

Auditing Course Material

Part 30 of 61 (Chapters 2901-3000)

14. Currency Derivatives

The Forward Contracts on currencies are the agreements between corporations and commercial banks to exchange a specified amount of currency at a predetermined exchange rate (referred to as the forward rate) on a specified future date.

Multinational corporations (MNCs) often utilize forward contracts when they anticipate needing or receiving a foreign currency in the future, allowing them to lock in exchange rates for purchasing or selling specific currencies.

Suppose, TCS (Tata Consultancy Services) has completed a project for an Australian company, let's call it XYZ Corporation. According to their agreement, XYZ Corporation will pay TCS, a sum of 200 million Australian Dollars after six months, upon completion of the project. However, TCS anticipates that the Australian dollar (AUD) might appreciate against their home currency, the Indian rupee (INR), during this period. To mitigate the risk of potential losses due to currency appreciation, TCS decides to enter into a forward contract with a bank.

TCS and the bank agree to exchange 200 million Australian Dollars for Indian rupees at a predetermined exchange rate, known as the forward rate, six months later. By entering into this contract, TCS locks in the exchange rate at which it will convert Australian dollars into Indian rupees in the future. This shields TCS from potential losses if the Australian dollar strengthens against the Indian rupee during the payment period.

While the forward contract provides security against currency volatility, TCS will need to pay a premium to the bank for entering into the contract. However, this cost is justified by the protection it offers against potential losses from unfavorable currency movements.

Multinational corporations (MNCs) utilize forward contracts to hedge their import transactions by securing a fixed exchange rate for obtaining the necessary currency to purchase imports. However, the fixed nature of forward contracts can sometimes result in opportunity costs.

Additionally, corporations leverage the forward market to establish a predetermined exchange rate for selling foreign currencies, serving as a hedge against potential depreciation of those currencies over time.

Forward contracts are available for various timeframes, with the most common periods being 30, 60, 90, 180, and 360 days, though longer durations are also possible. The forward rate of a currency typically fluctuates with the length of the forward period, reflecting the time value of money and expectations regarding future exchange rate movements.

14. Currency Derivatives

The **forward premium** refers to the difference between the forward exchange rate (F) and the spot exchange rate (S) at a particular point in time. It indicates whether the forward rate is higher or lower than the spot rate.

$$\text{FORWARD PREMIUM} = \frac{\text{FORWARD RATE}(F) - \text{SPOT RATE}(S)}{\text{SPOT RATE}(S)}$$

When the forward rate is less than the spot rate ($F < S$), the forward premium is negative, and the forward rate is said to exhibit a discount (called **Forward Discount**). This implies that the currency is cheaper in the forward market compared to the spot market.

$$\begin{aligned}\text{FORWARD PREMIUM} &\rightarrow 30 \text{ Days Forward} = \frac{F-S}{S} \times \frac{360}{30} \\ &\rightarrow 60 \text{ Days Forward} = \frac{F-S}{S} \times \frac{360}{60} \\ &\rightarrow 180 \text{ Days Forward} = \frac{F-S}{S} \times \frac{360}{180}\end{aligned}$$

In certain situations, firms may prefer to evaluate the premium or discount without annualizing it. In such cases, they exclude the fraction representing the number of periods per year in the formula used to calculate the premium or discount. This approach provides a clearer understanding of the immediate cost or benefit associated with entering into a forward contract without considering the impact of time over the entire year.

14. Currency Derivatives

If the euro's one-year forward rate is quoted at \$1.00 and the euro's spot rate is quoted at \$1.03, compute the euro's forward premium?

Solution:

$$\text{FORWARD PREMIUM} = \frac{F-S}{S} = \frac{1.00 - 1.03}{1.03} = -0.00291$$

2.91% DISCOUNT

14. Currency Derivatives

If the pound's 90-day forward rate is quoted at \$1.677 and the pound's spot rate is quoted at \$1.681, compute the pound's annualized forward premium?

Solution:

$$\text{FORWARD PREMIUM} = \frac{F-S}{S} \times \frac{360}{90} = \frac{1.677 - 1.681}{1.681} \times \frac{360}{90}$$
$$= -0.0095$$
$$0.95\% \text{ DISCOUNT}$$

14. Currency Derivatives

If the Yuan's 180-day forward rate is quoted at \$1.672 and the Yuan's spot rate is quoted at \$1.681, compute the Yuan's annualized forward premium?

Solution:



14. Currency Derivatives

Currency futures contracts represent standardized agreements specifying a fixed volume of a particular currency to be exchanged on a predetermined settlement date. Similar to forward contracts, they enable parties to lock in exchange rates for future transactions.

Comparison	Forward	Futures
Size of contract	Tailored to individual needs.	Standardized.
Delivery date	Tailored to individual needs.	Standardized.
Participants	Banks, brokers, and multinational companies.	Banks, brokers, and multinational companies.
Public speculation	Not encouraged.	Qualified public speculation encouraged.
Clearing operation	Handling contingent on individual banks and brokers. No separate clearinghouse function.	Handled by exchange clearinghouse. Daily settlements to the market price.
Regulation	Self-regulating.	Regulator of Country (SEBI).
Liquidation	Most settled by actual delivery. Some by offset, at a cost.	Most by offset, very few by delivery.
Transaction costs	Set by "spread" between bank's buy and sell prices.	Negotiated brokerage fees.

However, currency futures contracts differ in their trading mechanism, being bought and sold on organized exchanges rather than negotiated directly between parties. This standardized nature makes currency futures contracts more accessible to a wide range of market participants, including multinational corporations (MNCs) and individual speculators.

For MNCs, currency futures contracts serve as essential tools for managing foreign currency risk. By entering into these contracts, MNCs can hedge against adverse exchange rate movements that could impact their financial performance. For instance, a multinational company may use currency futures contracts to lock in exchange rates for future transactions, thereby mitigating the risk of unexpected currency fluctuations affecting their revenue or expenses. Additionally, currency futures contracts provide transparency and liquidity, allowing MNCs to execute hedging strategies efficiently.

On the other hand, currency futures contracts also attract speculators who aim to profit from anticipated exchange rate movements. Speculators analyze market trends and economic indicators to forecast currency movements and take positions accordingly. By buying or selling currency futures contracts, speculators can capitalize on these expectations, potentially generating profits from favorable price changes.

Despite their similarities, currency futures contracts and forward contracts have distinct characteristics. While both instruments allow parties to lock in exchange rates for future transactions, forward contracts are customized agreements negotiated directly between parties, typically commercial banks and their clients. In contrast, currency futures contracts are standardized and traded on exchanges, providing greater liquidity and transparency but limited customization options. Consequently, large corporations often prefer forward contracts for their flexibility and tailored features, while smaller firms and individual traders opt for currency futures contracts for their accessibility and exchange-traded nature.

