ECO 305: Intermediate Macroeconomics **Name: (8 points)** ______________________

Instructor: James M. Murray, PhD

Practice Exam 2

Multiple-choice questions. 2 points each.

1. Which of the following can cause permanent disparities in long-run output per worker between countries according to the Solow growth model?

   (a) Diminishing marginal product of labor

   (b) Different population sizes

   (c) Unequal savings rates

   (d) Different levels of capital stock per worker

2. What is the definition of human capital?

   (a) Private savings used to finance physical machines and buildings used in the production of goods and services

   (b) Labor supply used in the production of goods and services

   (c) Knowledge and skills that people use in the production of goods and services.

   (d) Physical machines and buildings used in the production of goods and services

3. Which of the following will result in permanent differences in output per worker between rich and poor countries?

   (a) Different levels of capital stock per worker between rich and poor countries.

   (b) Different levels of investment in education

   (c) Different growth rates between rich and poor countries

   (d) Different wages in poor versus rich countries.

4. Which of the following is the slope of the budget constraint in the consumption / saving model (model with current consumption on the horizontal axis and future consumption on the vertical axis)?

   (a) - MU_saving

   (b) - MU_cons / MU_future_cons

   (c) -(1+r)

   (d) -w

5. Which of the following results in an **increase** in consumers' lifetime wealth, i.e. an **increase** in the net present value of lifetime income?

   (a) Decrease in future wages

   (b) Increase in interest rate

   (c) Decrease in current taxes, financed by an increase in future taxes

   (d) Decrease in interest rate

6. Which of the following would make the slope of the indifference curve between current consumption and future consumption ***steeper****?*

   (a) A change to more highly prefer current consumption, leading to an increase in MU_cons and a decrease in MU_future_cons

   (b) A decrease in the interest rate

   (c) A change to prefer more future consumption at the expense of current consumption, so MU_cons decreases and MU_future_cons increases

   (d) An in increase in the interest rate

7. Which of the following is the utility-maximizing choice of a consumer in response to an increase in current income in the consumption/savings model?

   (a) Increase in current consumption and a decrease in future consumption

   (b) Increase in both current consumption and future consumption

   (c) Increase in current consumption but no change in future consumption

   (d) Increase in current consumption and an increase in borrowing

8. Suppose the interest rate increases for a saver/lender. Which of the following is true?

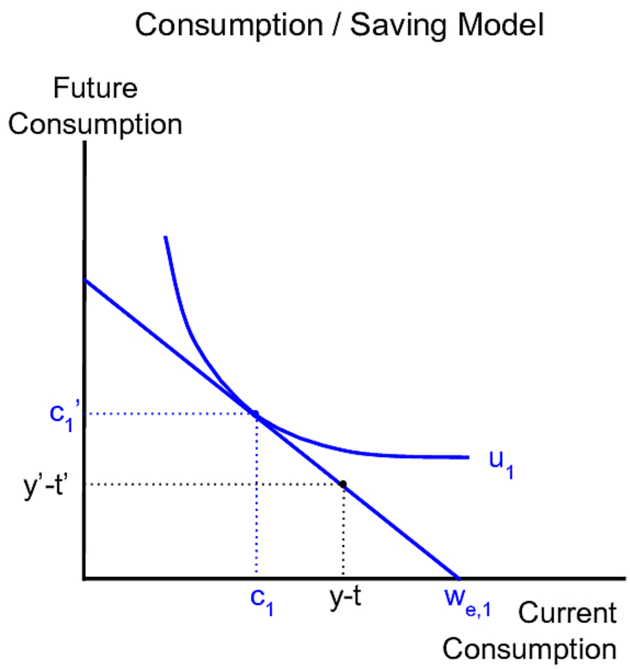
   (a) Total utility increases

   (b) Consumption in the future period decreases

   (c) Borrowing increases

   (d) Saving decreases

9. Which of the following is a TRUE statement regarding the consumer represented in this figure?



(a) Consumer is a borrower

(b) Consumer is a saver/lender

(c) Consumer is not maxing a utility maximizing choice for current consumption

(d) Consumer is not making a utility maximizing choice for future consumption

10. Suppose taxes **increase** in the **current period** and there is no change to current or future government expenditures. What does Ricardian equivalence predict will be the impact on consumption decisions?

(a) No change in current consumption and a decrease in future consumption

(b) Decrease in current consumption and a decrease in saving

(c) Decrease in future consumption and an increase in future consumption

(d) No change in consumption and a decrease in saving.

11. Suppose there is an **increase** in interest rates. What is the **substitution effect** on current and future consumption?

