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### 1.12 EXTERNALITIES: STUDENT LEARNING ACTIVITY

Answer the questions that follow.

#### 1. DEFINITIONS

Define the following terms:

[10 marks]

- Allocatively efficient point of production and consumption
- Clean technology
- Common access resources
- Consumer expenditure
- Consumer welfare
- Examples of public goods:
- Excludable
- External cost
- Free market
- Free riders
- Government expenditure
- Government intervention
- Indirect tax
- Marginal private benefit
- Marginal social benefit
- Marginal social cost
- Marginal social costs
- Market failure
- Marketable pollution permits (also called cap-and-trade)
- Negative externalities
- Non-excludable
- Non-rivalrous
- Opportunity cost
- Primary good
- Private costs
- Private goods
- Productivity
- Public goods
- Quasi-public goods
- Rivalrous
- Social optimum level of output
- Subsidy
- Sustainability and common access resources
- Sustainable
- The free-rider problem
- The tragedy of the commons
- Welfare loss

## 1.13 Public Goods

### 2. SHORT-ANSWER QUESTIONS

1. Using examples, distinguish between the concepts of excludability and rivalry. **[4 marks]**
2. Using examples, distinguish between private and public goods. **[4 marks]**
3. Explain how the concepts of excludability and rivalry distinguish private goods from public goods. **[6 marks]**
4. Using examples, explain how quasi-public goods are different to both public **and** private goods. **[4 marks]**
5. Using examples, explain the free-rider problem. **[4 marks]**
6. Explain how the free-rider problem results in public goods being a form of market failure. **[6 marks]**
7. Explain the government response to the lack of public goods, and the implications of such a response. **[8 marks]**
8. Using examples, distinguish between a common access resource and a public good. **[6 marks]**
9. In terms of common access resources: **[8 marks]**
  - i. Explain how their relationship to the concepts of excludability **and** rivalry
  - ii. How does the lack of a price relate to their non-excludability?
  - iii. Explain how their lack of price threatens the environment. **[12 marks]**
10. Explain the relationship between market failure and common access resources. **[6 marks]**
11. Using examples, explain sustainability. **[6 marks]**
12. Distinguish between the use of common access resources **and** the overuse of common access resources. **[6 marks]**
13. Using two different examples, explain how the use of a common access resource can be consistent with sustainability. **[6 marks]**
14. Use diagrams to explain how the consumption and production of fossil fuels can conflict with the sustainable use of these resources. **[10 marks]**
15. Use diagrams to explain how various types of market failure can be used to analyse problems associated with the environment. **[10 marks]**

1.13 Public Goods

3. MULTICHOICE QUESTIONS

Complete each interactive quiz.

[50 marks]

1.13A Public Goods

Start quiz! ▶

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The image shows a Vimeo logo where the letters 'v', 'i', 'e' are inside blue spheres, and the 'l' and 'o' are white. The background is a blue globe with a grid pattern.

1.13B Public Goods

Start quiz! ▶

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