

A. Multiple Choice Questions: Encircle the correct or best answer

(54)

1. In which of the following situations is the rest of the world's savings being used to finance investment in Canada?

- (a) Supply exceeds demand.
- (b) Exports exceed imports.
- (c) Investment exceeds national savings.**
- (d) Net taxes exceed national savings.
- (e) Investment exceeds household savings.

2. An auto company has 10 workers. Each worker can produce a maximum of either 7 cars or 4 SUVs a day. One day, the company decides to produce 35 cars and 25 SUVs. This output level is

- (a) production efficient because it is on the PPF.
- (b) efficient if firms reduce the number of workers.
- (c) inside the frontier and so is attainable but inefficient.
- (d) outside the frontier and so is unattainable.**

3. The price of a local phone call is 15 cents/minute in 2005, the base year. What is the price of this phone call in 2009 dollars if the CPI is 160 in 2009?

- a. 24.0 cents**
- b. 40.0 cents
- c. 20.0 cents
- d. 9.0 cents

4. Use the table below to answer the following question.

Government expenditures on goods and services	\$400
Wages, salaries, and supplementary labor income	\$2,000
Capital consumption	\$500
Gross investment	\$200
Personal consumption	\$2000
Net exports	\$-100
Indirect taxes	\$150

Net domestic product equals

- (a) \$ 2150.
- (b) \$ 2000.**
- (c) \$ 2600.
- (d) \$ 2500

5. An economy is at full employment. The money/nominal wage rate is \$20 an hour and the price level is 100. If the money wage rate falls to \$16 an hour, then the AS curve shifts _____ and the price level where the shifted AS curve and the potential GDP line intersect is _____.

- a. leftward; 120.
- b. rightward; 70.
- c. leftward; 70.
- d. rightward; 80.**

6. A change in any of the following factors except _____ shifts the AD curve.

- (a) Expectation about the future.
- (b) The money wage rate.**
- (c) Monetary and fiscal policies.
- (d) The state of the world economy.

7. Suppose that an Island economy produces only 2 goods as given below.

Item	Data for 1992		Data for 2006	
	Quantity	Price	Quantity	Price
Bananas	60	10	60	12
Coco-nuts	30	10	40	10

Given that the base year is 1992, what is the CPI for 2006?

- (a) 100.5
- (b) 113.3**
- (c) 140.0
- (d) 112.5
- (e) 100.0

8. Assume cars and SUVs are substitutes in production. If a high world demand for SUVs increases its price, then the supply curve of cars.

- a. remains constant.
- b. shifts to the right.
- c. shifts to the left.**
- d. shifts to the left initially and then returns to its original condition.

9. In a country with a working-age population of 30 million, 18 million are employed, 2 million are unemployed, and 2 million of the employed are working part-time, half of whom wish to work full-time. The unemployment rate is _____.

- (a) 9.1%
- (b) 11.1%
- (c) 10.0%**
- (d) 14.3%
- (e) 9.0%

10. India's GDP is measured in Rupees and that of Canada in \$. If the current exchange rate is Rs. 40 (\$ 1 = Rs 40) and a similar good that costs \$ 1 in Canada costs Rs. 20 in India, the real GDP of India as measured in terms of Rs and then converted to \$ _____.

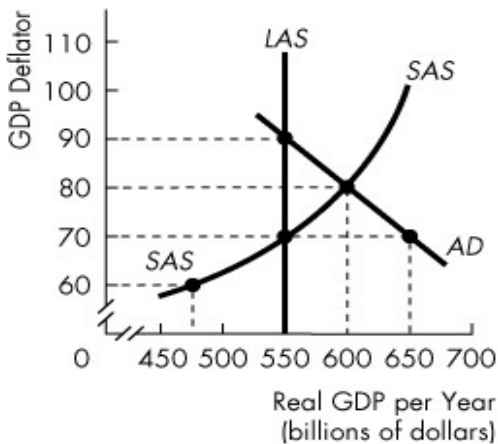
- a. **tends to understate India's standard of living.**
- b. tends to overstate India's standard of living.
- c. may understate or overstate India's standard of living depending upon the situation.
- d. correctly measures India's standard of living.

11. Given the following production possibility table.

	Workers needed to make:	
	One Car	One Ton of Grain
U.S.	8	10
Japan	4	4

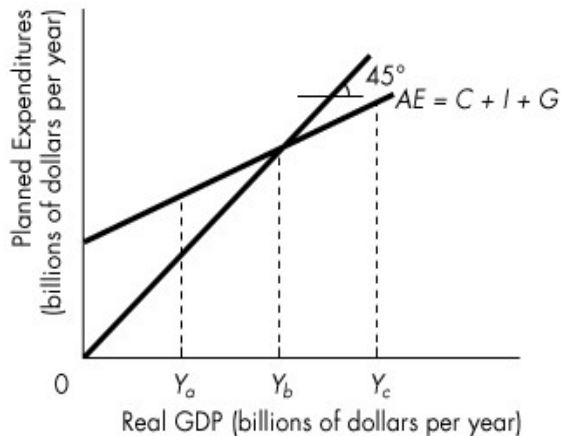
- a. Japan should export cars and the US grain.
- b. Japan should export grain and the US cars.**
- c. Japan should produce both cars and grain and export to the US.
- d. US should produce both and export to Japan.

