Answer Any Three Questions. Answer all parts to each question.

1. Answer all parts.

Thailand can import, or export, rice at the constant world price of 30 \( P_w = 30 \). The supply and demand curves for rice in Thailand are given by: \( S = 4 \cdot P_r \); \( D = 100 - P_r \) (\( P_r \) is the domestic price of rice).

   a) Discuss, and show graphically, how a $10 export subsidy (on rice) affects: domestic production, consumption, producer and consumer surplus, and government expenditures (on the subsidy). (10 points)

   b) Calculate numerically the impact of this $10 export subsidy on: consumer surplus, producer surplus, government expenditures, and overall welfare. Explain why this policy increases (or decreases) overall welfare. (8 points)

      i. Identify an alternative policy that would have the same effect on output and producer surplus as this export subsidy. From an overall welfare perspective, which policy (the policy identified here, or the export subsidy) is better? Explain. (6 points)

   c) Finally, consider a general equilibrium model with two goods (rice, computers). Assume Thailand is a small country (world prices are unaffected by Thailand’s actions) and that, under free trade, Thailand would export rice and import computers. Explain how this rice export subsidy:

      i. Effects domestic production, and consumption, of computers, as well as rice. (4 points)

      ii. What would the overall impact of the policies be if Thailand had an import tariff on computers at the same rate as the export subsidy for rice? Explain. (5 points)

2. Answer all parts.

Assume you see the following (hypothetical) exchange rates in the Wall Street Journal:

<table>
<thead>
<tr>
<th>Currency</th>
<th>Spot Rate: per US $</th>
<th>1 Year Forward Rate: per US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese Yen(¥)</td>
<td>100 ¥/$</td>
<td>95 ¥/$</td>
</tr>
<tr>
<td>Canadian Dollar</td>
<td>1.50 Can$/US$</td>
<td>1.50 Can$/US$</td>
</tr>
<tr>
<td>British Pound (£)</td>
<td>0.67£/$</td>
<td>0.69£/$</td>
</tr>
</tbody>
</table>

   a) Use the information above to calculate the spot exchange rate between the Japanese Yen and the British pound. (7 points)

   b) Use the information in the table to predict whether interest rates in (each of) Japan, Canada, and Britain would be higher, or lower, than US (one year) interest rates. (6 points)
i. Assume the US one year interest rate is 8%. **Calculate** the Japanese interest rate. Explain your calculation. (5 points)

c) Suppose a general election is scheduled in Britain for Spring 2001, and economic forecasters believe that, *following* the election, the government will implement (expansionary monetary) policy that will cause a depreciation of the British pound. How are these beliefs likely to affect the forward exchange rate, and the spot rate, of the pound? Explain. (8 points)

d) Suppose several different countries decide to abandon their own currencies and adopt a single common currency. Discuss what implications this decision has for interest rates in the different countries. (7 points)

3. Answer All Parts

a) Give a definition of the Balance of Payments accounts, and describe the different subaccounts of these accounts. Illustrate the types of transaction that would appear in each subaccount. (9 points)

b) What is a Balance of Trade (or Current Account) deficit, and what is the *economic significance*, if any, of this deficit? (6 points)

i. State the economic identity that relates the Current Account deficit to macroeconomic variables (such as income, consumption, savings, etc.). What relationship, if any, is there between Current Account deficits and government budget deficits? Provide economic arguments to support your discussion. (6 points)

c) Using a partial equilibrium model of imports of shoes to discuss whether import tariffs and import quotas have equivalent effects. Use a graph to illustrate your answer. (7 points)

i. Suppose that the US has a 20% tariff on all shoe imports, and that the US imports both high and low quality shoes. What do you think will happen to the quality of shoes imported if this tariff is replaced by a quota that limits total shoe imports to the same number of shoes imported? Explain briefly. (5 points)

4. Answer all parts.

a) Consider trade between two large nations (or trading blocs), such as the US and the European Union. Suppose that there are two goods, computers and cars, and that under free trade the US exports computers to Europe, while Europe exports cars to the US. Assume the equilibrium prices of the goods (cars, computers) depends upon economic conditions, and policies, in both countries (hence, the assumption both countries are large).

i. Show how a U.S. export tariff (on computers) will affect prices, production and consumption in each country. Show graphically how this tariff affects welfare in each country, and world welfare. *Can either country gain from this policy? Explain.* (10
ii. Suppose, in response to the US tariff, the European Union retaliates by imposing an import tariff on computers. Show how the European tariff affects prices in each country, and welfare in each country. {NOTE: Europe could impose an export tariff on cars, rather than an import tariff on computers. The analysis would be the same}. (5 points)

iii. With both countries choosing their “optimal” tariff, as above, is it possible that both countries are worse off than under free trade? If so, why don’t they both eliminate their tariffs? In answering, discuss the “prisoner’s dilemma”, and why there might be a scope for international agreements concerning tariffs. (8 points)

b) Use the concepts of “trade creation” and “trade diversion” to illustrate why Mexico might be hurt as a result of joining a free trade area with the U.S. Use a diagram to illustrate your discussion. (10 points)

5. Answer All Parts.

a) Suppose that both the US and Europe export airplanes to the rest of the world, and that both countries are large, in the sense that their exports (and their policies) affect world prices.

i. Assume that there are a large number of airplane manufacturers in both Europe and the US, so that the industry is perfectly competitive. Under these circumstances, briefly explain how European export subsidies would affect welfare in the US and Europe, and how the welfare of airplane buyers (e.g., in Asia) would be affected? (7 points)

ii. Unlike part (i) above, suppose there are only two airplane producers, one in the US (Boeing) and one in Europe (Airbus). Given the oligopolistic market structure, might European export subsidies have a different effect on European, or US, welfare than in part (i) above? Be explicit in answering this question, and use some economic model to justify your reasoning. (10 points)

b) Suppose that Australia produces, and imports, both cars and steel (for simplicity, assume Australia is “small”, so that world prices are taken as given). Assume that domestic production of each car uses one unit (ton) of steel. Furthermore, assume that initially there are import tariffs of both 20% on car imports and steel imports. Given this initial situation:

i. Analyze how a reduction in the tariff on steel will affect domestic steel and domestic car production. Within Australia, who gains and who loses from this policy? Does the tariff change the effective protection offered to the car industry? Explain. (9 points)

ii. Use diagrams to identify the welfare impact (in Australia) from this reduction in the tariff on steel. Could the reduction in the tariff on steel lower overall welfare in Australia? Explain your answer {Hint: be sure to consider what happens in the car industry} (7 points)