14. Currency Derivatives

Currency options are financial derivatives that confer the holder the right, but not the obligation, to buy (call option) or sell (put option) a specified amount of currency at a predetermined price, known as the strike price or exercise price, within a specified period of time. These options provide individuals or entities with flexibility in managing currency exposure, allowing them to capitalize on favorable exchange rate movements while limiting potential losses.

For example, consider a **call option** on the Euro with a strike price of 1.20 USD/EUR and an expiration date in three months. If, at the expiration date, the spot exchange rate of the Euro rises above 1.20 USD/EUR, the call option holder can exercise their right to buy Euros at the predetermined strike price. This allows the holder to acquire Euros at a lower cost than the prevailing market rate, potentially resulting in a profit if they subsequently sell the Euros at a higher spot rate.

Conversely, a **put option** provides the holder with the right to sell a specified amount of currency at the predetermined strike price within the specified period. Using the same example, if the spot exchange rate of the Euro falls below 1.20 USD/EUR at expiration, the put option holder can exercise their right to sell Euros at the higher strike price, thereby limiting their losses compared to selling at the lower spot rate.

Currency options are widely used by investors, corporations, and financial institutions for various purposes. Investors may use options to speculate on exchange rate movements, hedge against currency risk in their investment portfolios, or enhance portfolio returns through options strategies.

Corporations often utilize options to manage currency exposure arising from international trade or investments, allowing them to protect profit margins and mitigate the impact of adverse exchange rate fluctuations.

14. Currency Derivatives

A call option on Canadian dollars with a strike price of \$ 0.60 is purchased by a speculator for a premium of \$0.06 per unit. Assume there are 50,000 units in this option contract.

(i) If the Canadian dollar's spot rate is \$0.65 at the time the option is exercised, what is the net profit per unit and for one contract to the speculator?

(ii) What would the spot rate need to be at the time the option is exercised for the speculator to break even?

(iii) What is the net profit per unit to the seller of this option?

Solution:

CALL OPTION → RIGHT TO BUY AT 1C \$ = 0.60 \$
PREMIUM = 0.06 \$

(i) If the Canadian dollar's spot rate is \$0.65 at the time the option is exercised, what is the net profit per unit and for one contract to the speculator?

SPOT PRICE = 0.65 \$
NET PROFIT = $0.65 - 0.60 - 0.06 = -0.01 \$$
NET PROFIT FOR 50,000 UNITS = $50,000 \times -0.01$
 $= -500 \$ (\text{LOSS})$

(ii) What would the spot rate need to be at the time the option is exercised for the speculator to break even?

FOR BREAK EVEN
SPOT PRICE SHOULD BE = $0.60 + 0.06 = 0.66 \$$

(iii) What is the net profit per unit to the seller of this option?

NET PROFIT TO SELLER OF CALL OPTION
= 0.01 \$ PER UNIT

14. Currency Derivatives

A put option on Australian dollars with a strike price of \$ 0.80 is purchased by a speculator for a premium of \$ 0.02.

(i) If the Australian dollar's spot rate is \$ 0.74 on the expiration date, should the speculator exercise the option on this date or let the option expire? What is the net profit per unit to the speculator?

(ii) What is the net profit per unit to the seller of this put option?

Solution:

(i) If the Australian dollar's spot rate is \$ 0.74 on the expiration date, should the speculator exercise the option on this date or let the option expire? What is the net profit per unit to the speculator?

PUT OPTION → RIGHT TO SELL AT 1 A\$ = 0.80 \$

PREMIUM = 0.02 \$

SPOT PRICE = 0.74 \$

PROFIT = $0.80 - 0.74 - 0.02 = 0.04 \$$

YES, THE OPTION SHOULD BE EXERCISED BY HOLDER.

(ii) What is the net profit per unit to the seller of this put option?

NET PROFIT TO SELLER = - 0.04 \$ (LOSS)

15. Currency Arbitrage

Arbitrage is a strategy used to profit from the difference in prices of the same asset or security in different markets or locations. It involves exploiting discrepancies in quoted prices to make a riskless profit. The key characteristic of arbitrage is that it doesn't require tying up funds for an extended period, and it typically involves minimal or no risk.

In the context of foreign exchange trading, **currency arbitrage** specifically targets inconsistencies in exchange rates across different financial centers or markets. Traders capitalize on these differences by buying a currency in one market where it's priced lower and selling it in another where it's priced higher. This process helps to align exchange rates across markets by taking advantage of the price differentials.

However, profitable arbitrage opportunities are often short-lived. As traders engage in arbitrage transactions, the buying and selling activities can impact exchange rates, quickly eliminating the price discrepancies that initially presented the profit opportunity. This phenomenon is known as the **no-arbitrage condition**, where the potential for riskless profits disappears due to market adjustments.

Foreign Currency Arbitrage manifests in various forms, but 3 common types include:

- (i) Locational Arbitrage
 - (ii) Triangular Arbitrage
 - (iii) Covered Interest Arbitrage
-

15. Currency Arbitrage

Locational arbitrage is used in the foreign exchange market to exploit differences in quoted exchange rates across different locations. Essentially, traders buy a currency where it is priced lower and sell it where it is priced higher, making a profit from the price differential.

Suppose at a London Bank, the quoted exchange rate for a British pound is \$1.60, while at a New York Bank, it is \$1.61. In this scenario, locational arbitrage presents an opportunity.

By purchasing pounds at London Bank for \$1.60 per pound and selling them at New York Bank for \$1.61 per pound, one could capitalize on the price difference. Considering there is no bid/ask spread and no additional costs associated with this arbitrage strategy, the gain would be \$0.01 per pound. This profit is risk-free because the trader knows the selling price when purchasing the pounds and doesn't need to tie up funds for any period.

If we consider the bid/ask spread, to achieve profits from locational arbitrage, the bid price of one bank must be higher than the ask price of another bank.

15. Currency Arbitrage

The quotations for the Australian dollar (A\$) at Sydney and Paris are shown below. Can there be gains from Locational Arbitrage?

