1. The economy of Alpha is in short-run equilibrium with a cyclical unemployment rate of 3%, a frictional unemployment rate of 4%, and an actual unemployment rate of 8%.

(a) Calculate Alpha's natural rate of unemployment. Show your work.

(c) Assume that policymakers take no action to close the output gap.

(i) Explain how Alpha's economy will adjust to full employment in the long run.

(ii) On your graph in part (b), show how Alpha's economy will adjust to full employment in the long run, labeling the new equilibrium price level PL_2.

(d) Assume instead that Alpha's central bank is considering using monetary policy to close a recessionary output gap. The banking system in Alpha has ample reserves. Identify a specific monetary policy action the central bank of Alpha would take to close the output gap in the short run.

(f) Based on the change in the policy rate shown in part (e), what would happen to each of the following in the short run in Alpha?

(i) The price of previously issued bonds

(ii) The price level. Explain.

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.