2.2 The measurement of macroeconomic performance: 1-hour Pack

Total Marks

AQA 7136 · Calculator allowed · about 60 minutes

Name: _____ Date: ____ / ____ / _____

Study Extract A and Table 1, then answer all questions. A calculator is allowed. Show your working for every calculation.

Extract A: Verdania's economy, 2024 to 2026

A wholly fictional economy invented for Revision Library. All figures are original and hypothetical; they do not describe any real country.

Verdania is a fictional, medium-sized open economy. After a period of subdued growth, the Verdanian government announced a fiscal stimulus package in 2026, increasing government spending by £6 billion to support the recovery. Economists at the Verdanian Institute of Economic Studies estimated the economy's marginal propensity to consume (MPC) at 0.6, its marginal propensity to save (MPS) at 0.1, its marginal propensity to tax (MPT) at 0.2, and its marginal propensity to import (MPM) at 0.1.

Verdania's labour force (the economically active population) is 30 million people. Selected macroeconomic indicators for 2024 to 2026 are shown in Table 1.

Table 1: Selected macroeconomic indicators for Verdania, 2024 to 2026 (CPI, GDP deflator and wage index all base year 2020 = 100)

Year	Nominal GDP (GBP billion)	GDP deflator	CPI	Wage index	Unemployment rate (%)
2024	480	112.0	118.0	120.0	4.8
2025	504	115.0	122.0	124.0	4.3
2026	523	117.0	126.0	129.0	4.5

Between 2024 and 2026, Verdania's nominal GDP rose from £480 billion to £523 billion, an increase of 8.96%. However, real GDP rose by a smaller percentage over the same period.

1 Index numbers.

(a) Define an index number. **(1)**

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(b) The CPI for 2026 in Table 1 is 126.0 (2020 = 100). Explain what this value indicates about the general price level in Verdania. **(3)**

(Total for Question 1 is 4 marks)

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2 Verdania's labour force (the economically active population) is 30 million people. In 2025, 1.29 million of these people were unemployed.

(a) Calculate Verdania's unemployment rate in 2025, and confirm this is consistent with the value shown in Table 1. **(3)**

(b) State one limitation of the claimant count as a measure of unemployment, as an alternative to the labour force survey. **(2)**

(Total for Question 2 is 5 marks)

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3 Real versus nominal GDP. (Extract A states that Verdania's nominal GDP rose from £480 billion in 2024 to £523 billion in 2026, an increase of 8.96%.)

(a) Calculate the percentage increase in nominal GDP between 2024 and 2026, confirming this matches the 8.96% stated in Extract A. **(2)**

(b) Explain why the percentage increase in real GDP between 2024 and 2026 is smaller than the percentage increase in nominal GDP. **(4)**

(Total for Question 3 is 6 marks)

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4 How the CPI is constructed.

(a) The CPI is calculated using a fixed 'basket of goods and services', with each item weighted according to its share of average household spending. Explain why these weights need to be updated periodically. **(3)**

(b) State one household or group for whom the national CPI inflation rate might not accurately reflect their own personal experience of rising prices, and explain why. **(3)**

(Total for Question 4 is 6 marks)

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5 Using Table 1, answer the following about Verdania's rate of CPI inflation.

(a) Calculate the rate of CPI inflation between 2024 and 2025. **(2)**

(b) Calculate the rate of CPI inflation between 2025 and 2026. **(2)**

(c) Using your answers to (a) and (b), describe the trend in Verdania's rate of inflation between 2024 and 2026. **(3)**

(Total for Question 5 is 7 marks)

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6 Unemployment: percentage points versus percentage change.

(a) Using Table 1, calculate the change in Verdania's unemployment rate, in percentage points, between 2024 and 2025. **(2)**

(b) Calculate the same change expressed as a percentage change (relative to the original 2024 rate), and explain how this measure differs from a change in percentage points. **(3)**

(Total for Question 6 is 5 marks)

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7 The multiplier. (Using the marginal propensities given in Extract A: MPC = 0.6, MPS = 0.1, MPT = 0.2, MPM = 0.1, and the £6 billion rise in government spending in 2026.)

(a) Show that these marginal propensities are consistent with the rule that MPC + MPS + MPT + MPM = 1. **(2)**

(b) Calculate Verdania's marginal propensity to withdraw (MPW). **(2)**

(c) Calculate the value of the expenditure (Keynesian) multiplier for Verdania. **(2)**

(d) Hence calculate the total eventual change in Verdania's real national income (real GDP) resulting from the £6 billion increase in government spending. **(2)**

(e) Explain, in terms of withdrawals and injections, why an initial increase in government spending of £6 billion leads to a TOTAL increase in national income greater than £6 billion. **(2)**

(Total for Question 7 is 10 marks)

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Mark scheme · 2.2 The measurement of macroeconomic performance: 1-hour Pack

Question 1

(a) a figure that expresses the value of a variable relative to a chosen base value (usually set at 100 in a base year/period), used to track proportional change over time **B1**

(a) Answer: A figure showing a variable's value relative to a base value of 100.

(b) the average price level in 2026 is 126.0 relative to a base value of 100 in 2020 **M1**

(b) average prices in 2026 are 26% higher than in the base year 2020 (a rise of 26.0 index points) **A1**

(b) equivalently, a representative basket of goods and services that cost £100 in 2020 would now cost £126 in 2026 **A1**

(b) Answer: Average prices are 26% higher in 2026 than in the base year 2020.

