

THE HONG KONG POLYTECHNIC UNIVERSITY  
HONG KONG COMMUNITY COLLEGE

**Subject Title** : Economics and Society (for Non-Business Students)      **Subject Code** : CCN1042

**Session** : Semester Two, 2015/16

**Numerical Answers**

**Question B1**

- (a) For business travellers, the price elasticity of demand is  $[(2,000 - 1,900)/1,950]/[(2,500 - 2,000)/(2,250)] = 0.23$ .  
For vacationers, the price elasticity of demand is  $[(900 - 600)/750] / [(2,500 - 2,000)/2,250] = 1.8$ .

**Question C3**

(a)

Quantity (in units)	Price (\$)	TC (\$)	TR (\$)	MR (\$)	MC (\$)
0	55	0	<b>0</b>	-	-
10	50	300	<b>500</b>	<b>50</b>	<b>30</b>
20	45	600	<b>900</b>	<b>40</b>	<b>30</b>
30	40	900	<b>1,200</b>	<b>30</b>	<b>30</b>
40	35	1,200	<b>1,400</b>	<b>20</b>	<b>30</b>
50	30	1,500	<b>1,500</b>	<b>10</b>	<b>30</b>

**Question D1**

- (a)  $GDP = C + I + G + NX$   
 $= \$500 + \$40 + \$100 + (\$20 - \$10) = \$650$  billion.  
 $GNP = GDP + \text{Net factor income from the rest of the world}$   
 $= \$650 + (\$30 - \$20) = \$660$  billion.  
 $NNP = GNP - \text{Capital consumption allowance}$   
 $= \$660 - \$50 = \$610$  billion.  
 $\text{Statistical discrepancy} = NNP - \text{National income}$   
 $= \$610 - \$604 = \$6$  billion.  
 $\text{Net investment} = \text{Gross investment} - \text{Capital consumption allowance}$   
 $= \$40 - \$50 = -\$10$  billion.

**Question D2**

- (a) The opportunity cost of cheese is  $20/40 = 1/2$  unit of bread in United Kingdom and  $5/20 = 1/4$  unit of bread in Spain. The opportunity cost of bread is  $40/20 = 2$  units of cheese in United Kingdom and  $20/5 = 4$  units of cheese in Spain.

**Question D3**

- (a) The required reserve ratio =  $\$45m/\$750m \times 100\% = 6\%$ . The money multiplier =  $1/0.06 = 16.67$ .
- (b) Initially, money supply =  $(\$50 + \$750)$  million =  $\$800$  million.  
If the banks loan out all of its excess reserves and the new required reserve ratio reduced by 2%, the new money supply =  $(\$45m + \$15m)/(0.06 - 0.02) = \$1,500$  million. The change in money supply =  $\$1,500m - \$800m = \$700$  million.