INTERNATIONAL BACCALAUREATE · IB DIPLOMA · ECONOMICS · SL • EXERCISE SHEET

2.1 Demand, supply and policy

Name: _____ Class: _____ Date: _____ **Total: 25 marks**

KEY WORDS price elasticity of demand • indirect tax

Demand, supply and policy

Objective

Apply movements versus shifts, equilibrium and welfare read from a diagram, the PED/PES calculations with the total-revenue test, and the evaluation of government intervention (syllabus 2.1–2.7, SL).

1 Key knowledge and worked examples

Unit 2 toolkit. Demand slopes downward by diminishing marginal utility; supply slopes upward. On the shared diagram the equilibrium is $(20, 100)$; CS 2500 and PS 1000; allocative efficiency where $P = MC$. PED at $20 \to 22$ is -0.4 with TR rising $2000 \to 2112$ (inelastic); PES at $20 \to 24$ is $+0.8$. A tax of 6 lifts the consumer price to 24 at quantity 92 (producers keep 18; revenue 552; incidence 4:2). A subsidy of 6 cuts price to 16 at 108. A maximum price of 16 leaves a shortage of 24; a minimum price of 24 a surplus of 24.

2 Practice

2.1 State the law of demand and its utility explanation. [2]

2.2 Name any four shift factors of the demand curve and any three of supply. [2]

2.3 At a price of 12 the diagram shows quantity demanded 116 and quantity supplied 68. State the size of the excess demand and explain how the market returns to equilibrium. [3]

2.4 Price rises from 20 to 22 and quantity demanded falls from 100 to 96. Calculate PED and use the total revenue test to classify demand. [4]

2.5 Price rises from 20 to 24 and quantity supplied rises from 100 to 116. Calculate PES and state one determinant that would make supply more elastic. [3]

3 Exam-style questions

3.1 *(Original, Paper 2 style.)* The government imposes a specific tax of 6. On the diagram the consumer price rises from 20 to 24, quantity falls from 100 to 92 and producers receive 18. Calculate the tax revenue, state how the burden is shared, and explain which elasticity decides the split. [5]

3.2 *(Original, Paper 1 style.)* The government instead sets a maximum price of 16, at which quantity demanded is 108 and quantity supplied 84. Using a diagram, evaluate the policy. [4]

3.3 *(Original, behaviour critique.)* Give two reasons real consumers may not maximise utility, naming the behavioural-economics evidence. [2]