Question 2

(a) unemployment rate = (number unemployed / labour force) x 100 = (1.29 / 30) x 100 **M1**

(a) = 4.3% **A1**

(a) matches the 2025 unemployment rate of 4.3% given in Table 1, confirming consistency **B1**

(a) Answer: 4.3%, matching Table 1.

(b) the claimant count only includes people claiming unemployment-related benefits, so it excludes unemployed people who are not eligible for or do not claim benefits, causing it to understate true unemployment **B1**

(b) developed example: a young person who has just left education and is job-seeking, or someone whose partner earns enough that the household does not qualify for benefits, would count as unemployed on the labour force survey but might not appear in the claimant count **B1**

(b) Answer: It excludes unemployed people who do not claim benefits, understating true unemployment.

Question 3

(a) (523 - 480) / 480 x 100 **M1**

(a) = 8.96%, confirming the figure given in Extract A **A1**

(a) Answer: 8.96%, as stated.

(b) nominal GDP measures the value of output at CURRENT prices, so part of its rise reflects higher prices (inflation) rather than more output being produced **M1**

(b) real GDP removes the effect of rising prices (by deflating nominal GDP using the GDP deflator), isolating the change in the actual VOLUME of goods and services produced **A1**

(b) since Verdania experienced positive inflation throughout this period (Table 1: the GDP deflator rose from 112.0 to 117.0), part of the nominal GDP increase reflects this price rise rather than genuine extra output **M1**

(b) therefore the real GDP growth rate (the true increase in output) is smaller than the nominal GDP growth rate, which includes both extra output AND the effect of rising prices **A1**

(b) Answer: Some of the nominal rise reflects price inflation, not extra output, so real GDP growth (awrt 4.3% over the period) is smaller than nominal growth (8.96%).

Question 4

(a) the pattern of household spending changes over time, e.g. spending on new technology rises while spending on some traditional goods falls **M1**

(a) if the weights are not updated, the CPI would no longer accurately reflect how a typical household's cost of living is actually changing **A1**

(a) statistical agencies periodically re-weight and update the basket (e.g. via household expenditure surveys) to keep it representative of current spending patterns **B1**

(a) Answer: Spending patterns change over time, so weights must be updated to keep the CPI representative.

(b) identifies a plausible group, e.g. low-income households (who spend a higher proportion of income on food/energy), pensioners (who spend more on healthcare/heating), or students **B1**

(b) explains that if this group's actual spending pattern differs significantly from the average 'basket', their personal inflation rate could be higher or lower than the published national CPI figure **B1**

(b) gives a specific, consistent example, e.g. a sharp rise in energy prices would raise a pensioner's personal inflation rate by more than the national average CPI, since heating makes up a larger share of their spending **B1**

(b) Answer: E.g. pensioners: heating/energy is a larger share of their spending, so their personal inflation rate can exceed the national CPI figure.

Question 5

(a) (122.0 - 118.0) / 118.0 x 100 **M1**

(a) = 3.39%, awrt 3.4% **A1**

(a) Answer: Awrt 3.4%.

(b) (126.0 - 122.0) / 122.0 x 100 **M1**

(b) = 3.28%, awrt 3.3% **A1**

(b) Answer: Awrt 3.3%.

(c) the rate of inflation fell very slightly, from awrt 3.4% (2024-25) to awrt 3.3% (2025-26) [ft candidate's own values] **B1**

(c) prices in Verdania were still rising (positive inflation) throughout the period, so this is disinflation, NOT deflation **B1**

(c) distinguishes the two terms: disinflation means the general price level is still rising but at a slower rate, which is different from deflation (a fall in the general price level, i.e. negative inflation) **B1**

(c) Answer: Inflation fell very slightly (awrt 3.4% to awrt 3.3%): disinflation, not deflation.

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Question 6

(a) 4.3 - 4.8 **M1**

(a) a fall of 0.5 percentage points **A1**

(a) Answer: A fall of 0.5 percentage points.

(b) (4.3 - 4.8) / 4.8 x 100 **M1**

(b) a fall of 10.4%, awrt 10.4% **A1**

(b) the two measures differ because 'percentage points' is a simple arithmetic difference between the two rates, while 'percentage change' expresses that difference relative to (as a proportion of) the original (2024) rate **B1**

(b) Answer: A fall of awrt 10.4%; percentage points is a simple difference, percentage change is relative to the starting value.

Question 7

(a) 0.6 + 0.1 + 0.2 + 0.1 **M1**

(a) = 1.0, confirming the propensities are consistent (every extra pound of income is either consumed, saved, taxed or spent on imports) **A1**

(a) Answer: 0.6+0.1+0.2+0.1 = 1.0, as required.

(b) MPW = MPS + MPT + MPM = 0.1 + 0.2 + 0.1 **M1**

(b) = 0.4 **A1**

(b) Answer: MPW = 0.4.

(c) multiplier = 1 / MPW = 1 / 0.4 **M1**

(c) = 2.5 **A1**

(c) Answer: Multiplier = 2.5.

(d) change in national income = multiplier x change in government spending = 2.5 x 6 **M1**

(d) = £15 billion (an increase) **A1**

(d) Answer: £15 billion.

(e) the initial £6 billion of extra government spending becomes income for firms/workers, who in turn spend a proportion of this extra income (determined by the MPC) on further consumption, creating a further round of extra income for others **B1**

(e) this respending continues through successive rounds, each smaller than the last (as some income leaks out as saving, tax and import spending/withdrawals at each round), so the total (cumulative) rise in national income exceeds the size of the original injection **B1**

(e) Answer: Repeated rounds of respending, shrinking each round due to withdrawals, cumulatively add up to more than the initial injection.

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