AP MICROECONOMICS • EXERCISE SHEET

5.2 Changes in Factor Demand and Factor Supply

Name: ________ Class: ______ Date: _______ **Total: 9 marks**

KEY WORDS factor demand 要素需求 • factor supply 要素供给

Objective

Build the skills to answer exam questions on **changes in factor demand and factor supply**.

You must be able to:

- identify the determinants that shift **factor demand** 要素需求, including the output price and worker **productivity**
- explain how the price of a related input shifts factor demand
- identify the determinants of **factor supply** 要素供给
- predict the effect of a shift on the equilibrium **wage** and quantity

1 Worked examples

Study these first. Each one shows the method for a question type used later.

■ **Factor demand shifters**

Since demand for a factor is derived from its MRP, it rises when the **output price** rises or workers become more **productive**. A change in the price of a related input can also shift it.

■ **Factor supply shifters**

The **number of available workers**, and their willingness to work at each wage.

■ **Equilibrium effects**

More labour **demand** → higher wage and quantity. More labour **supply** → lower wage, higher quantity.

2 Practice

2.1 State one determinant that shifts factor demand. [1]

2.2 State how an increase in worker productivity affects factor demand. [1]

2.3 State the effect of an increase in the number of available workers on the equilibrium wage. [2]

3 Exam-style questions

3.1 Factor demand rises when the price of the good it helps make [1]

- **A** falls
- **B** rises
- **C** is zero
- **D** is fixed by law

3.2 An increase in labour supply, other things equal, [1]

- **A** raises the wage
- **B** lowers the wage
- **C** raises MRP
- **D** has no effect

3.3 The demand for a product rises sharply.

(a) State the effect on the MRP of the labour making it. [1]

(b) State the effect on the demand for that labour. [1]

(c) State the effect on the equilibrium wage. [1]

Solutions

2.1 any one of: the output price, worker productivity, the price of a related input.

2.2 it increases factor demand (higher MRP).

2.3 the wage falls and the quantity of labour rises.

3.1 **B**.

3.2 **B**.

3.3 (a) it rises. (b) labour demand rises. (c) the equilibrium wage rises.