessibility.</li></ul> |
| Areas on the fringe of hot deserts are at risk of desertification.           | <p>Causes of desertification – climate change, population growth, removal of fuel wood, overgrazing, over-cultivation and soil erosion.</p> <p>Strategies used to reduce the risk of desertification – water and soil management, tree planting and use of appropriate technology.</p>                                          |

# EXAM PRACTISE QUESTIONS

1. Describe the climate of the hot desert (2 marks) *pg.30 in revision guide*

|            |            |
|------------|------------|
| (D)escribe | (D)escribe |
|            |            |

2. Explain why soil in the hot desert is not very fertile (2marks) *pg.30 in revision guide*

|             |                 |
|-------------|-----------------|
| (K)nowledge | (U)nderstanding |
|             |                 |

3. Define the term nomadic (1 mark) *pg.30 in revision guide*

| Description |
|-------------|
|             |

3. Explain why hot deserts can only support low density populations of animals and people (3 marks) *pg.30 in revision guide*

|             |                 |                 |
|-------------|-----------------|-----------------|
| (K)nowledge | (U)nderstanding | (U)nderstanding |
|             |                 |                 |

4. Explain two ways in which plants have adapted to the physical conditions of the hot desert (6 marks) *pg.31 in revision guide*

|             |                 |                 |
|-------------|-----------------|-----------------|
| (K)nowledge | (U)nderstanding | (U)nderstanding |
|             |                 |                 |
| (K)nowledge | (U)nderstanding | (U)nderstanding |
|             |                 |                 |

5. State two reasons why animals have adapted in the hot desert. (2 marks) *pg.31 in revision guide*

| (D) escribe | (D) escribe |
|-------------|-------------|
|             |             |

6. Explain how the fennec fox has adapted to the hot desert (3 marks) *pg.31 in revision guide*

| (K)nowledge | (U)nderstanding | (U)nderstanding |
|-------------|-----------------|-----------------|
|             |                 |                 |

7. Explain two ways in which the camel has adapted to the hot desert (6 marks) *pg.31 in revision guide*

| (K)nowledge | (U)nderstanding | (U)nderstanding |
|-------------|-----------------|-----------------|
|             |                 |                 |
| (K)nowledge | (U)nderstanding | (U)nderstanding |
|             |                 |                 |

8. Explain two ways in which biodiversity in the hot desert is under threat *pg.31 in revision guide*

| (K)nowledge | (U)nderstanding | (U)nderstanding |
|-------------|-----------------|-----------------|
|             |                 |                 |
| (K)nowledge | (U)nderstanding | (U)nderstanding |
|             |                 |                 |

9. Explain two opportunities for development in the hot desert (6 marks) *pg.32 in revision guide*

|             |                 |                 |
|-------------|-----------------|-----------------|
| (K)nowledge | (U)nderstanding | (U)nderstanding |
|             |                 |                 |
| (K)nowledge | (U)nderstanding | (U)nderstanding |
|             |                 |                 |

10. Explain how extreme temperatures are a challenge to development (3 marks) *pg.32 in revision guide*

|             |                 |                 |
|-------------|-----------------|-----------------|
| (K)nowledge | (U)nderstanding | (U)nderstanding |
|             |                 |                 |

11. Explain how limited water supply is a challenge to development (3 marks) *pg.32 in revision guide*

|             |                 |                 |
|-------------|-----------------|-----------------|
| (K)nowledge | (U)nderstanding | (U)nderstanding |
|             |                 |                 |

12. Explain how inaccessibility is a challenge to development (3 marks) *pg.32 in revision guide*

|             |                 |                 |
|-------------|-----------------|-----------------|
| (K)nowledge | (U)nderstanding | (U)nderstanding |
|             |                 |                 |

13. Define desertification (1 mark) *pg.33 in revision guide*

| Description |
|-------------|
|             |

14. Explain how climate change causes desertification (3 marks) *pg.33 in revision guide*

|                     |                         |                         |
|---------------------|-------------------------|-------------------------|
| <b>(K)</b> nowledge | <b>(U)</b> nderstanding | <b>(U)</b> nderstanding |
|                     |                         |                         |
| <b>(K)</b> nowledge | <b>(U)</b> nderstanding | <b>(U)</b> nderstanding |
|                     |                         |                         |

