

**Question 1.** Differentiate between balance of trade and current account balance,

**Answer** Different between balance of trade and current account balance

S. No	Balance of Trade	Current Account Balance
1	It is a difference between exports and imports of goods.	It is net value of balances of visible and of invisible trade of unilateral transfer
2	Balance of Trade Includes only visible Items	Current account records both visible and invisible Items
3	It is a narrow concepts means it is only a part of current account balance.	It is a wider concept and It Includes balance of trades.

**Question 2.** What are official reserve transactions? Explain their importance in the balance of payments.

**Answer** Official reserve refers to that the monetary authority (central bank) is financed the any deficit in the balance of payment. Official reserve transactions take place when a country with draws from its stock of foreign exchange reserves to finance deficit in its overall balance of payment. A country with surplus in its overall BOP leads to rise in foreign exchanges reserves.

**Importance** Official reserve transactions help to bring a balance In the country's overall balance of payment. So, it plays an important role in economy of any country.

**Question 3.** Distinguish between the nominal exchange rate and the real exchange rate. If you were to decide whether to buy domestic goods or foreign goods, which rate would be more relevant? Explain.

**Answer** Nominal Exchange Rate It means the price of foreign currency in terms of domestic currency. Means, the number of units of domestic currency one must give up to get an unit of foreign currency.

**Real Exchange Rate** It refers to the relative price of foreign goods in terms of domestic goods.

To buy domestic goods with foreign goods, at a point of time nominal exchange rate is more relevant.

**Question 4.** Suppose it takes 1.25 yen to buy a rupee, and the price level in Japan is 3 and the price level in India is 1.2 calculate the real exchange rate between India and Japan.

**Answer** Given =  $P$  = Price Level in India = 1.2  
 $P_f$  = Price Level in Japan = 3  
 $e$  = Nominal Exchange Rate =  $\frac{1}{1.25} = 0.8$   
 $\therefore$  Real Exchange Rate =  $\frac{eP_f}{P} = \frac{0.8 \times 3}{1.2} = 2$

**Question 5.** Explain the automatic mechanism by which BOP equilibrium was achieved under the gold standard.

**Answer** The country from which we were importing and making payment in gold would face an increase in prices and cost. There would be disequilibrium. Normally the BOP of the country losing gold, and worsen that of the country with the favourable trade balance, until equilibrium in international trade is re-established at relative prices that keep import and export in balance with no further net gold flow. Thus, fixed exchange rates were maintained by an automatic equilibrating mechanism.

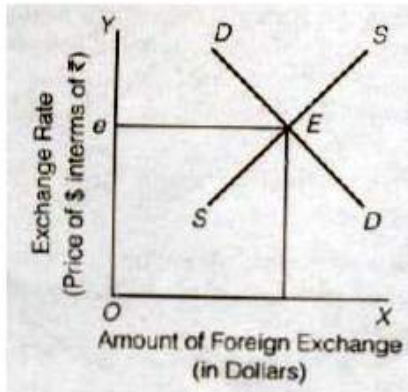
**Question 6.** How is the exchange rate determined under the flexible exchange rate regime?

**Answer** Flexible exchange rate is determined by the forces of supply and demand in the international market. And the equilibrium exchange rate is determined at a level where demand for foreign exchange is equal to the supply of foreign exchange.

Sources of demand for foreign exchange

- (i) Payment of international loans
- (ii) Gifts and grants to rest of the world

- (i) Export to the rest of the world
- (ii) Direct foreign investment
- (iii) Direct purchase of goods and services by the non-residents in the domestic market.



In the figure, the equilibrium exchange rate i.e., E

**Question 7.** Differentiate between devaluation and depreciation

**Answer** Different between devaluation and depreciation

S.No	Devaluation	Depreciation
1	It means the decrease in the price of domestic currency under fixed exchange rates.	It means decrease in the price of the domestic currency Intems of the floating exchange rates.
2	It takes place due to official action (by government)	It takes place due to market forces
3	It takes place under fixed (pegged) exchange rate system.	It takes place under flexible exchange rate system.

**Question 8.** Would the central bank need to intervene in a managed floating system? Explain

**Answer** Managed floating is a system that allows adjustment in exchange rate according to set of rules and regulations which are officially declared in the foreign market. Under this system, also called dirty floating, central banks intervene to buy

and sell foreign currency in an attempt to moderate exchange rate movements whenever they feel that such action are appropriate. Official reserve transaction are, therefore, not equal to zero.

