2. What is the H-O theory?

The Heckscher—Ohlin theory is based on a number of simplifying assumptions (some made only implicitly by Heckscher and Ohlin).

1. There are two nations (Nation 1 and Nation 2), two commodities (commodity X and commodity Y), and two factors of production (labor and capital).
2. Both nations use the same technology in production.
3. Commodity X is labor intensive, and commodity Y is capital intensive in both nations.
4. Both commodities are produced under constant returns to scale in both nations.
5. There is incomplete specialization in production in both nations.
6. Tastes are equal in both nations.
7. There is perfect competition in both commodities and factor markets in both nations.
8. There is perfect factor mobility within each nation but no international factor mobility.
9. There are no transportation costs, tariffs, or other obstructions to the free flow of international trade.
10. All resources are fully employed in both nations.
11. International trade between the two nations is balanced.

The Heckscher-Ohlin (H-O) theory can be presented in a nutshell in the form of two theorems: the H-O theorem which deals with and predicts the pattern of trade and, the factor—price equalization theorem which deals with the effect of international trade on factor prices.

The Heckscher-Ohlin theorem can be stated as follows: A nation will export the commodity whose production requires the intensive use of the nation’s relatively abundant and cheap factor and import the commodity whose production requires the intensive use of the nation’s relatively scarce and expensive factor. In short, the relatively labor-rich nation exports the relatively labor-intensive commodity and imports the relatively capital-intensive commodity.

This means that Nation 1 exports commodity X because commodity X is the L-intensive commodity and L is the relatively abundant and cheap factor in Nation 1. On the other hand, Nation 2 exports commodity Y because commodity Y is the K-intensive commodity and K is the relatively abundant and cheap factor in Nation 2 (i.e., r/w is lower in Nation 2 than in Nation 1).
Example: If the general price level does not change in the foreign nation from the base period to period 1 (i.e. \( P_1^* / P_0^* = 1 \)), while the general price level in the home nation increases by 50%, the relative PPP theory postulates the exchange rate should be 50% higher.

The relative purchase power parity condition suggests that countries with higher rates of inflation will have a devalued currency.

Empirical test:
- Frenkel (1978) found that the PPP theory collapsed during the 1970s, as did Levich (1985) and Dornbusch (1987).
- Frankel (1986 and 1990) suggested that researchers should utilize data over many decades to properly test the PPP theory because deviations from purchasing-power parity die out only very slowly.
- Lothian and Taylor (1996) using data from 1790 to 1990 and confirmed Frankel’s findings.
- MacDonald (1999), Cashin & McDermott (2006) also confirmed the theory to be void.

Conclusion
- PPP works well for highly traded individual commodities
- PPP works well over an extensively long period of time
- PPP works well in cases of purely monetary disturbances and very inflationary periods

3. Explain demand for money and supply of money using monetary approach to the BOP

This approach started toward the end of the 1960s by Robert Mundell and Harry Johnson.

Under Fixed Exchange Rates:
- The monetary approach begins by postulating that the demand for nominal money balances is positively related to the level of nominal national income and is stable in the long run.
- The equation for the demand for money is: \( M_d = kPY \) ....(1)
  - \( M_d \): quantity demanded of nominal money balances
  - \( k \): desired ratio of nominal money balances to nominal national income
  - \( P \): domestic price level
  - \( Y \): real output
- In equation (1), \( PY \) is the nominal national income or output (GDP). This is assumed to tend towards full employment in the long run. The symbol \( k \) is also equal to \( 1/V \), where \( V \) is velocity of circulation of money. With \( V \) depending on institutional factors and assumed to be constant, \( M_d \) is a stable and positive function of the domestic price level and real national income.
- The equation of supply of money is: \( M_s = m(D+F) \)
  - \( m \): money multiplier
  - \( D \): domestic component of the nation’s monetary base
  - \( F \): international or foreign component of the nation’s monetary base
- \( D+F \) is the monetary base of the nation, or high powered money. Under fractional reserve banking system, each new dollar of \( D \) or \( F \) deposited in any commercial bank results in an increase in the nation’s money supply by a multiple of $1.
1. Functions of World Bank with respect to reconstruction
   - To assist in reconstruction and development of territories of its member governments.
   - To promote foreign investments
   - To promote long range growth of international trade

2. Optimum Currency Areas
   It is a group of nations whose national currencies are tied up by permanently fixed exchange rate and operate under a set of conditions to make this system optimum.

(8 Markers)

1. What is Bretton-woods system as being a gold exchange standard?
   - In 1944, representatives of USA, UK, and 42 other nations met at Bretton Woods, to decide what international monetary system to establish after the war. The system they devised was called the International Monetary Fund (IMF).
   - The Fund was established to oversee that nations followed a set of agreed norms of international trade conduct, provide borrowing facilities in case of temporary disequilibria of the BOP of a nation.
   - The Bretton Woods system was a gold-exchange standard. This meant, the US was to maintain the price of gold fixed at $35 per ounce and be ready to exchange on demand dollars for gold at that price without limitation or restriction.
   - Other nations were to fix their currencies in terms of dollars and intervene in foreign exchange markets to keep exchange rate from moving more than 1% or below par. Within this range, exchange rate was determined by market forces.
   - Until the late 1950s and early 1960s, when other currencies became fully convertible into dollars, the US dollar was the only intervention currency, so that the new system was practically a gold-dollar standard.
   - The Bretton Woods system was in the nature of an adjustable peg system, combining general exchange rate stability with some flexibility.

2. What is international monetary system? What are the characteristics of a good monetary system?
   - An international monetary system refers to the rules, customs, instruments, facilities and organizations for effecting international payments. They can be classified according to the way in which exchange rates are determined or according to the form that international reserve assets take.
   - A good monetary system is one which maximizes the flow of international trade and investments and leads to an equitable distribution of the gains from trade among nations. It can be evaluated in the basis of adjustment, liquidity, and confidence.
   - Adjustment: It refers to process in which Balance of Payments disequilibria is corrected. A good monetary system will minimize the cost of and time required for correction.