Resource Management Overview and Food **– MARK SCHEME**

1   (a)   One mark for correct calculation.

20% / 6 times greater / 500% more.   (*Percentage sign not necessary*.)

AO4 = 1

(b)   Candidates should make reference to the **map showing world oil consumption in 2016** through using continent / continental area name(s) and / or data provided. They should show that they can apply knowledge and understanding in analysing the pattern shown by the map. Expect recognition of a global pattern of higher consumption in wealthier regions / emerging economies, lower in poorer regions. The connection should be made with oil consumption as an indicator of wealth and therefore an ability to secure the goods and services that allow well-being. Credit reference to economic and / or social well-being.

The **map showing world oil consumption in 2016** shows that Asia Pacific has the largest single share of the world oil consumption (1). Countries in this region can use this oil to develop rapidly and improve incomes through employment (1) so people are likely to have improved well-being as they can access more goods and services with this wealth (1).

Africa has the lowest share of world oil consumption at 4% (1). This links to for example Sub-Saharan Africa which has low levels of well-being measured through indicators such as HDI (1).

Richer countries will have the means to purchase oil and therefore energy for personal use and industrial development (1) and this will increase the well-being of the population as they will have a good standard of living as a result (1) as visible in the North American share at 24% when that is just USA and Canada (1).

Max 1 mark if no reference to the **map showing world oil consumption in 2016**.

Reserve 3rd mark (AO4) for clear and explicit reference to the **map showing world oil consumption in 2016**.

AO3 = 2
AO4 = 1

[Total 4 marks]

2   (a)   fluctuated   coal   1992

3 × 1 marks

AO4 = 3

(b)   Any two reasonable points (2 × 1) or a single developed point (2 marks)

Indicative content

- The relative price.
- Ease of use / flexibility of use or transportation of resource.
- Concerns about the environment.
- Government policy.
- Response to public opinion.

- Increasing drive towards renewables.
- Coal running out / decline, in the UK.
- International carbon agreements.

AO2 = 2

[Total 5 marks]

3   One mark for a basic statement, e.g.

- Farmers can make more profit (1)
- Farm to fork' integration allows producers / supermarkets to maximise profits (1)
- Food is cheaper (1)
- Reduces imports (1).

Two marks for a developed idea, e.g.

- Large farms have taken over small ones (1) so they can reduce costs in using machinery across a wider area and increase profits (d)(1)

- Supermarkets and large growing organisations such as Produce World have prospered (1) as they control every stage from growing to final sale (d)(1) and don't lose money to any middle-men (d)(1)

- Reduced costs of production mean prices can be kept lower (1) so food prices are lower in real terms than 30 years ago (d) (1) / so the shopper benefits (d)(1).

    No credit for disadvantages.

AO2= 2

[Total 2 marks]

4   1 mark – basic idea of increasing food miles meaning a greater need for transport.

2nd mark – some development which includes observations about increasing use of fuel or a link to increasing levels of pollution.

AO2 = 1
AO3 = 1

[Total 2 marks]

5   The population is expected to increase by 9.7 million between 2014 and 2039 – mark is available for using data. More people will lead to an increased demand for water – for drinking, washing etc – qualification of type of use is needed for mark. More people owned dishwashers – up by 13% in under 10 years and as people have more money and more time saving devices, water use will go up as dishwashers use more water than washing up by hand.

There is no requirement to use both items of data but information must be used, not just lifted to gain marks.

2 × 1 or 1 × (1 = 1)

AO2 = 1
AO3 = 1

[Total 2 marks]

6   (a)   One mark for any correctly named country:

Brunei, Japan, Malaysia, South Korea.

AO4 = 1

(b)   C: 8 (1 mark)

33.3% (1 mark)

Percentage sign not required. Answer must be to one decimal place.

If the candidate has made a mistake in the first part then allow the corresponding answer to the second part of the question:

A – 25.0%, B – 29.2%, D – 37.5%

AO4 = 2

(c)   Answers should make use of the **map of South and East Asia** through naming countries and affected areas in order to describe the pattern and should be focused on the 15-24.9% category.

One mark for a basic statement, e.g.

- The biggest area is South Asia (1)
- All bar three of the countries are neighbours (1)
- The largest group of countries is south of China (1).

Second mark may be a second separate point <u>or</u> developed point for further descriptive clarity, e.g.

- The biggest area is South Asia (1) with a clear group to the south of China of 4 of the 7 countries (d)(1)
- Almost all of the countries are neighbours (1) with just two isolated examples, one to the south east of India and the other on China's northern border (d)(1)
- There is a group to the south of China (1) with isolated countries to the north of China and one other in SE Asia (d)(1).

No credit for description of any categories other than 15-24.9%.
No credit for a list of named countries even if correct.
No credit for explanation.

AO4 = 2

[Total 5 marks]

7   One mark for a basic statement e.g.

- Some countries are poor (1)
- When there is conflict / war (1)
- Dependence on staple crops (1).

Two marks for a developed idea e.g.

- Some countries are poor (1) so they are unable to buy food (d)(1) if the prices rise on world markets (d)(1)
- When there is conflict / war (1) food supplies can't get through (d)(1)
- Dependence on staple crops (1) means that people may be fed but the supply is still poor as people suffer malnutrition (d)(1).

AO2 = 2

[Total 2 marks]

8   (a)   One mark for the correct answer.

C 25–35%.

No credit if two or more answers are selected.

AO4 = 1

(b)   The question focuses on distribution of areas with high/very high levels of undernourishment.

One mark for basic description relating to distribution shown on the map e.g.

- large parts of tropical Africa have high levels of undernourishment both north and south of the equator (1)
- there are six countries with very high levels of undernourishment (1)

Second mark for developed point using detail from the map, e.g.

- large parts of tropical Africa have high levels of undernourishment both north and south of the equator, such as Chad and Tanzania (2)
- there are six countries with very high levels of undernourishment, four to the north of the equator, such as the Central African Republic, and two to the south, Zambia and Namibia (2)
- many parts of coastal east Africa have high levels of undernourishment, such as Tanzania and Mozambique (2).

No credit for listing names of countries or for describing the areas with low levels of undernourishment.

AO4 = 2

[Total 3 marks]