(a) Current consumption decreases and future consumption is indeterminate

(b) Current consumption increases and future consumption decreases

(c) Both current and future consumption decrease

(d) Current consumption decreases and future consumption increases

12. Suppose the interest rate **increases** for a **lender/saver**. Considering both income and substitution effects, which of the following is TRUE?

    (a) The effect on current consumption is indeterminate

    (b) Current consumption increases and future consumption decreases

    (c) Current consumption decreases and future consumption increases

    (d) The effect on future consumption is indeterminate

13. Suppose consumer confidence increases, and therefore consumers expect an **increase in income in the future**. Which of the following is a predicted effect from the consumption/saving model?

    (a) Saving will increase in the current period and future consumption will increase.

    (b) Consumption will increase in the current period and saving will increase.

    (c) Consumption will not change in the current period but will increase in the future.

    (d) Consumption will increase in the current period and saving will decrease.

14. Which of the following can cause the labor supply curve (modeled with employment on the horizontal axis and wage on the vertical axis) to **shift to the left**?

    (a) Decrease in wage

    (b) Decrease in marginal product of capital

    (c) Decrease in interest rate

    (d) Increase in wage

15. Which of the following can cause a **rightward shift** in the demand for labor (modeled with employment on the horizontal axis and wage on the vertical axis).

    (a) Expected improvement in future technology

    (b) Improvement in labor productivity

    (c) Increase in number of people willing to work

    (d) Decrease in wage

16. Which of the following can cause a **leftward shift** in the demand for labor (modeled with employment on the horizontal axis and wage on the vertical axis).

    (a) Increase in wage

    (b) Improvement in technology

    (c) Increase in interest rate

    (d) Drop in the marginal product of labor

17. Which of the following could cause a **rightward shift** in consumption demand (modeled with the interest rate on the vertical axis and quantity of consumption on the horizontal axis)?

    (a) Destruction of capital stock

    (b) Decrease in interest rate

    (c) A decrease in current taxes with an expected equal decrease in future government expenditures

    (d) Increase in interest rate

18. Which of the following could lead to a **rightward shift** in the investment demand curve (when labeled with the interest rate on the vertical axis and quantity of investment on the horizontal axis)?

    (a) Destruction of capital stock

    (b) Decrease in interest rate

    (c) Increase in interest rate

    (d) Reduction in the marginal product of capital

19. Which of the following could lead to a **leftward shift** in the investment demand curve (when labeled with the interest rate on the vertical axis and quantity of investment on the horizontal axis)?

    (a) Destruction of capital stock

    (b) Announced change in manufacturing regulations that will make capital less productive in the future

    (c) Decrease in the depreciation rate

    (d) Temporary decrease in the marginal product of capital

20. Which of the following models is behind the labor supply curve (with wage on the vertical axis and employment on the horizontal axis)?

    (a) Consumption / leisure model

    (b) Consumption / saving model

    (c) Ricardian equivalence model

    (d) Profit maximization model

21. Which of the following models is behind the consumption demand curve (with the interest rate on the vertical axis and quantity of consumption on the horizontal axis)?

    (a) Investment decision

    (b) Profit maximization model

    (c) Consumption / saving model

    (d) Solow growth model

22. Which of the following government policies will likely have the largest impact on real GDP?

    (a) Permanent decrease in taxes funded by a decrease in future government expenditures

    (b) Decrease in taxes today funded by an increase in taxes in the future.

    (c) Decrease in taxes in the future, but funded with an increase in taxes in the present.

    (d) Decrease in government expenditures to fund a decrease in taxes in the current period.

Short-answer problem-solving questions. 8 points each.

23. Describe and illustrate in a growth model with human capital accumulation the impact an increase in investment in K-12 education can have on the long-run growth path of real GDP per capital in the economy.

24. Choose a growth model and use it to describe and illustrate any reason why poor countries would not be able to catch up to rich countries in terms of output per worker. Show illustrations of time plots of real GDP per person in your answer, and have sufficient illustrations and descriptions to show where those time plots come from.

25. Suppose a consumer is a saver/lender. Describe and illustrate the impact of an **increase in the interest rate** on current consumption, future consumption, and saving. If the income and substitution effects work in opposite directions to make one or more outcomes indeterminate, explain this.

26. Suppose consumer confidence falls and that consumers expect lower incomes in the future. Describe and illustrate the impact on current consumption, future consumption, and saving. If the income and substitution effects work in opposite directions to make one or more outcomes indeterminate, explain this.

27. Suppose the government decreases current taxes and makes no changes to future or current government expenditures. Use the intertemporal government budget constraint and the intertemporal consumer's budget constraint to describe and illustrate the impact on consumers' decisions for current consumption, future consumption, and saving.