15. Explain how removal of firewood causes desertification (3 marks) *pg.33 in revision guide*

|                     |                         |                         |
|---------------------|-------------------------|-------------------------|
| <b>(K)</b> nowledge | <b>(U)</b> nderstanding | <b>(U)</b> nderstanding |
|                     |                         |                         |

16. Define the term overgrazing (1 mark) *pg.33 in revision guide*

| Description |
|-------------|
|             |

17. Explain how over-cultivation can cause desertification (3 marks) *pg.33 in revision guide*

|                     |                         |                         |
|---------------------|-------------------------|-------------------------|
| <b>(K)</b> nowledge | <b>(U)</b> nderstanding | <b>(U)</b> nderstanding |
|                     |                         |                         |

18. Explain how population growth causes desertification *pg.33 in revision guide*

|                     |                         |                         |
|---------------------|-------------------------|-------------------------|
| <b>(K)</b> nowledge | <b>(U)</b> nderstanding | <b>(U)</b> nderstanding |
|                     |                         |                         |

19. How can water management reduce the risk of desertification? (2 marks) *pg.33 in revision guide*

|             |                 |
|-------------|-----------------|
| (K)nowledge | (U)nderstanding |
|             |                 |

20. Explain how tree planting can reduce the risk of desertification (4 marks) *pg.33 in revision guide*

|             |                 |
|-------------|-----------------|
| (K)nowledge | (U)nderstanding |
|             |                 |
| (K)nowledge | (U)nderstanding |
|             |                 |

21. Explain how rotating crops can reduce the risk of desertification *pg.33 in revision guide*

|             |                 |
|-------------|-----------------|
| (K)nowledge | (U)nderstanding |
|             |                 |

22. Define what appropriate technology is (1 mark) *pg.33 in revision guide*

| Description |
|-------------|
|             |

23. Explain how using solar cookers reduces the risk of desertification (2 marks) *pg.33 in revision guide*

|             |                 |
|-------------|-----------------|
| (K)nowledge | (U)nderstanding |
|             |                 |

| Question                               | Removal of firewood is the most significant cause of desertification in hot deserts. To what extent do you agree with this statement (9 marks) |               |                   |                   |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|-------------------|
|                                        | A (application)                                                                                                                                | K (knowledge) | U (understanding) | U (understanding) |
| Paragraph 1                            |                                                                                                                                                |               |                   |                   |
| Paragraph 2<br>(Challenge – grade 6 +) |                                                                                                                                                |               |                   |                   |
| Conclusion<br>(Challenge – grade 8+)   |                                                                                                                                                |               |                   |                   |

|                                                    |                                                                                                                                                                 |                      |                          |                          |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------|--------------------------|
| <b>Question</b>                                    | <b>For a hot desert environment you have studied, assess the importance of management strategies used to reduce the risk of environmental damage. (9 marks)</b> |                      |                          |                          |
|                                                    | <b>A (application)</b>                                                                                                                                          | <b>K (knowledge)</b> | <b>U (understanding)</b> | <b>U (understanding)</b> |
| <b>Paragraph 1</b>                                 |                                                                                                                                                                 |                      |                          |                          |
| <b>Paragraph 2<br/>(Challenge –<br/>grade 6 +)</b> |                                                                                                                                                                 |                      |                          |                          |
| <b>Conclusion<br/>(Challenge –<br/>grade 8+)</b>   |                                                                                                                                                                 |                      |                          |                          |

|                                                      |                                                                                                                                                                                |                      |                          |                          |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------|--------------------------|
| <b>Question</b>                                      | <b>To what extent do extreme environments create challenges that limit development in these areas? Use a case study of a hot desert environment you have studied (9 marks)</b> |                      |                          |                          |
|                                                      | <b>A (application)</b>                                                                                                                                                         | <b>K (knowledge)</b> | <b>U (understanding)</b> | <b>U (understanding)</b> |
| <b>Paragraph 1</b>                                   |                                                                                                                                                                                |                      |                          |                          |
| <b>Paragraph 2</b><br><b>(Challenge – grade 6 +)</b> |                                                                                                                                                                                |                      |                          |                          |
| <b>Conclusion</b><br><b>(Challenge – grade 8+)</b>   |                                                                                                                                                                                |                      |                          |                          |