	BID	ASK
SYDNEY A\$/US\$	0.635	0.640
PARIS A\$/US\$	0.645	0.650

Solution:

BID RATE OF PARIS $>$ ASK RATE OF SYDNEY
 \Rightarrow ARBITRAGE OPPORTUNITY

- ① START WITH 1000 US \$
 - ② BUY A\$ FROM SYDNEY = $\frac{1000}{0.640} = 1562.5 \text{ A\$}$
 - ③ SELL A\$ AT PARIS = 1562.5×0.645
= 1007.8 US \$
- PROFIT = $1007.8 - 1000 = 7.8 \text{ US \$}$

15. Currency Arbitrage

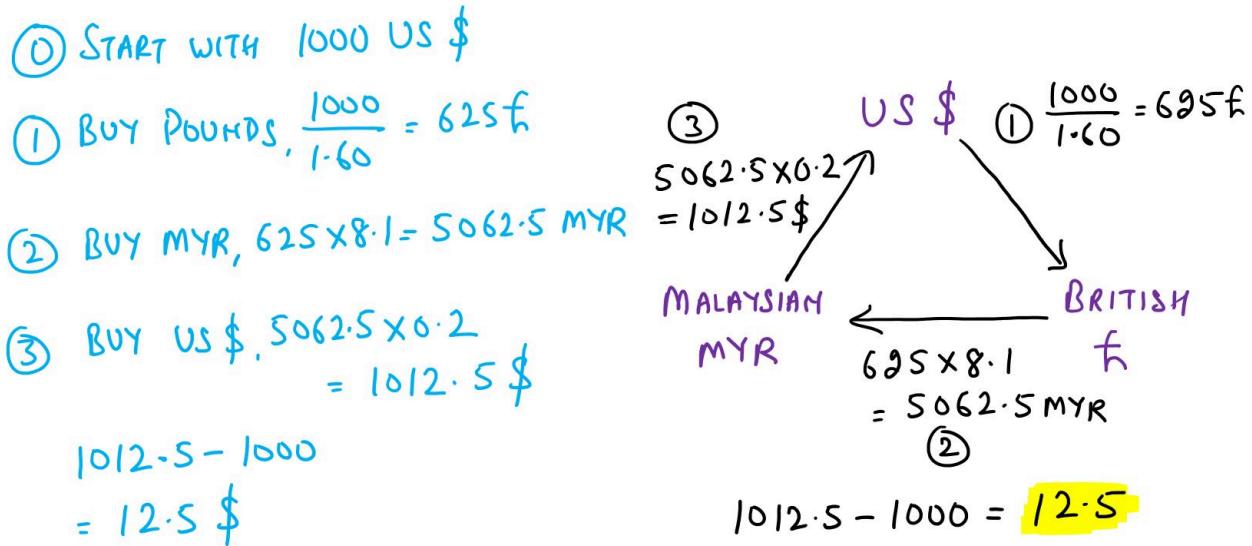
Triangular arbitrage is a trading strategy used in the foreign exchange market to profit from discrepancies in cross exchange rates between three currencies. It involves a series of currency transactions conducted in the spot market to exploit the price differences.

Without Transaction Costs

Assume that a bank has quoted the British pound (£) at \$1.60, the Malaysian ringgit (MYR) at \$0.20, and the cross exchange rate at £1 = MYR 8.1.

$$\begin{aligned} \text{£/US\$} &= 1.60 \\ \text{MYR/US\$} &= 0.20 \\ \hookrightarrow \text{£/MYR} &= \text{£/US\$} \times \text{US\$/MYR} \\ &= 1.60 \times \frac{1}{0.20} \\ \text{£/MYR} &= 8.0 \quad \xrightarrow{\text{ARBTRAGE OPPORTUNITY}} \\ \text{But Quoted £/MYR} &= 8.1 \end{aligned}$$

When quoting a cross exchange rate of £1 = MYR 8.1 (which is greater than cross rate), the bank is exchanging too many ringgit for a pound and is asking for too many ringgit in exchange for a pound. Based on this information, you can engage in triangular arbitrage by purchasing pounds with dollars, converting the pounds to ringgit, and then exchanging the ringgit for dollars.



Thus, the triangular arbitrage strategy generates \$1012.5, which is \$12.5 more than you started with (\$1000).

With Transaction Costs

Till now, we assumed that arbitrage does not account for transaction costs. In reality, there is a bid and ask quote for each currency, which means that the arbitrageur incurs transaction costs that can reduce or even eliminate the gains from triangular arbitrage.

The following example illustrates how bid and ask prices can affect arbitrage profits (considering data of above example only). The data of bid and ask spread is given below.

	BID	ASK
f US \$	1.60	1.61
MYR US \$	0.20	0.21
f MYR	8.10	8.20

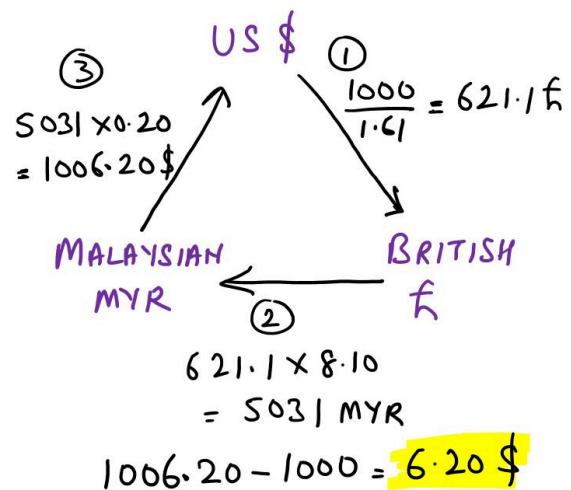
⑥ START WITH 1000 US \$

$$\textcircled{1} \text{ BUY POUNDS}, \frac{1000}{1.61} = 621.1 f$$

$$\textcircled{2} \text{ BUY MYR}, 621.1 \times 8.10 = 5031 \text{ MYR}$$

$$\textcircled{3} \text{ BUY US$}, 5031 \times 0.20 = 1006.20 \text{ US\$}$$

$$1006.20 - 1000 = 6.20 \$$$



Like locational arbitrage, triangular arbitrage is a strategy that few of us can ever take advantage of because the computer technology available to foreign exchange dealers can easily detect misalignments in cross exchange rates. The triangular arbitrage will ensure that cross exchange rates are usually aligned correctly. If cross exchange rates are not properly aligned, triangular arbitrage will take place until the rates are aligned correctly.

15. Currency Arbitrage

If there are no transaction costs, based on below exchange rates, can triangular arbitrage be used to earn a profit?

$$\text{Rs } 1 = \$ 1.50$$

$$\text{C\$ } 1 = \$ 0.75$$

$$\text{Rs } 1 = \text{C\$ } 2.00$$

Solution:

$$\begin{aligned} \text{Rs} | \$ &= 1.50 \\ \text{C\$} | \$ &= 0.75 \\ \hookrightarrow \text{Rs} | \text{C\$} &= \text{Rs} | \$ \times \$ | \text{C\$} \\ &= 1.50 \times \frac{1}{0.75} \\ &= 2.00 \end{aligned}$$

SINCE QUOTED $\text{Rs} | \text{C\$}$ IS ALSO 2.00

→ NO ARBITRAGE OPPORTUNITY

15. Currency Arbitrage

Covered Interest Arbitrage is a trading strategy employed in the foreign exchange market to profit from differences in interest rates between two countries while covering the exchange rate risk. It involves borrowing money in a currency with a lower interest rate, converting it into a currency with a higher interest rate, investing it in interest-bearing assets denominated in that currency, and then hedging the exchange rate risk by entering into a forward contract.

Thus it is the process of doing 2 things:

- (i) capitalizing on the interest rate differential between two countries
- (ii) parallelly covering the exchange rate risk with a forward contract.

