1. Let the money supply growth be such that $M_t = \mu M_{t-1}$ for each period t where $\mu > 1$.

   (1) (5%) What is the government's <u>real</u> revenue from printing money?

   (2) (10%) Explain why economists often refer to the government's revenue from money creation (seigniorage) as the inflation tax? Do you think that the government can raise seigniorage without limit? Why?

2. (10%) In the standard national accounts the nominal deficit is

$$(M_t + B_t) - (M_{t-1} + B_{t-1}),$$

   where M_t and B_t denote the money supply and government bonds in period t. Some economists argue that

$$(M_t + B_t) - (1 + \pi_{t-1})(M_{t-1} + B_{t-1})$$

   where $\pi_{t-1} = (P_t - P_{t-1})/P_{t-1}$, is a more accurate measure of government's obligation. What do you think? Compare these two measures and explain. (*Hint*: start with the real deficit.)

3. (10%) In a currency reform the government replace Old Taiwan dollars with New Taiwan dollars. People can exchange their old currency for the new one at a ratio of 40,000 to 1. Also, any contracts that were written in terms of Old Taiwan dollars are converted at the above ratio. What are the effects of the currency reform on price level, interest rate and the quantities of output? Explain.

4 (15%) Suppose that the government obtains a significant portion of its revenue from money creation. Suppose now that the government cuts current monetary growth in an attempt to reduce inflation. However, the government does not change the current or future values for its real expenditures and tax receipts. What do you think would happen to the inflation rate? Would this policy be successful? Why?

5. During the Presidential election campaign, there was a serious
international reserves outflow because of mainland China's
military buildup and its provocations in the Taiwan straits.
The Central Bank of China thus adopted two policy measures.
One is to maintain the exchange rate at the level of 27.5 NT/US .
Another is to lower the required reserve ratio further.

(i) What are the purpose of those policy measures ?

(ii) Please analyze the impacts of the whole event on interest
rate and exchange rate.

(25)

6. An open economy is described by

$$Y = C(Y) + I(r) + G + T(E,Y,Y^*)$$
$$M/P = L(Y,r) , \quad M=DR+FR$$
$$r = r^*$$

where Y=output, C=consumption, I=investment, G=government spending,
T=trade balance, E=exchange rate (national currencies per unit of
foreign currency), Y*=foreign output, L=money demand, M=money
supply=domestic credit(DR)+foreign reserve(FR), r=domestic
interest rate, r*=foreign interest rate. Assume there is perfect
capital mobility and the central bank has no sterilized operation.
Please use diagrams to examine the effects of a fiscal expansion
on output
under a) a fixed exchange rate. b) a floating exchange rate.
Does a monetary expansion have the same results as a fiscal
expansion ?

(25)