12. The following figure shows the aggregate demand (AD), short-run aggregate supply (SAS), and long-run aggregate supply (LAS) curves for an economy. As the economy automatically adjusts to long-run equilibrium,



- (a) AD shifts leftward.
- (b) SAS shifts rightward.
- (c) LAS shifts rightward.
- (d) SAS shifts leftward.**

13. There are no exports or imports in the economy illustrated in the figure below. When real GDP is equal to Y_a , aggregate planned expenditure



- (a) exceeds real GDP and real GDP will fall.
- (b) is less than real GDP and real GDP will fall.
- (c) is equal to real GDP and real GDP will neither rise nor fall.
- (d) exceeds real GDP and real GDP will rise.**
- (e) is less than real GDP and real GDP will rise.

14. Which of the following does *not* affect aggregate demand?

- a. Exchange rate.
- b. Monetary policy.
- c. Expected future income.
- d. Technological change.**
- e. Fiscal Policy.

15. The recent decrease in GST from 6% to 5% by the present Conservative government is expected to

- a. shift the AS curve to the right.
- b. shift the AD curve to the right.**
- c. shift the AS curve to the left.
- d. shift the AD curve to the left.

16. Suppose that investment decreases by \$15 billion. If the multiplier is 3, and the aggregate supply curve is positively sloped. In the short run, equilibrium real GDP will

- (a) not be affected.
- (b) decrease by less than \$45 billion.**
- (c) a decrease by \$45 billion.
- (d) increase by less than \$45 billion.
- (e) decrease by more than \$45 billion.

17. When the Canadian price level rises with the foreign price levels remaining the same _____.

- (a) Canadian exports increase and the AD curve shifts rightward.
- (b) Canadian exports decrease, Canadian imports increase, and the AD curve shifts leftward.
- (c) Canadian exports decrease, Canadian imports increase, and there is a movement up along the AD curve.**
- (d) Canadian firms' profits increase and the AD curve shifts rightward.

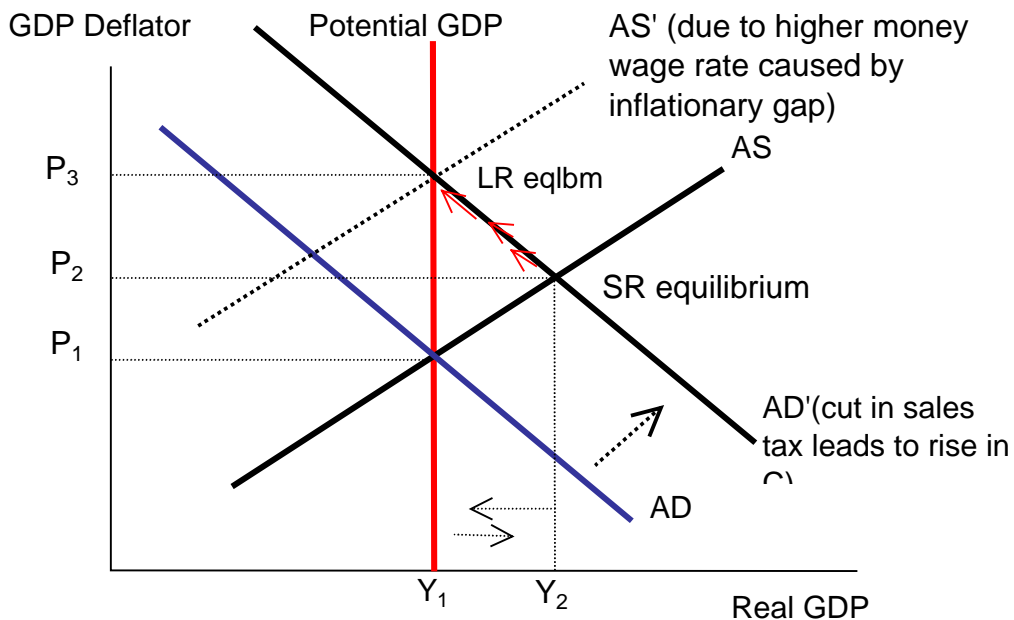
18. If $AE = 100 + 0.7Y$ and $Y = 300$, then unplanned inventories deplete by

- (a) 10 units.**
- (b) 300 units.
- (c) 333.33 units.
- (d) 100 units.
- (e) none as the economy is in equilibrium.