The logic of the term covered interest arbitrage becomes clear when it is broken into two parts: "interest arbitrage" refers to the process of capitalizing on the difference between interest rates between two countries; "covered" refers to hedging your position against exchange rate risk.

Assume the following information:

- (i) You are in India and you have Rs 1,00,000 to invest.
- (ii) The current spot rate of the UK pound is Rs 100.
- (iii) The 180-days forward rate of the UK pound is Rs 100.
- (iv) The 180-days interest rate in the India is 2%.
- (v) The 180-days interest rate in the UK is 4%.

Based on this information, you should proceed as follows in Covered Interest Arbitrage strategy.

① Convert Rs 1,00,000 into UK Pounds

$$= \frac{1,00,000}{100} = 1000 \text{ £}$$

Domestic Profit

$$2\% \text{ of } 1,00,000 \\ = \text{Rs } 2000$$

② Deposit in UK BANK. It will become

$$= 1000 (1 + 0.04) = 1040 \text{ £}$$

③ Sell 90 Days forward for 1040 £

④ After 90 Days, convert back 1040 £ into Rs
- $1040 \times 100 = 1,04,000$

9% Additional Return

$$\text{PROFIT} = 1,04,000 - 1,00,000 = \text{Rs } 4,000$$

Based on our discussion, it seems that when the spot rate and forward rates are comparable and there's an interest rate differential, covered interest arbitrage becomes a viable strategy. However, we haven't taken into account the bid-ask spread. Its effect must also be considered.

15. Currency Arbitrage

Let's break down the comparison of the three types of arbitrage:

(i) Locational Arbitrage

Locational arbitrage aims to exploit differences in prices of the same currency in different locations.

The threat of locational arbitrage ensures that quoted exchange rates remain similar across banks in various locations. This type of arbitrage helps maintain consistency and uniformity in exchange rates across different geographical locations by quickly capitalizing on any discrepancies.

(ii) Triangular Arbitrage

Triangular arbitrage targets inconsistencies in cross exchange rates between three currencies.

The threat of triangular arbitrage ensures that cross exchange rates are properly set according to the exchange rates of the individual currencies involved. By taking advantage of any mispricings in cross exchange rates, triangular arbitrage helps align exchange rates between multiple currencies, promoting market efficiency and accuracy.

(iii) Covered Interest Arbitrage

Covered interest arbitrage seeks to profit from differences in interest rates between two countries while hedging against exchange rate risk.

The threat of covered interest arbitrage ensures that forward exchange rates are properly set to reflect the interest rate differentials between currencies. By exploiting interest rate differentials and hedging against exchange rate fluctuations, covered interest arbitrage contributes to the accurate determination of forward exchange rates, fostering stability and efficiency in the market.

16. Interest Rate Parity

Interest rate parity (IRP) is the equilibrium state in the foreign exchange market where interest rates and exchange rates adjust to ensure that covered interest arbitrage is no longer feasible. In other words, it's the condition where the returns from investing in two different currencies are equalized after accounting for the exchange rate differential.

$$\text{INTEREST RATE DIFFERENTIAL} \\ \equiv \text{FORWARD PREMIUM} / \text{DISCOUNT}$$

According to IRP theory, the currency of the country with a lower interest rate should be at a forward premium in terms of the currency of the country with the higher rate. More specifically, in an efficient market with no transaction costs, the interest differential should be (approximately) equal to the forward differential. When this condition is met, the forward rate is said to be at interest rate parity, and equilibrium prevails in the money markets.

For instance, consider an investor who can earn a higher interest rate by investing in a foreign currency. While the higher interest rate may seem advantageous, there's an offsetting effect due to the exchange rate.

When the forward rate is less than the spot rate, indicating a discount, it implies that the foreign currency is cheaper in the forward market compared to the spot market. This discount serves to offset the higher interest rate earned on the foreign investment, ensuring that the returns are equalized between investing domestically and investing abroad.

The relation between the two interest rates (home and foreign) and the forward rate under conditions of IRP is given below.

$$\frac{F}{S} = \frac{1+i_f}{1+i_h}$$

↓
APPROXIMATED VERSION

$$\frac{F-S}{S} = i_f - i_h$$

$F = \text{FORWARD RATE}$
 $S = \text{SPOT RATE}$

$i_f = \text{INTEREST RATE OF FOREIGN COUNTRY}$
 $i_h = \text{INTEREST RATE OF HOME COUNTRY}$

IN TERMS OF
FOREIGN CURRENCY
PER UNIT OF
HOME CURRENCY

If the foreign interest rate exceeds the home rate by 3% (if we use approximated formula), then the forward rate should exhibit a discount of 3%.

Thus, if interest rate parity (IRP) is not maintained, covered interest arbitrage becomes a viable option for consideration. We can understand this in 2 steps:

- From given the two interest rates (home and foreign country), we compute the forward rate, under conditions of IRP.
- If the actual forward rate is different from this computed forward rate, there may be potential for covered interest arbitrage.

$$\text{COMPUTE } F \text{ FROM } \frac{F}{S} = \frac{1+i_f}{1+i_h}$$

COMPUTED $F >$ ACTUAL F

→ CIA FOR HOME COUNTRY INVESTORS

COMPUTED $F <$ ACTUAL F

→ CIA FOR FOREIGN COUNTRY INVESTORS

COMPUTED $F =$ ACTUAL F

→ NO ARBITRAGE (IRP HOLDS)

CIA ≡ COVERED INTEREST ARBITRAGE

When interest rate parity does not exist, investors from only one of the two countries of concern could benefit from using covered interest arbitrage.

16. Interest Rate Parity

Suppose an Indian investor with Rs 10,00,000 to invest for 90 days is trying to decide between investing in India at 8% per annum (2% for 90 days) or in euros at 6% per annum (1.5% for 90 days). The current spot rate is €0.74000/Rs and the 90-day forward rate is €0.73637/Rs. Compare both strategies of investment. Is there any opportunity for Covered Interest Arbitrage?

Solution:

INVEST IN INDIA

- ① TOTAL AFTER 90

$$\text{Days} = 10,00,000 (1+0.02)$$

$$= \text{Rs } 10,20,000$$

SAME RETURNS
(NO ARBITRAGE)

INVEST IN EURO

- ① CONVERT RS 10,00,000 INTO EUROS

$$= 10,00,000 \times 0.74000$$

$$= € 7,40,000$$

- ② INVEST IN EURO, TOTAL AFTER 90 DAYS

$$= 7,40,000 (1+0.015) = € 7,51,100$$

- ③ CONVERT BACK INTO RS

$$= \frac{7,51,100}{0.73637} = \text{Rs } 10,20,000$$

IF IRP HOLDS

$$\frac{1+i_f}{1+i_h} = \frac{F}{S} \quad \leftarrow \quad \frac{0.73637}{0.74000} = 0.99509$$

$$\frac{1+0.015}{1+0.020} = 0.99509 \quad \leftarrow \quad \begin{matrix} \uparrow \\ \text{BOTH ARE EQUAL} \end{matrix}$$

IRP HOLDS

NO OPPORTUNITY FOR
ARBITRAGE

16. Interest Rate Parity

The Indian Rupee exhibits a 3-month interest rate of 6%, while the U.S. dollar exhibits a 3-month interest rate of 5%. If IRP exists, compute the forward rate premium of the Rupee with respect to the U.S. dollar. If the Rupee's spot rate is \$0.01, what is the 3-month forward rate?

