**Q1) Explain the factors that can cause a shift in the aggregate demand (AD) curve.** (10 marks)

The aggregate demand (AD) curve can shift due to changes in any of its components: consumption (C), investment (I), government spending (G), and net exports (X - M).

1. **Consumption (C):** An increase in consumer confidence, higher disposable income, or a reduction in interest rates can lead to higher consumer spending, shifting the AD curve to the right. Conversely, a decrease in these factors shifts the AD curve to the left.
2. **Investment (I):** Lower interest rates reduce the cost of borrowing, encouraging businesses to invest more, which shifts the AD curve to the right. Higher interest rates have the opposite effect, shifting the AD curve to the left.
3. **Government Spending (G):** An increase in government spending on infrastructure, defense, or public services shifts the AD curve to the right. A decrease in government spending shifts it to the left.
4. **Net Exports (X - M):** An increase in foreign demand for a country's exports or a decrease in imports can shift the AD curve to the right. A decrease in exports or an increase in imports shifts it to the left.

For full marks, students should clearly explain how each factor affects the components of aggregate demand and how these changes lead to shifts in the AD curve.

**Q2) Describe the difference between short-run and long-run aggregate supply curves and the factors that can cause shifts in each.** (10 marks)

The short-run aggregate supply (SRAS) curve is upward-sloping, indicating that as the price level increases, firms are willing to produce more. This is because higher prices often lead to higher profits, incentivizing firms to increase output.

The long-run aggregate supply (LRAS) curve is vertical, reflecting the economy's maximum sustainable output at full employment, where all resources are used efficiently. In the long run, the economy is not influenced by the price level, so output remains constant regardless of price changes.

**Factors causing shifts:**

* **SRAS Curve:**
  + **Input Prices:** A decrease in the price of raw materials or wages can shift the SRAS curve to the right, indicating that firms can produce more at each price level. An increase in input prices shifts the SRAS curve to the left.
  + **Supply Shocks:** Positive supply shocks, such as technological advancements, shift the SRAS curve to the right, while negative shocks, such as natural disasters, shift it to the left.
* **LRAS Curve:**
  + **Productivity Growth:** Improvements in technology, education, or an increase in capital stock shift the LRAS curve to the right, indicating potential growth in the economy’s productive capacity.
  + **Changes in Labor Force:** An increase in the labor force or an improvement in labor productivity shifts the LRAS curve to the right. Conversely, a decrease shifts it to the left.

For full marks, students should clearly distinguish between the SRAS and LRAS curves and provide examples of factors that shift each curve.

**Q3) Using an AD-AS diagram, analyze the impact of an increase in consumer confidence on an economy.** (15 marks)

An increase in consumer confidence typically leads to higher consumption (C), which is a major component of aggregate demand (AD). As consumers feel more secure about their financial future, they are likely to spend more on goods and services, shifting the AD curve to the right.

**Diagram Analysis:**

* **Initial Equilibrium:** The economy is initially at equilibrium where AD intersects the short-run aggregate supply (SRAS) at point E1, with price level P1 and output Y1.
* **Shift in AD:** An increase in consumer confidence shifts the AD curve from AD1 to AD2, leading to a new equilibrium at point E2.
* **New Equilibrium:** At the new equilibrium, the price level rises from P1 to P2, and output increases from Y1 to Y2.

**Macro Effects:**

* **Output:** The increase in output reflects economic growth, leading to lower unemployment.
* **Price Level:** The rise in the price level may lead to demand-pull inflation.

For full marks, students should accurately depict the AD-AS diagram and thoroughly explain the impact on both the price level and output, considering both short-term and long-term effects.

**Q4) Discuss the concept of an inflationary gap and the possible policies to correct it.** (15 marks)

An inflationary gap occurs when the actual level of output in an economy exceeds the potential level of output at full employment, leading to upward pressure on prices. This typically happens when aggregate demand (AD) is too high relative to aggregate supply (AS).

**Diagram Explanation:** In an AD-AS diagram, an inflationary gap is illustrated by the economy's equilibrium being to the right of the long-run aggregate supply (LRAS) curve, indicating that the economy is producing beyond its full employment level, creating inflationary pressure.

**Policies to Correct an Inflationary Gap:**

1. **Contractionary Fiscal Policy:** The government can reduce its spending or increase taxes to decrease aggregate demand, shifting the AD curve to the left.
2. **Contractionary Monetary Policy:** The central bank can increase interest rates to reduce borrowing and spending, thereby decreasing aggregate demand.
3. **Supply-Side Policies:** These policies aim to increase productivity and shift the long-run aggregate supply (LRAS) curve to the right, reducing inflationary pressure without sacrificing output.

For full marks, students should clearly define the inflationary gap, illustrate it with a diagram, and discuss the effectiveness of various policies to address the gap.

**Q5) Explain how the interaction between aggregate demand and aggregate supply can lead to different macroeconomic outcomes, such as inflation, deflation, and economic growth.** (10 marks)

The interaction between aggregate demand (AD) and aggregate supply (AS) determines the overall price level and output in an economy, leading to various macroeconomic outcomes:

* **Inflation:** If aggregate demand increases faster than aggregate supply, the economy may experience demand-pull inflation. This occurs when the AD curve shifts to the right while the AS curve remains relatively unchanged, leading to higher prices and higher output in the short run.
* **Deflation:** Conversely, if aggregate supply increases faster than aggregate demand, perhaps due to technological advances or productivity gains, the economy may experience deflation. This is characterized by a leftward shift in the AD curve or a rightward shift in the AS curve, leading to lower prices and potentially lower output.
* **Economic Growth:** Sustained economic growth occurs when both aggregate demand and aggregate supply increase over time. If the LRAS curve shifts to the right, indicating growth in the economy’s productive capacity, and AD shifts correspondingly, the economy can achieve higher levels of output without significant inflationary pressure.

For full marks, students should provide a comprehensive analysis of how different shifts in the AD and AS curves can lead to varying macroeconomic outcomes, using diagrams where appropriate.