

B. (20 pts) Short answers.

(1) Write down the formula for the present value of X dollars received N years from now. What is the present value (PV) of \$100 received a year from now, if the interest rate (i) is 10%?

(2) Give an example of a negative externality.

(3) Give an example of a common good.

(4) For our simplest model of the economy ($Y = C + I$, $C = a + bY$), write down the formula for the multiplier. What does the multiplier equal if the marginal propensity to consume is .9?

C. (20 pts) Circle one answer for each question.

(1) A firm's labor demand curve is the downward-sloping portion of its:

- a. marginal product curve
- b. marginal revenue curve
- c. marginal revenue product curve
- d. marginal cost curve

(2) A public good is:

- a. rivalrous and excludable
- b. nonrivalrous and nonexcludable
- c. rivalrous and nonexcludable
- d. nonrivalrous and excludable

(3) GDP in current dollars is also known as:

- a. Actual GDP
- b. Nominal GDP
- c. Potential GDP
- d. Real GDP

(4) Which one of the following is not included in National Income?

- a. wages
- b. corporate profits
- c. indirect business taxes
- d. depreciation

(5) Which one of the following is not a component of gross private domestic investment?

- a. business purchases of newly produced plant, equipment, and software
- b. exchanges of existing assets
- c. inventory investment
- d. residential construction

D. (20 pts) Short Answers.

(1) Write down the equation for Aggregate Demand as the sum of its four components.

(2) Which is generally the largest component? Which is generally the smallest component?

(3) Which is generally the most volatile component? State one of the reasons why this component is so volatile.

(4) Write down the equation (or definition) for Disposable Income. State one of the ways in which the government affects disposable income.

E. (20 pts) Draw your graph neatly and label axes and points clearly.

(1) Draw an AS-AD graph including the LRAS, SRAS and AD curves and show the economy in an initial equilibrium that is both a short-run and a long-run equilibrium.

(2) On the graph above, illustrate a supply shock that leads to a recessionary gap.

(3) What has happened to prices and output as a consequence of this supply shock?

(4) What will happen next if the economy is left to equilibrate without government intervention?