Solution:

If IRP Holds

$$\frac{1+i_f}{1+i_h} = \frac{F}{S}$$

$$\frac{1+0.05}{1+0.06} = \frac{F}{S}$$

$$\Rightarrow \frac{F}{S} = 0.990566$$

$$\text{FORWARD PREMIUM} = \frac{F}{S} - 1 = 0.990566 - 1 = -0.00943 \text{ (DISCOUNT)}$$

3 MONTH FORWARD RATE

$$\frac{F}{S} = 0.990566$$

$$F = 0.01 \times 0.990566 \\ = 0.009906 \$$$

Thus, the Rupee should exhibit a forward discount of about 0.94%.

This implies that U.S. investors would receive 0.94% less when selling Rupees 3 months from now (based on a forward sale) than the price they pay for Rupees today at the spot rate. Such a discount would offset the interest rate advantage (6-5=1%) of the India.

16. Interest Rate Parity

Suppose the interest rate on pounds sterling is 12% in London, and the interest rate on a comparable dollar investment in New York is 7%. The pound spot rate is \$1.95, and the one-year forward rate is \$1.87.

- (i) Is there opportunity for Covered Interest Arbitrage? For whom? UK investors or US investors?
- (ii) Show with initial investment of 10,00,000 of home currency.

Solution:

FOR UK INVESTOR

$$S = \$1.95$$

$$F = \$1.87$$

FOR USA INVESTOR

$$S = £ \frac{1}{1.95} = £0.513$$

$$F = £ \frac{1}{1.87} = £0.534$$

- (i) Is there opportunity for Covered Interest Arbitrage? For whom? UK investors or US investors?

FOR UK INVESTOR

$$i_h = 0.12 \quad i_f = 0.07$$

$$\frac{F}{S} = \frac{1+i_f}{1+i_h}$$

$$\frac{F}{1.95} = \frac{1+0.07}{1+0.12}$$

$$F = \$1.863 \text{ (COMPUTED)}$$

$$\text{ACTUAL } F = \$1.87$$

SINCE ACTUAL F > COMPUTED F
NO ARBITRAGE

FOR USA INVESTOR

$$i_h = 0.07 \quad i_f = 0.12$$

$$\frac{F}{S} = \frac{1+i_f}{1+i_h}$$

$$\frac{F}{0.513} = \frac{1+0.12}{1+0.07}$$

$$F = £0.537 \text{ (COMPUTED)}$$

$$\text{ACTUAL } F = £0.534$$

SINCE ACTUAL F < COMPUTED F
YES ARBITRAGE

- (ii) Compute the profit with Arbitrage with initial investment of 1,00,000 of home currency.

USA INVESTOR

INVEST IN USA

① INVEST \$ 10,00,000

② 7%

③ AFTER 1 YEAR

$$= 10,00,000 (1+0.07)$$

$$=\$ 10,70,000$$

INVEST IN UK

① CONVERT \$ 10,00,000 INTO £ AND
INVEST IN UK @ 12%

$$= \frac{10,00,000}{1.95} (1+0.12) = £ 5,74,358.97$$

② CONVERT BACK INTO \$

$$= 5,74,358.97 \times 1.87 = \$ 10,74,051.28$$

COMPARE \Rightarrow PROFIT = \$ 4,051.28

16. Interest Rate Parity

Based on below information, is covered interest arbitrage feasible? Explain.

Spot rate of A\$ 1 = \$ 1.60

180-day forward rate of A\$ 1 = \$ 1.56

180-day Australian interest rate = 4%

180-day US interest rate = 3%

Solution:

HOME = AUSTRALIA

FOREIGN = USA

IF IRP HOLDS

$$\frac{F}{S} = \frac{1+i_f}{1+i_h}$$

$$\frac{F}{1.60} = \frac{1+0.03}{1+0.04}$$

$$F = 1.5846$$

BUT ACTUAL F = 1.56

Yes, Opportunity for Arbitrage for Australian Investor

While the U.S. investors could not benefit from covered interest arbitrage, Australian investors could capitalize on covered interest arbitrage. While Australian investors would earn 1% interest less on the U.S. investment, they would be purchasing pounds forward at a discount of 2.5 percent at the end of the investment period.

17. Purchasing Power Parity

Purchasing Power Parity (PPP) theory is used to compare the relative value of currencies across different countries. It suggests that in the long run, exchange rates between currencies should adjust so that identical goods and services have the same price when expressed in the same currency.

PRICE OF BURGER IN INDIA = Rs 330

PRICE OF BURGER IN UK = £ 3

Absolute PPP says →

$$\text{EXCHANGE RATE SHOULD BE } \frac{\text{£}}{\text{Rs}} = \frac{330}{3} = 110 \\ \Rightarrow 1 \text{ £} = \text{Rs } 110$$

In other words, PPP asserts that the exchange rate between two currencies should equalize the purchasing power of each currency. For instance, if a basket of goods costs \$100 in the United States and an equivalent basket of goods costs Rs 8000 in India, then according to PPP, the exchange rate between the US dollar and the Indian Rupee should be such that \$100 equals Rs 8000.

This version of PPP is also called Absolute Purchasing Power Parity (Absolute PPP). There is another form, Relative Purchasing Power Parity (Relative PPP), which we will discuss later.

The purchasing power parity theory was propounded by Professor Gustav Cassel of Sweden.

Assumptions

The key assumptions necessary for absolute Purchasing Power Parity (PPP) to hold true are:

1. Zero Transaction Costs

This assumption implies that the costs associated with buying and selling goods internationally are negligible. In reality, transaction costs include expenses like shipping, insurance, customs duties, and storage fees. If these costs were truly zero, it would mean that goods could be freely traded between countries without any additional financial burden. However, in the real world, transaction costs vary depending on factors such as distance, mode of transportation, and the nature of the goods being traded.

2. No Barriers to Trading

This assumption assumes that there are no barriers, such as tariffs, taxes, quotas, or other restrictions, that hinder the flow of goods and services between countries. Barriers to trade artificially alter prices and can prevent goods from being traded at their true market value. In a world without such barriers, prices would adjust freely to reflect the true supply and demand conditions in each market, leading to convergence in prices across countries.

3. Homogeneous Products

This assumption states that the goods being compared are identical in all respects. In other words, there is no differentiation in quality, branding, or any other features that could affect consumer preferences or willingness to pay. Homogeneous products ensure that differences in prices between countries are solely due to variations in exchange rates, rather than differences in product characteristics.

