

Part I. Choice: Choose only one Best Answer for each question (3 points/ each)

1. A time Trend in a economic variable refers to
  - (A) decreases but not increases of a economic variable
  - (B) increases but not decreases of a economic variable
  - (C) a general tendency for a economic variable to rise or fall
  - (D) the scale used on the x- and y-coordinates
2. Suppose that there are only two types of used cars, peaches and lemons. Peaches are worth \$10,000 and lemons are worth \$4,000. If only lemons are sold, then used cars are
  - (A) experience goods and the used car market has effective signals
  - (B) not experience goods and the used car market has effective signals
  - (C) not experience goods and the used car market lacks effective signals
  - (D) experience goods and the used car market lacks effective signals
3. David's utility of wealth is 65 units at \$3,000, 80 units at \$5,000 and 95 units at \$9,000. Starting from zero wealth, he must choose between options A and B. Option A gives him \$5,000 for sure. Options B gives him \$3,000 with probability 0.5 or \$9,000 with probability 0.5. David will
  - (A) Choose A
  - (B) be indifferent between A and B because they have the same expected utility
  - (C) be indifferent between A and B because they have the same risk
  - (D) Choose B
4. The substitution effect of a higher interest rate
  - (A) reduces current consumption and boosts current saving
  - (B) reduces current consumption and saving
  - (C) boosts current consumption and saving
  - (D) boosts current consumption and reduces current saving
5. Firm A is a semi-conductor producing company with highly advanced technology while firm B is also a semi-conductor producer but with lower technology. Currently, firm A wants to issue an effective signal to the public. Therefore, this effective signal should have (MSB: marginal signal benefit, MSC: marginal signal cost, (a):firm A, (b): firm B)
  - (A)  $MSB(a)-MSC(a) \geq MSB(b)-MSC(b)$
  - (B)  $MSB(a)-MSC(a) = MSB(b)-MSC(b)$
  - (C)  $MSB(a)-MSC(a) < MSB(b)-MSC(b)$
  - (D)  $MSB(a)-MSC(a) > MSB(b)-MSC(b)$
6. An oligopoly facing a competitive market will hire more labor whenever
  - (A) its average revenue product of labor exceeds the wage rate
  - (B) the wage rate exceeds its average revenue product of labor
  - (C) its marginal revenue product of labor exceeds the wage rate
  - (D) the wage rate exceeds its marginal revenue product of labor

(背面仍有題目,請繼續作答)

7. Let MPC be the marginal private cost per megawatt hour (Mwh) of producing electricity using nuclear. Let MSC be the marginal cost per Mwh and T be the tax per Mwh. To achieve allocative efficiency, the tax should be set so that  
(A)  $MPC=MSC+T$   
(B)  $MPC=MSC-T$   
(C)  $MSC=MPC/T$   
(D)  $MSC=T/MPC$
8. In one day, Brady can either plow 10 acres or plant 20 acres. In one day, Clowe can either plow 14 acres or plant 14 acres. Clowe has  
(A) an absolute advantage only in plowing  
(B) an absolute advantage only in planting  
(C) a comparative advantage in both planting and plowing  
(D) a comparative advantage in neither planting and plowing
9. Because pollution is a by-product of some production processes, GDP  
(A) tends to understate economic welfare  
(B) tends to overstate economic welfare  
(C) accountants adjust GDP downward  
(D) accountants adjust GDP upward
10. The duration of unemployment  
(A) falls if unemployment compensation becomes more generous and if the coverage of unemployment insurance increases  
(B) rises if unemployment compensation becomes less generous and if the coverage of unemployment insurance decreases  
(C) falls if unemployment compensation becomes less generous and if the coverage of unemployment insurance decreases  
(D) rise if unemployment compensation becomes more generous and if the coverage of unemployment insurance increases
11. An increase in energy prices could account for a productivity slowdown because higher gas prices  
(A) reduce the capital stock, with many capital goods that use energy intensively being scrapped, thereby reducing output per hour  
(B) increase the capital stock, with many capital goods that use energy intensively being scrapped, thereby reducing output per hour.  
(C) reduce the capital stock, with many capital goods that use energy intensively being scrapped, thereby increasing output per hour.  
(D) increase the capital stock, with many capital goods that use energy intensively being scrapped, increasing output per hour.
12. If households do not increase saving to meet their and their children's future tax liability, debt financing will cause  
(A) lower real interest rates  
(B) real interest rates to remain constant  
(C) higher real interest rates  
(D) highly volatile movements in real interest rates

