AP MACROECONOMICS • EXERCISE SHEET

2.1 The Circular Flow and GDP

Name: ____________ Class: ________ Date: __________ **Total: 9 marks**

KEY WORDS net exports 净出口 • gross domestic product (gdp) 国内生产总值 • circular flow model 循环流动模型 • consumption 消费 • investment 投资

Objective

Build the skills to answer exam questions on **the circular flow and GDP**.

You must be able to:

- use the **circular flow model** 循环流动模型 to trace goods, resources, and money
- define **gross domestic product (GDP)** 国内生产总值
- explain why intermediate goods, used goods, and financial transfers are excluded
- calculate GDP by the **expenditure approach**, $GDP = C + I + G + (X - M)$

1 Worked examples

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

The circular flow

Households supply resources to firms and buy goods; firms pay wages and sell goods. Money flows one way, goods and resources the other, with government and the foreign sector added.

GDP

The **market value of all final goods and services** produced **within a country** in a given period.

The expenditure approach

$$GDP = C + I + G + (X - M),$$

consumption + investment + government spending + net exports. **Intermediate** goods, **used** goods, and purely **financial** transfers are excluded (to avoid double-counting).

2 Practice

2.1 Define GDP. [1]

2.2 Write the expenditure-approach formula for GDP. [1]

2.3 Given $C = 500$, $I = 150$, $G = 250$, $X = 80$, $M = 100$ (all in billions), find GDP. [2]

3 Exam-style questions

3.1 GDP measures the value of [1]

- **A** all goods ever produced
- **B** final goods and services produced in a period
- **C** intermediate goods only
- **D** used goods

3.2 Which of these is **excluded** from this year's GDP? [1]

- **A** a newly built car
- **B** a haircut
- **C** the resale of a used car
- **D** a restaurant meal

3.3 An economy has $C = 700$, $I = 250$, $G = 350$, exports $= 120$, imports $= 170$ (all in billions).

(a) Find net exports. [1]

(b) Find GDP. [2]

Solutions

2.1 the market value of all final goods and services produced within a country in a given period.

2.2 $GDP = C + I + G + (X - M)$.

2.3 $GDP = 500 + 150 + 250 + (80 - 100) = 880$ billion.

3.1 **B**.

3.2 **C** — a used-car resale was counted when first sold.

3.3 (a) $X - M = 120 - 170 = -50$ billion. (b) $GDP = 700 + 250 + 350 + (-50) = 1250$ billion.