**Question 9.** Are the concepts of demand for domestic goods and domestic demand for goods the same?

**Answer** No, both concept are not same demand for domestic goods refers the demand for goods made by both domestic and foreign countries. Domestic demand for goods refers the demand for goods by our own country for goods which may be produced in foreign countries

**Question 10.** What is the marginal propensity to import when  $M = 60 + 0.6Y$ ? What is the relationship between the marginal propensity to import and the aggregate demand function?

**Answer** Marginal propensity to import indicates the extent to which imports are induced by changes in income of production.

It is given

$$M = 60 + 0.06Y$$

$$M = M + MY$$

Here (m) Marginal propensity to import = 0.06

The marginal propensity to import negatively affects the aggregate demand function.

When income increase aggregate demand decreases. This is because the additional income is spent on foreign goods and not on domestic goods.

**Question 11.** Why is the open economy autonomous expenditure multiplier smaller than the closed economy one?

**Answer** The open economy multiplier is smaller than in a closed economy because a part of domestic demand falls on foreign goods. An increase in autonomous demand leads to a smaller increase in output compared to a closed economy

**Question 12.** Calculate the open economy multiplier with proportional taxes,  $T = tY$ , instead of lump-sum taxes as assumed in the text

**Answer**  $y = C + c(1-t)Y + I + G + X - M - my$

$$Y - c(1-t)Y + my = C + I + G + X - M$$

$$Y[1 - c(1-t) + m] = C + I + G + X - M$$

$$Y = \frac{C + I + G + X - M}{[1 - c(1-t) + m]}$$

Autonomous Expenditure (A) =  $C + I + G - m + X - M$

∴ Open economy multiplier with proportional taxes

$$\frac{\Delta Y}{\Delta A} = \frac{1}{1 - c(1-t) + m}$$

**Question 13.** Suppose  $C = 40 + 0.8 Y_d$ ,  $T = 50$ ,  $I = 60$ ,  $G = 40$ ,  $X = 90$ ,  $M = 50 + 0.05Y$

- Find equilibrium income.
- Find the net export balance at equilibrium income.
- What happens to equilibrium income and the net export balance when the government purchases increase from 40 to 50?

(i) Equilibrium level of income

$$Y = C + c(Y - T) + I + G + X - M - mY$$

$$Y = \frac{A}{1 - c + m}, \quad \text{Here } A = C - cT + I + G + X - M$$

$$= \frac{C - cT + I + G + X - M}{1 - c + m}$$

$$= \frac{40 - 0.8 \times 50 + 60 + 40 + 90 - 50}{1 - 0.8 + 0.05}$$

$$= \frac{140}{0.25}$$

$$= \frac{140}{25} \times 100$$

$$= 560$$

(ii) Net export at equilibrium income

$$NX = X - M - mY$$

$$= 90 - 50 - 0.05 \times 560$$

$$= 40 - 28$$

$$= 12$$

ii) If G increases from 40 to 50

$$\begin{aligned}
 Y &= \frac{C - cT + I + G + X - M}{1 - c + m} \\
 &= \frac{40 - 0.8 \times 50 + 60 + 50 + 90 - 50}{1 - 0.8 + 0.05} \\
 &= \frac{40 - 40 + 60 + 50 + 40}{0.25} \\
 &= \frac{150}{0.25} = \frac{150}{25} \times 100 = 600
 \end{aligned}$$

Net export balance

$$\begin{aligned}
 NX &= X - M - mY \\
 &= 90 - 50 - 0.05 \times 600 \\
 &= 40 - 30 = 10
 \end{aligned}$$

**Question 14.** In the above example, if exports change to  $X = 100$ , find the change in equilibrium income and the net export balance

**Answer** Given,  $C = 40 + 0.8 Y_d$ ,

$$T = 50$$

$$I = 60$$

$$G = 40$$

$$X = 100$$

$$M = 50 + 0.05Y$$

$$\begin{aligned}
 \text{Equilibrium income} &= \frac{C - cT + I + G + X - M}{1 - c + m} \\
 &= \frac{40 - 0.8 \times 50 + 40 + 60 + 100 - 50}{1 - 0.8 + 0.05} \\
 &= \frac{40 - 40 + 100 + 100 - 50}{0.25} \\
 &= \frac{150}{25} \times 100 = 600 \\
 Nx &= X - M - mY
 \end{aligned}$$

Net export balance

$$\begin{aligned}
 N_x &= X - M - 0.05 Y \\
 &= 100 - 50 - 0.05 \times 600 \\
 &= 50 - 30 = 20
 \end{aligned}$$