Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. The Excel file will be handed in via Canvas. Your name will only appear on a page of the file that has nothing else on it. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 170 points) and is scheduled to take 50 minutes (but you can take the full 2 hours.) Therefore, expect to spend 1 minute for every 2 points. For example, a 10-point question should take 5 minutes.

- 1) (18 points) Use the <u>data</u> in the tab "Question\_1" to answer this question. Find the Laspeyres Price Index for all years with 2015 as the base year and the inflation rate for all the possible years. Find the Passche Price Index for all years with 2015 as the base year and the inflation rate for all the possible years. Find the PCE Index for all years with 2015 as the base year and the inflation rate for all the possible years.
- 2) (12 points) Use the <u>data</u> in the tab "Question\_2" to forecast the high temperature through the end of the month using Same Value, Same Change, Same Percent Change, 7 Day Moving Average, and 3 day Weighted Moving Average.
- 3) (8 points) Answer EITHER Part A OR Part B.
- A) In Question #1, would 2014 be a good base year? Explain your logic.
- B) in Question #2, which method of forecasting would be the best one for forecasting the CPI? Explain your logic.
- 4) (8 points) Answer EITHER Part A OR Part B.
- A) Explain why a change in the price level does not move the real MD curve.
- B) Explain why a change in the price level moves the real MS curve.
- 5) (16 points) Answer EITHER Part A OR Part B.
- A) Draw the SRAS/LRAS/AD diagram for the Neo-Classical School, a.k.a. Rational Expectations School. Illustrate the effects of a decrease in the money supply of 4% while people were expecting a decrease of the money supply of 6%. Explain why the curve(s) moved. What happens to real GDP, inflation, and the unemployment rate?
- B) Draw the SRAS/LRAS/AD diagram for the Neo-Classical School, a.k.a. Rational Expectations School. Illustrate the effects of a decrease in government spending of \$4000 while people were expecting a decrease of government spending of \$6000. Explain why the curve(s) moved. What happens to real GDP, inflation, and the unemployment rate?
- 6) (16 points) Answer EITHER Part A OR Part B.
- A) Draw the IS/LM/FE diagram. Illustrate the effects of an improvement in technology. Explain why the curve(s) moved as drawn. What happens to GDP and the interest rates?
- B) Draw the IS/LM/FE diagram. Illustrate the effects of an increase in the price level. Explain why the curve(s) moved as drawn. What happens to GDP and the interest rates?
- 7) (22 points) Answer EITHER Part A OR Part B.
- A) How does the Neo-Classical School, a.k.a. Rational Expectations School explain the business cycle? Which variable (real GDP, unemployment rate, nominal interest rates, real interest rates, or inflation) do they predict the cyclicality of that variable wrong? Use an appropriate graph to show how they reach their conclusion. How do they explain their model getting the wrong result?
- B) Use an appropriate graph to explain why the Neo-Classical School, a.k.a. Rational Expectations School thinks that monetary policy will not have any impact on real variables. How do they explain the fact that M1 is pro-cyclical?