Past-paper walk-through

Business Cycles ▪ 2.7

eXercise

Questions in this set

- 2023 Set 1 Q3

Reading the mark scheme

- **B1** a mark that stands on its own – the point is either made or not.
- **M1** a *method* mark: the right approach, even if the number is wrong.
- **A1** an *answer* mark, and it usually needs its M mark first.
- **C1** a working mark on the way to the answer.
- // separates answers the examiner accepts equally.
- **ecf** = error carried forward: a later part is marked on your own earlier answer.
- **owtte** = "or words to that effect" – the wording need not match.

Question 3

2023 Set 1 ▪ Q3

Assume that in the country of Zeta, the civilian noninstitutional population aged 16 and over is $1{,}000{,}000$. The labor force participation rate is 70%, the unemployment rate is 9%, and the natural rate of unemployment is 5%.
(a) Calculate the number of people in Zeta that are unemployed. Show your work.
(b) Is the economy of Zeta currently experiencing a recessionary gap, an inflationary gap, or no output gap? Explain.
(c) Consumer goods and capital goods are produced in the country of Zeta. Draw a correctly labeled graph of the production possibilities curve for Zeta. Indicate a point, labeled A, that represents the current state of Zeta's economy.
(d)(i) If some individuals who are counted as unemployed in Zeta stop looking for work, what will happen to each of the following?
The labor force participation rate. Explain.

Question 3

(d)(ii) The unemployment rate

Solution 3

(a)

Mark scheme

- Unemployed $=$ Unemployment Rate $\times$ Labor Force Participation Rate $\times$ Adult Population $= 9\% \times 70\% \times 1{,}000{,}000 = 63{,}000$ people.

Solution 3

(b)

Mark scheme

- Zeta is currently experiencing a RECESSIONARY GAP. Explanation: the current unemployment rate (9%) is higher than the natural rate of unemployment (5%), meaning actual output is below full-employment (potential) output.

Solution 3

(c)

Mark scheme

- Draw a standard bowed-out (concave to the origin) production possibilities curve (PPC), with Capital Goods on the vertical axis and Consumer Goods on the horizontal axis. Plot point A INSIDE the curve (below/to the left of the PPC, not on it), representing that Zeta is producing below its full-employment/potential output — consistent with the recessionary gap and 9% unemployment rate found in parts (a)-(b).

Solution 3

(d)(i)

Mark scheme

- The labor force participation rate will DECREASE. Explanation: only employed people plus people actively seeking work count as being ''in the labor force,'' so workers who stop looking for work are no longer counted as unemployed and drop out of the labor force. Since the working-age population is unchanged but the labor force shrinks, the labor force participation rate (labor force / working-age population) decreases.

Solution 3

(d)(ii)

Mark scheme

- The unemployment rate will DECREASE. Explanation: the unemployment rate is the number of unemployed divided by the labor force; when discouraged workers stop looking for work, they are removed from both the count of unemployed and the labor force, and this reclassification lowers the reported unemployment rate even though these people still are not working.