13. If you want to avoid losses on your bond holdings caused by the money authority's monetary policies, sell bonds  
 (A) before the money authority raises interest rates  
 (B) before the money authority lowers interest rates  
 (C) if you think that the money authority will increase lending to banks  
 (D) if you think that the money authority will raise the growth of the money supply.
14. Under a feedback rule, if the economy is operating below its natural output rate, an appropriate fiscal policy would be to  
 (A) increase the money supply  
 (B) decrease the money supply  
 (C) increase government spending  
 (D) increase taxes
15. Necessary but not sufficient conditions for the infant industry argument for protection to be valid are that learning-by-doing  
 (A) does not occur and there are no spillovers  
 (B) occurs and there are spillovers  
 (C) does not occur and there are spillovers  
 (D) occurs and there are no spillovers

II. Filling the Blanks ( 4 points/each blank)

1. As the Table shown below, please answer the following questions (a) and (b)

Output (Tons)	Marginal Private Benefit(Million)	Marginal Private Cost(Million)	Marginal Social Cost(Million)
1000	120	60	70
2000	100	70	80
3000	80	80	90
4000	60	90	100
5000	50	100	110
6000	40	110	120
7000	30	120	130

- (a) If the market is perfectly competitive and unregulated, the output will be \_\_\_\_\_ (1)
- (b) If the market is perfectly competitive and unregulated, the socially optimal outcome could be reached by taxing a unit of \$ \_\_\_\_\_ (2)

(背面仍有題目,請繼續作答)

2. As the Table shown below, please answer the following questions (a), (b), and (c)

Price level	Aggregate Demand	Short-Run aggregate supply	Long-Run aggregate supply
200	11	17	15
190	12	16	15
180	13	15	15
170	14	14	15
160	15	13	15
150	16	12	15
140	17	11	15

- (a) The short-run equilibrium will be at the price level of (3) \_\_\_\_\_
- (b) When the price level is at the short-run equilibrium, the unemployment rate is (4) \_\_\_\_\_ (please answer "above" or "below") the equilibrium level.
- (c) When the price level is at the short-run equilibrium, the short-run aggregate supply curve will shift to the (5) \_\_\_\_\_ (please answer "left" or "right")
3. David has an expected utility function of the form  $u(W) = \sqrt{W}$ . He has an initial wealth of \$9 and a lottery ticket which gives him \$27 with probability of 1/3 and \$0 with probability of 2/3. Then, (a) what is the expected utility of David? (6) \_\_\_\_\_ (b) what is the lowest price at which he will sell his ticket? (7) \_\_\_\_\_
4. If the investment and government purchase are exogenous variables under no tax rate economy, then answer following questions (a) (b), and (c) according the Table listed below.

Real GDP	Unit: trillion		
	Consumption Expenditure	Investment	Government Purchase
4	1	2	1
5	1.5	2	1
6	2	2	1
7	2.5	2	1
8	3	2	1
9	3.5	2	1

- (a) What is the equilibrium level of aggregate expenditure (8) \_\_\_\_\_
- (b) What is the marginal propensity to consumption (9) \_\_\_\_\_
- (b) What is the government purchase multiplier (10) \_\_\_\_\_

## III. Essay Question (15 points)

1. (15 points) To Boost the economy, the government announces the future economic expenditure plan of some \$2 billion dollars. (A) This announcement has what kind of effects on the expectations of the public on the major aspects of a nation's economy, such as private and public investments, interest rates, GDP, exchange rates? (8 points) (B) In addition, following your answer in (A), if the actual can not meet the expectations and lags behind them, what kind of effects will be on a nation's economy? (7 points)