17. Purchasing Power Parity

Absolute PPP is also called Law of One Price. It means that in the absence of transportation costs and other barriers to trade, identical goods sold in different locations should sell for the same price when expressed in a common currency. Essentially, it suggests that in an efficient market, the price of a homogeneous product should be equalized across different locations after accounting for exchange rates.

For example, if a particular brand of computer sells for \$1000 in the United States and an identical model sells for €800 in Europe (assuming no trade barriers or transportation costs), the Law of One Price would imply that the exchange rate between the US dollar and the euro should be such that \$1000 equals €800.

17. Purchasing Power Parity

$$\left. \begin{array}{l} \text{FISH IN INDIA} = \text{Rs } 20 \text{ (RUPEES)} \\ \text{FISH IN BANGLADESH} = \text{Tk } 28 \text{ (TAKA)} \end{array} \right\} \text{PRICES ARE FOR PER KG}$$
$$\text{ABSOLUTE PPP} \rightarrow \text{Rs } 1 / \text{Tk } 2 = \frac{28}{20} = 1.4$$
$$1 \text{ Rs} = \text{Tk } 1.4$$

Purchasing Power Parity (PPP) suggests that exchange rates between currencies should adjust over time so that identical goods have the same price when expressed in a common currency. In other words, if a product costs \$10 in one country and €8 in another country, PPP implies that the exchange rate between the US dollar and the euro should be such that \$10 equals €8.

If a discrepancy exists between the actual exchange rate and the implied exchange rate calculated based on PPP, traders exploit this difference through arbitrage.

WHAT IF ACTUAL 1 RS = Tk 1.25

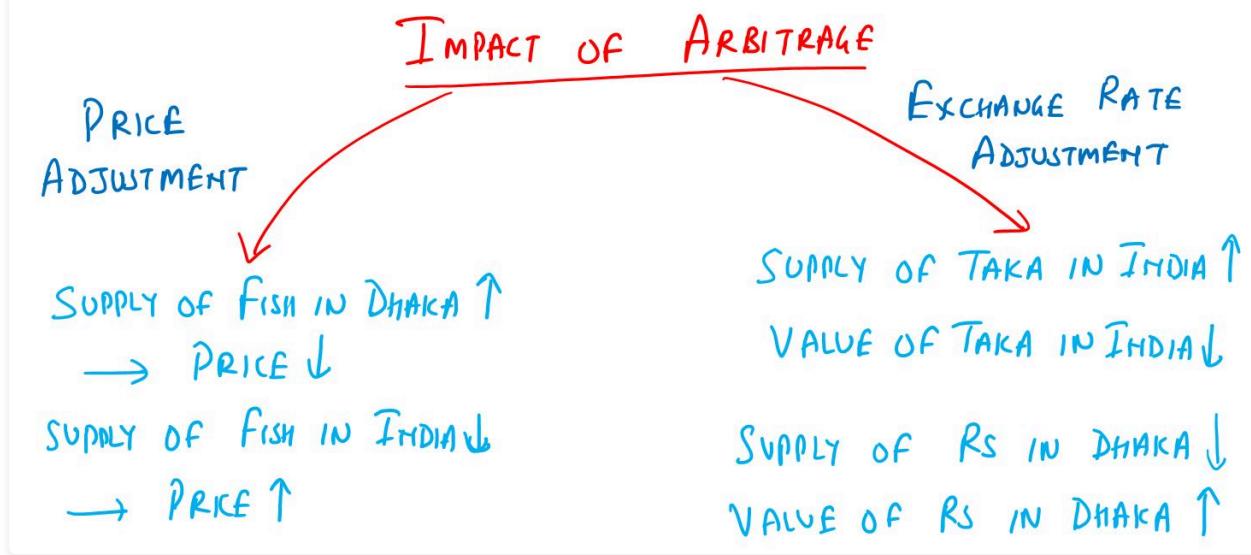
- ① START WITH RS 20 IN INDIA
- ② BUY FISH IN INDIA WITH RS 20

③ SELL FISH IN BANGLADESH = Tk 28

④ CONVERT Tk → Rs $\frac{20}{1.25} = \text{Rs } 22.4$

⑤ ARBITRAGE PROFIT = RS 22.4 - RS 20 = RS 2.4

If a trader observes that the price of a particular good is lower in one market compared to another market when expressed in a common currency, they can buy the good in the cheaper market and sell it in the more expensive market to profit from the price differential.



This process would continue until the price differential disappears due to increased demand in the cheaper market and increased supply in the more expensive market.

Additionally, arbitrage activities would affect exchange rates by increasing demand for the currency of the cheaper market and decreasing demand for the currency of the more expensive market, thereby causing adjustments in exchange rates to reflect the true purchasing power parity between currencies.

Specifically, the currency of the cheaper market would appreciate, while the currency of the more expensive market would depreciate, until the price differential disappears and PPP is restored.

17. Purchasing Power Parity

Absolute PPP

→ What exchange rate should be?
(Law of One Price)

Relative PPP

→ How exchange rate changes over time?
(Based on factors like Inflation, Interest Rate)

Till now, we have learnt that the Absolute Purchasing Power Parity (Absolute PPP) theory indicates the ideal level at which exchange rates should stabilize over time, ensuring that identical goods have the same price when expressed in a common currency.

In contrast, Relative Purchasing Power Parity (Relative PPP) doesn't prescribe specific exchange rates.

Instead, Relative PPP examines the factors influencing the rate of change in exchange rates over time. This means Relative PPP helps us understand why and how exchange rates fluctuate relative to each other as economic conditions change, such as inflation rates, interest rates, and productivity growth, among other factors.

17. Purchasing Power Parity

CHANGE IN EXCHANGE RATE
≡ INFLATION DIFFERENTIAL

COUNTRY WITH HIGHER INFLATION
→ CURRENCY WILL DEPRECIATE

Relative Purchasing Power Parity (PPP) predicts changes in exchange rates over time based on inflation differentials between countries.

RELATIVE PPP

$$\frac{E(S)}{S} = \left(\frac{1 + \pi_f}{1 + \pi_h} \right)^t \xrightarrow[\text{VERSION}]{\text{APPROXIMATED}} \frac{E(S)}{S} = [1 + (\pi_f - \pi_h)]^t$$

h = HOME COUNTRY f = FOREIGN COUNTRY π = INFLATION RATE
 S = SPOT RATE $E(S)$ = EXPECTED SPOT RATE AFTER PERIOD t

NOTE: $E(S)$ and S are represented as foreign currency per unit of home currency.
If $h = \text{UK}$, $f = \text{USA}$

$$1 f = 1.2 \$ \checkmark$$

$$1 \$ = 0.8 f \times$$

That is, the exchange rate change during a period should equal the inflation differential for that same time period.

