# Final Exam
## Econ 3150, Summer 2015

Explain your answers (graphs combined with descriptions are usually best). Write clearly. Relative weights for the questions appear in brackets.

1. [4] Use the Solow model to show what will happen to the economy in *one* of the following scenarios. Specifically, show what will happen to saving, consumption, incomes, and the capital stock immediately and in the long run and how these variables will transition to the long run. Label your graphs clearly and describe the effects.

    (a) Later today an alien space ship comes to Earth and gives each person a new laptop. These are not special laptops; they are exact replicas of mid-range Dells.

    (b) Jesus comes back and tells everyone that Catholics are right about birth control.

2. [1] If nominal GDP grew by 5% this year and inflation was 3%, what was real GDP growth?

3. [2] True or false: we could get pain-free disinflation if wages were indexed to inflation.

4. [2] Answer *one* of the following:

    (a) Congressional and presidential oversight of the Fed is all that keeps them from printing all the money they want and producing runaway hyperinflation like in Zimbabwe or inter-war Germany.

    (b) True or false: In a country where the inflation rate is 10,000% per year, people will pay their taxes as early as possible so that they do not have to hold the money to pay their taxes later.

    (c) What do you think of this claim from a news article source? "As long as inflation is not faster than GDP growth, we are fine, because we need more money to pay for the higher purchases that higher GDP brings."

5. [4] Plot a graph showing how Solow Model steady state consumption relates to the saving rate. Explain. *Hint: the saving rate should be on*

*the horizontal axis, and steady-state consumption should be on the vertical axis.*

6. [4] True, false, or uncertain: legalizing marijuana will raise GDP because then we can tax and regulate it.

7. [3] The Solow model tells us about the sources of convergence between national incomes and about the sources of long-run growth. Why are sub-Saharan African incomes growing so much faster than Western European incomes (5% versus 2%)? Why are Western European incomes growing at all?

8. [2] Name *two* problems with predictable inflation and *one* problem with unexpected inflation.

9. [5] Use our model of the small, open economy to show how *one* of the following will affect real exchange rates:

    (a) An increase in government purchases
    (b) An increase in purchases by governments in some other, large country
    (c) A tax on imports

10. [2] True or false: when the interest rate on 3-month Treasury bills is similar to 10-year Treasury notes, this tells us that a contraction may be coming. Why?

11. [2] Why are prices sticky in the short run?

12. [2] Suppose banks become more confident and decrease their reserve ratios. Show the effect on AD-AS.

13. [2] True, false, or uncertain: the government spending multiplier is greater than unity.

14. [3] Consider this scenario: congress is considering a temporary tax increase because the economy is "overheating". Explain what the theory of Ricardian Equivalence says about the impact of this policy.

15. [6] Use the DAD-DAS framework to analyze the effect of a *temporary* fiscal "stimulus" spending package assuming that people's expectations about inflation are adaptive. Show what would happen in the short-run, after the tax cut disappears, and in the long-run. Graph time-series for output and inflation. How would your analysis change with rational expectations *about inflation*?

16. [3] Why do most economists agree that monetary policy is a better response to business cycles than fiscal policy is?