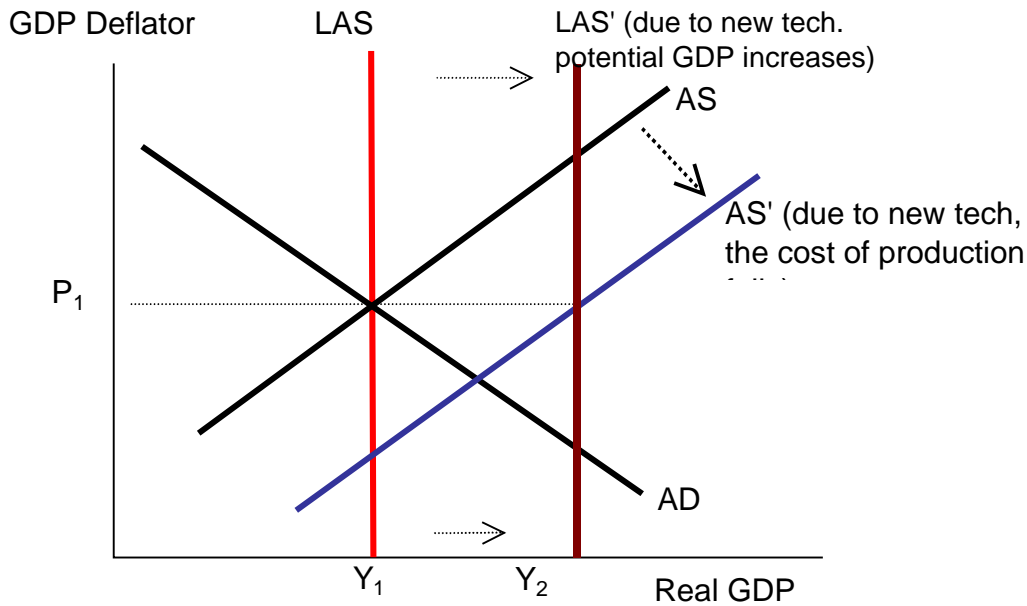
B. In the case of graph question(s), please draw self-explanatory and well-labeled graph(s) (i.e., showing the mechanisms for curve shift, if any, reasons for such shift and the results) and avoid extra verbal explanations. (46)

1. Suppose Canadian economy is in full employment level. What happens to Canadian real GDP in the short run when

- (a) the government of Canada cuts the sales tax rate from 6% to 5%? In this case, also illustrate the economy's (natural) tendency to come back to the full employment level. (8)



(b) Canada develops a new (production) technology. (6)



2. An island economy produces only lobsters and crabs as given below.

	In 2007	In 2008
Lobsters:	Q = 100, P = \$20.	Q = 110, P = \$25.
Crabs:	Q = 25, P = \$25.	Q = 40, P = \$30

a. Calculate the real GDP in 2007 (the base year) and 2008 using Statistics Canada's new method. (10)

GDP in 2007 Prices:

$$GDP_{07} = 100 \times 20 + 25 \times 25 = \$2625$$

$$GDP_{08} = 110 \times 20 + 40 \times 25 = \$3200$$

$$\% \text{ change in GDP from 2007 to 2008} = (3200 - 2625) / 2625 = 21.90\%$$

GDP in 2008 Prices:

$$GDP_{07} = 100 \times 25 + 25 \times 30 = \$3250$$

$$GDP_{08} = 110 \times 25 + 40 \times 30 = \$3950$$

$$\% \text{ change in GDP from 2007 to 2008} = (3950 - 3250) / 3250 = 21.54\%$$

$$\text{Average \% change in GDP from 2004 to 2005} = 21.72\%$$

$$\text{Real GDP}_{07} \text{ (base year)} = \$ 2625$$

$$\text{Real GDP}_{08} = 1.2172 \times 2625 = \$ 3195.15$$

- b. Calculate the GDP deflator in 2008 and interpret your result. (4)

GDP deflator = $(\text{Nominal GDP}_{08} / \text{Real GDP}_{08}) \times 100 = 395000 / 3195.15 = 123.62$
The average prices in 2008 are 23.62% higher than those in 2007 (the base year).

Alternative: The nominal GDP in 2008 gives the overestimation of real production in that year by the same % increase in price (relative to base year), which is 23.62%.

3. In an economy, autonomous consumption is \$200 billion, the marginal propensity to consume $c = 0.8$, investment is \$200 billion, government expenditure is \$150 billion, export is \$50 billions and imports $M = 0.2Y$. The marginal tax rate = 10%.

- (a) Calculate the equilibrium real GDP, Y , of this economy. (4 marks)
(b) If the government increases expenditure by \$100 billion, calculate the new equilibrium Y ? (4 marks)
(c) Calculate the size of the expenditure multiplier. (4marks)
(d) Draw a diagram illustrating your results. (6 marks)

(a) $AE = C + I + G + X - M = 200 + 0.8(1 - 0.1)Y + 200 + 150 + 50 - 0.2Y$
 $= 600 + 0.52Y$

At equilibrium, $AE = Y$
 $600 + 0.52Y = Y$
 $0.48Y = 600 \Rightarrow Y^* = \1250

(b) New $AE = 700 + 0.52Y$
At new equilibrium, new $AE = Y \Rightarrow Y^{**} = \1458.33

(c) Expenditure Multiplier = $1 / (1 - \text{slope of AE}) = 1 / (1 - 0.52) = 2.083$.
(Alternative: Multiplier = $\Delta Y / \Delta G = (Y^{**} - Y^*) / \Delta G = (1458.33 - 1250) / 100 = 2.083$)

(d)