ONE PERIOD VERSION

$$\frac{E(S)}{S} = \frac{1 + \pi_f}{1 + \pi_h} \xrightarrow[\text{VERSION}]{\text{APPROXIMATED}} \frac{E(S)}{S} = 1 + (\pi_f - \pi_h)$$

If $E(S)$ and S are represented as home country per unit of foreign currency

$$\frac{E(S)}{S} = \left(\frac{1 + \pi_h}{1 + \pi_f} \right)^t$$

$$\frac{E(S)}{S} = \left[1 + (\pi_h - \pi_f) \right]^t \quad \leftarrow \text{Approximated Version}$$

According to this theory, if one country experiences higher inflation than another, its currency is expected to depreciate relative to the currency of the country with lower inflation. This depreciation reflects the decrease in the purchasing power of the currency with higher inflation.

$$1 + e_f = \frac{1 + \pi_h}{1 + \pi_f}$$

**APPRECIATION OR DEPRECIATION
OF FOREIGN CURRENCY**

$e_f > 0 \Rightarrow \text{APPRECIATION}$

$e_f < 0 \Rightarrow \text{DEPRECIATION}$

Conversely, the currency of the country with lower inflation is expected to appreciate relative to the currency of the country with higher inflation.

In effect, Relative PPP says that currencies with high rates of inflation should depreciate relative to currencies with lower rates of inflation.

17. Purchasing Power Parity

The United States and Switzerland are running annual inflation rates of 5% and 3%, respectively, and the spot rate is SFr 1 = \$0.75. What would be exchange rate in 4 years?

Solution:

HOME = SWITZERLAND

FOREIGN = USA

$$\pi_h = 3\%$$

$$\pi_f = 5\%$$

1 SFr = \$ 0.75 ← Foreign Currency Per unit of Home Currency

$$\frac{E(s)}{S} = \left(\frac{1 + \pi_f}{1 + \pi_h} \right)^t \quad \frac{E(s)}{0.75} = \left(\frac{1 + 0.05}{1 + 0.03} \right)^4$$

$$E(s) = 0.81$$

EXPECTED SPOT RATE $1 \text{ SFr} = \$0.81$

17. Purchasing Power Parity

Suppose the spot exchange rate for the Pakistani Rupee is Rs 206 per dollar. The inflation rate in the United States is 2.8 percent per year and is 3.7 percent in Pakistan. What do you predict the exchange rate will be in one year?

Solution:

We can solve this using either orginal formula or approximated formula.

HOME = PAKISTAN FOREIGN = USA

$\pi_h = 3.7\%$ $\pi_f = 2.8\%$

1 \$ = Rs 206 ← Home Currency per unit of Foreign Currency

$$\frac{E(S)}{S} = \left(\frac{1 + \pi_h}{1 + \pi_f} \right)^t \quad \frac{E(S)}{206} = \left(\frac{1 + 0.037}{1 + 0.028} \right)^1$$

$$E(S) = 207.80$$

EXPECTED SPOT RATE $1 \$ = Rs 207.80$

If we USE APPROXIMATED FORMULA

$$\frac{E(S)}{S} = \left[1 + (\pi_h - \pi_f) \right]^t \quad \frac{E(S)}{206} = \left[1 + (0.037 - 0.028) \right]^1$$

$$E(S) = 207.85$$

EXPECTED SPOT RATE $1 \$ = Rs 207.85$

17. Purchasing Power Parity

If the current exchange rate is Rs 105 per pound and India's inflation rate is projected to be 2% per year for the next three years, while the UK inflation rate is projected to be 6%, what is the expected exchange rate after 1 year and after 3 years?

Solution:

HOME = INDIA FOREIGN = UK

$\pi_h = 2\%$ $\pi_f = 6\%$

$1f = \text{Rs } 105 \leftarrow \text{Home Currency per unit of Foreign Currency}$

USING APPROXIMATED FORMULAS

AFTER 1 YEAR

$$\frac{E(S)}{S} = 1 + (\pi_h - \pi_f) \quad \frac{E(S)}{105} = 1 + (0.02 - 0.06)$$

$$E(S) = 100.8$$

EXPECTED RATE AFTER 1 YEAR $1f = \text{Rs } 100.8$

AFTER 3 YEARS

$$\frac{E(S)}{S} = [1 + (\pi_h - \pi_f)]^t \quad \frac{E(S)}{105} = [1 + (0.02 - 0.06)]^3$$

$$E(S) = 92.897$$

SPOT RATE AFTER 3 YEARS $1f = \text{Rs } 92.897$

17. Purchasing Power Parity

We have data for 1982 and 2007. In 1982 the ¥/\$ exchange rate was ¥249.05/\$. During this same 25-year period, the consumer price index (CPI) in Japan rose from 80.75 to 97.72 and the U.S. CPI rose from 56.06 to 117.07. If PPP had held over this period, what would the ¥/\$ exchange rate have been in 2007?

Solution:

$$\text{HOME = USA} \quad \text{FOREIGN = JAPAN}$$
$$1 + \pi_h = \frac{117.07}{56.06} \quad 1 + \pi_f = \frac{97.72}{80.75}$$
$$1 \$ = ¥ 249.05 \leftarrow \text{Foreign Currency per unit of Home Currency}$$
$$\frac{E(S)}{S} = \frac{1 + \pi_f}{1 + \pi_h} \quad \frac{E(S)}{249.05} = \frac{97.72 / 80.75}{117.07 / 56.06}$$
$$E(S) = 144.32$$

EXPECTED SPOT RATE $1 \$ = ¥ 144.32$

18. Nominal and Real Exchange Rate

The **nominal exchange rate** refers to the actual exchange rate between two currencies, while the **real exchange rate** adjusts the nominal rate to reflect changes in the relative purchasing power of each currency over time.

Purchasing power parity theory suggests that nominal exchange rate movements may primarily reflect differences in inflation rates between countries. Therefore, changes in the nominal exchange rate may not accurately reflect changes in the relative competitiveness of domestic firms compared to their foreign counterparts.

Instead, the real exchange rate provides a more accurate measure of relative competitiveness by accounting for changes in purchasing power. It adjusts the nominal exchange rate to reflect the actual purchasing power of each currency, relative to a base period. This adjustment helps to isolate the impact of currency fluctuations on the ability of domestic firms to compete in international markets.

Suppose Country A's currency is the Dollar (\$) and Country B's currency is the Rupee (Rs). Initially, the nominal exchange rate is 1 \$ = 90 Rs. Over time, Country A experiences higher inflation than Country B. As a result, the nominal exchange rate changes to 1 \$ = 100 Rs.

However, adjusting for inflation, the real exchange rate may remain unchanged or even appreciate, indicating that the purchasing power of Country A's currency has not significantly decreased relative to Country B's currency.

