

## **Answer Key for Sample Final Exam- Spr2008**

### **Part I – Choice Questions**

- 1: D
- 2: B
- 3: B
- 4: C
- 5: C
- 6: A
- 7: A
- 8: B
- 9: B
- 10: D
- 11: B
- 12: C
- 13: C
- 14. B.

### **Part II – Calculations and Explanations**

1. Government Purchases = \$1,500,000

Bombs are the only government purchases. The other government receipts and expenditures were transfer payments which are not included in GDP.

$$\text{GDP} = \text{C} + \text{I} + \text{G} + \text{NX}$$

$$\text{C} = \$5,000,000$$

$$\text{I} = \$1,000,000$$

$$\text{G} = \$1,500,000$$

$$\text{NX} = -\$250,000$$

$$\text{GDP} = \$7,250,000 \quad \text{Calculated using the Expenditure Method}$$

2. ANS:

Country	Adult Population	Labor Force	Employed	Unemployed	Unemployment Rate	Labor-Force Participation Rate
Japan	109,474	66,010	62,510	3,500	5.30	60.30
France	46,804	26,870	24,293	2,577	9.59	57.41
Germany	70,159	39,591	35,755	3,836	9.69	56.43

### **Part III – Essay Questions**

Note: the answer keys to the essay questions provide only a simple structure of the answer. Please add more details using the book and the lecture notes as the references.

1. → K/L (physical capital per worker), H/L (human capital per worker), N/L (natural resources per worker), A (technological progress).

Policies to boost productivity by increasing K/L are

- (i) to encourage savings and investment
- (ii) to encourage investment from abroad (foreign direct investment or foreign portfolio investment)
- (iii) to control population growth

2. Because the natural rate of unemployment is higher in Canada and in Europe. This comes from:

- A. Higher frictional unemployment arising from higher unemployment insurance;
- B. Higher structural unemployment arising from higher minimum wage;
- C. Higher structural unemployment arising from union power.

3. Again, please practice the diagram yourself.

The economy starts at the long-run equilibrium, where output equals the natural level and the actual price equals the expected price. The crossing point of the three curves -- AD, SRAS, and LRAS – gives the long-run equilibrium.

The September 11<sup>th</sup> attack lowers the investors' confidence, and reduces investment demand (and therefore the aggregate demand). This is reflected as a leftward shift of the AD curve. The crossing point of the new AD curve and the SRAS curve is the new short-run equilibrium, where both the output and the price are lower. Therefore, the short-run equilibrium indicates that the economy has entered a recession.

Note that, the new short-run equilibrium price is lower than the expected price. Observing this, people realize that they were overestimating the price. Therefore, over time, they begin to lower their price expectation, which shifts downward the SRAS curve. As time goes, people keep adjusting their price expectations, and the SRAS curve keep shifting downward, until the actual price equals the expected price once again. At this moment, output has returned to the natural level. The economy has reached another long-run equilibrium.

Apparently, the September 11<sup>th</sup> attack lowers output and price in the short run; but in the long run, only price is affected, output stays at the natural level.