1.1 The economic problem and economic assumptions

Name: _____ Class: _____ Date: _____ **Total: 17 marks**

KEY WORDS scarcity • opportunity cost

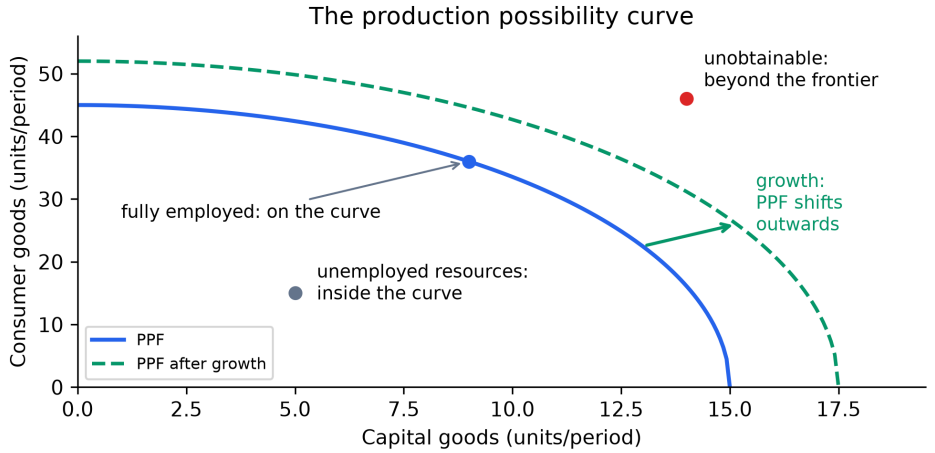
The economic problem and economic assumptions

Objective

Apply scarcity and opportunity cost to all three economic agents, read the production possibility curve, explain growth shifts, and use the assumptions with their exceptions (spec 1.1.1–1.1.2).

1 Key knowledge and worked examples

The economic problem. Scarcity (unlimited wants, finite resources) forces choice; every choice's cost is the next-best alternative forgone – for consumers, producers and government. The PPF shows maximum potential: on the curve fully employed, inside unemployed resources, beyond unobtainable; growth shifts the frontier outwards. Consumers maximise benefit and firms profit – unless habits, copying, poor calculation, revenue-maximising managers, customer care or charity intervene.



Original model; the labelled points are worked in the questions.

2 Practice

2.1 Define scarcity and state why it forces choice. [2]

2.2 A government builds a hospital rather than a school. State the opportunity cost and name the economic agent making the choice. [2]

2.3 A workshop can make 20 desks or 40 chairs per day on a straight frontier. Calculate the opportunity cost of 5 more desks. [2]

2.4 On a PPF diagram, state what is shown by (a) a point inside the curve; (b) a shift of the curve outwards. [2]

2.5 Give one reason a consumer may fail to maximise their benefit, and one reason a producer may fail to maximise profit. [2]

3 Exam-style questions

3.1 *(Original.)* A country's PPF shifts inwards. Explain two possible causes and state what happens to the maximum productive potential. [4]

3.2 *(Original.)* A firm donates 5 percent of profits to charity and its manager is paid on revenue, not profit. Explain whether the firm still fits the profit-maximisation assumption. [3]

Solutions

2.1 Scarcity is the problem of unlimited wants against finite resources (1). Because resources cannot satisfy all wants, choices must be made about what to produce, consume or fund (1).

2.2 The opportunity cost is the school forgone (1). The agent is the government (1).

2.3 Slope $= 40 \div 20 = 2$ chairs per desk, so 5 more desks cost $5 \times 2 = 10$ chairs per day.

2.4 (a) Unemployed or underused resources – the economy could produce more of both goods. (b) Positive economic growth – the maximum productive potential has risen (more resources or better technology).

2.5 Consumer (any one): not good at calculating benefits; habits hard to give up; copying others. Producer (any one): managers revenue- or sales-maximise; prioritising customer care; charitable work.

3.1 Causes (any two, explained): destruction of resources by war or natural disaster (fewer factors available); emigration of labour or loss of capital stock; a fall in the workforce's skills. The maximum productive potential FALLS – previously attainable combinations become unobtainable (the curve moves towards the origin).

3.2 Not fully. The revenue-paid manager has an incentive to revenue- maximise rather than profit-maximise (a named deviation), and the charitable donation transfers 5 percent of profit away from owners. The assumption still guides the firm's pricing in competitive markets, but observed behaviour departs from it – the exceptions from the specification are exactly what is happening.

Local review guidance: definitions word-perfect – scarcity and opportunity cost are one-mark definitions; PPF answers attach the labelled point to its meaning (inside/on/beyond); (R1) assumption answers name the SPECIFIC exception, not "people are irrational". This is authored classroom guidance.