

# **Environmental systems and societies**

## **Standard level**

### **.....Specimen paper 1**

**For first examinations in 2017**

Examination code

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**Environmental systems and societies**  
**Standard level**  
**Paper 1**

Specimen paper

Candidate session number

1 hour

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**Instructions to candidates**

- Write your session number in the boxes above.
- Do not open this examination paper until instructed to do so.
- Answer all questions. Refer to the resource booklet which accompanies this question paper.
- Write your answers in the boxes provided.
- A calculator is required for this paper.
- The maximum mark for this examination paper is **[40 marks]**.



1. (a) Identify **two** biomes in Mongolia. [1]

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- (b) Outline **two** factors that have contributed to the high biodiversity in Mongolia. [2]

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2. (a) With reference to **Figure 3a, 3b,** and **3c** outline **two** ways in which the climate may limit productivity in Mongolia. [2]

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- (b) With reference to **Figure 3c** and your own knowledge, explain **two** reasons why Mongolia is susceptible to soil erosion. [4]

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3. Using the diagram below, draw labeled arrows to create a flow diagram that shows:

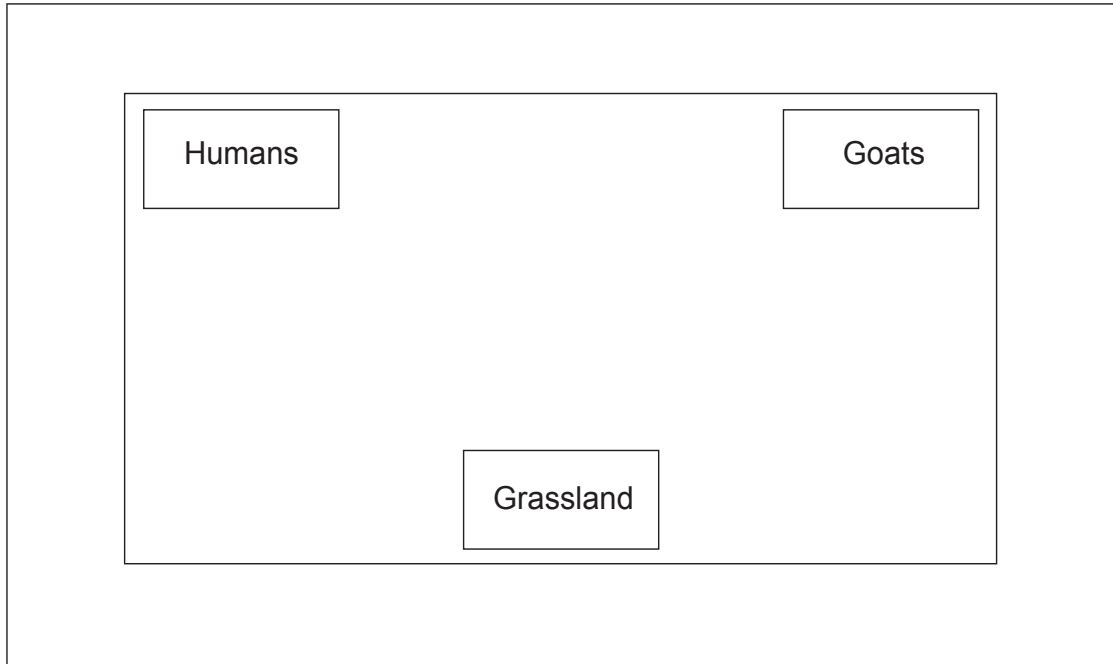
(a) one input and one output of the system.

[1]

(b) two flows between the given storages.

[1]

**Farming System**



4. To what extent does the data in **Figure 6a** and **6b** provide evidence for climate change in Mongolia?

[4]

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5. (a) With reference to **Figure 7b**, state **one** impact on the natural capital of this ecosystem of nomads settling in one place. [1]

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- (b) Identify **two** reasons for the changing number of livestock when former nomads become settled in one place. [2]

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6. **Figure 8a** shows a variation in the community over the distance between A and D.

- (a) With reference to **Figure 8a**, state why site D is included in the study. [1]

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- (b) Outline **two** ways in which the abiotic conditions of Tracks A and C differ. [1]

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- (c) (i) State the process through which communities change over time. [1]

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**(Question 6 continued)**

- (ii) Explain how this process can cause changes in the biotic and abiotic conditions by reference to Tracks A and C. **[3]**

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- 7. With reference to **Figure 6a and 6b, Figure 7a, 7b and 7c** and **Figure 9** explain how desertification and water resource shortage have led to the formation of smog in Ulan Bator. **[3]**

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8. (a) With reference to **Figure 4** and **Figure 10** outline **two** possible reasons why the Snow leopard has received special attention from conservationists. [2]

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- (b) The Snow Leopard Trust demonstrates features of several different value systems. Identify **one** feature of its activity that would be typical of anthropocentric and **one** of technocentric value systems in the table below. [2]

Activity which is typical of anthropocentric value systems	Activity which is typical of technocentric value systems
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9. With reference to **Figure 11** and other information from the resource booklet, suggest why Mongolia's biocapacity has changed over time. [3]

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**10.** With reference to the information presented in the resource booklet, analyse the global ecological value of Mongolia. **[6]**

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Answers written on this page  
will not be marked.



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