19. Fisher Effect

The Fisher effect, proposed by Irving Fisher, describes the interplay between nominal interest rates, real interest rates, and expected inflation. At its core, it posits that nominal interest rates adjust in accordance with changes in expected inflation rates.

$$(1 + \text{NOMINAL RATE}) = (1 + \text{REAL RATE})(1 + \text{EXPECTED INFLATION RATE})$$

APPROXIMATED VERSION

$$\text{NOMINAL RATE} = \text{REAL RATE} + \text{INFLATION RATE}$$

Nominal Interest Rate represents the stated rate on a loan or investment, untouched by inflation considerations. This is what borrowers pay and lenders receive, as typically quoted in financial reports.

Real Interest Rate, on the other hand, factors in inflation adjustments. It reflects the actual purchasing power gained or lost from an investment or loan after accounting for inflation. This adjustment is made by subtracting the expected inflation rate from the nominal interest rate.

For instance, if the nominal interest rate on a one-year loan is 8%, it implies that Rs 108 must be repaid in one year for every Rs 100 loaned today. However, what truly matters to both parties in a loan agreement is the real interest rate – the rate at which current goods translate into future goods.

The Fisher equation illustrates that if the required real return is 3% and the expected inflation rate is 10%, then the nominal interest rate will be approximately 13% (to be precise, 13.3%).

The reasoning behind this outcome is that Rs 100 in the next year will have the purchasing power equivalent to Rs 90 in today's currency (as inflation rate is 10%). Consequently, the borrower must repay the lender Rs 10.3 to offset the decrease in purchasing power of the Rs 103 (100+3) in principal and interest payments, in addition to the Rs 3 required to yield a 3% real return.

20. Unbiased Forward Rates

The connection between forward rates and expected future spot rates is fundamental in understanding how financial markets anticipate future exchange rates.

$$\text{EXPECTED SPOT RATE IN FUTURE } (E(S)) \\ \equiv \text{FORWARD RATE } (F)$$

Forward Rate (F) is the exchange rate agreed upon now for a transaction that will take place in the future, typically at a predetermined date.

Expected Future Spot Rate (E(S)) represents the anticipated exchange rate at the future date. It's essentially the market's best guess at where the spot rate will be at that time.

The **unbiased forward rates (UFR) condition** asserts that the forward rate equals the expected future spot rate. In other words, under this condition, the forward rate should accurately reflect what the market expects the spot rate to be at the specified future date.

If the forward rate (F) is not equal to the expected future spot rate (E(S)), there could be an opportunity for arbitrage – buying low and selling high – which would quickly adjust the rates back into alignment. This is because any deviation between the two rates would create a risk-free profit opportunity, enticing investors to take advantage of the discrepancy until equilibrium is restored.

21. International Fisher Effect

Relative Purchasing Power Parity (PPP) predicts fluctuations in exchange rates over time by considering the variance in inflation rates between nations. In essence, it posits that the alteration in exchange rates during a specific period should correspond to the inflation differential for that same duration.

$$\frac{E(S)}{S} = \frac{1 + \pi_f}{1 + \pi_h}$$

Interest Rate Parity (IRP) theory establishes a relationship between the interest rates of two currencies (domestic and foreign) and the forward and spot rates.

$$\frac{F}{S} = \frac{1 + i_f}{1 + i_h}$$

The unbiased forward rates (UFR) condition maintains that the forward rate is equivalent to the anticipated future spot rate. Put differently, in this scenario, the forward rate should accurately mirror the market's expectation of the spot rate at the specified future date.

$$E(S) = F$$

When above 3 prominent equations are synthesized, they culminate in the **International Fisher Effect**. It is also known as **Fisher Open Condition**.

$$\left. \begin{array}{l} \frac{E(S)}{S} = \frac{1 + \pi_f}{1 + \pi_h} \quad - (1) \\ \frac{F}{S} = \frac{1 + i_f}{1 + i_h} \quad - (2) \\ E(S) = F \quad - (3) \end{array} \right\} \text{IFE}$$

UNBIASED INTEREST PARITY

APPROXIMATED VERSION

$$\frac{1 + \pi_f}{1 + \pi_h} = \frac{1 + i_f}{1 + i_h}$$

APPROXIMATED VERSION

$$i_f - \pi_f = i_h - \pi_h$$

The International Fisher Effect (IFE) suggests changes in nominal interest rates between two countries will be counteracted by changes in their respective exchange rates.

INTEREST RATE DIFFERENTIAL

\equiv INFLATION RATE DIFFERENTIAL

In essence, it posits that interest rate differentials will be equal to differentials in inflation rates. In simpler terms, the IFE asserts that real interest rates are uniform across nations.

Another way to understand the IFE is through the concept that real returns, adjusted for inflation, should be equalized across different countries. If real returns were higher in one country compared to another, capital would flow out of the lower-return country and into the higher-return country, seeking better investment opportunities. This movement of capital would exert pressure on asset prices and interest rates in both countries, eventually leading to a convergence of real returns.

FACT FORMULAS FOR IFE (for t Periods)

$$\frac{F(S)}{S} = \left(\frac{1+i_f}{1+i_h} \right)^t$$

$$\left(\frac{1+\pi_f}{1+\pi_h} \right)^t = \left(\frac{1+i_f}{1+i_h} \right)^t$$

This principle underpinning the IFE reflects a basic economic notion: capital seeks the highest possible return, and markets tend to adjust to eliminate arbitrage opportunities. If, for example, real returns were higher in Brazil than in India, investors would transfer funds from Indian markets to Brazilian markets. This capital inflow would drive up asset prices in Brazil, reducing their returns, while simultaneously lowering asset prices in India, thereby increasing their returns. This process acts as a mechanism to equalize real returns across different countries.

21. International Fisher Effect

You observe that the inflation rate in the United States is 1.8 percent per year and that T-bills currently yield 2.3 percent annually. What do you estimate the inflation rate to be in:

- (i) Australia if short-term Australian government securities yield 4 percent per year?
- (ii) Canada if short-term Canadian government securities yield 6 percent per year?

Solution:

$$Home = USA \quad i_h = 2.3\% \quad \pi_h = 1.8\%$$

- (i) Australia if short-term Australian government securities yield 4 percent per year?

$$\begin{aligned} i_f &= 4\% \\ i_f - \pi_f &= i_h - \pi_h \\ 4 - \pi_f &= 2.3 - 1.8 \\ \pi_f &= 3.5\% \end{aligned}$$

- (ii) Canada if short-term Canadian government securities yield 6 percent per year?

$$\begin{aligned} i_f &= 6\% \\ i_f - \pi_f &= i_h - \pi_h \\ 6 - \pi_f &= 2.3 - 1.8 \\ \pi_f &= 5.5\% \end{aligned}$$

21. International Fisher Effect

One-year interest rate is 2% on Swiss francs and 7% on U.S. dollars.

(i) If the current exchange rate is SFr 1 = \$0.91, what is the expected future exchange rate in one year?

(ii) If a change in expectations regarding future U.S. inflation causes the expected future spot rate to rise to \$1.00, what should happen to the U.S. interest rate?

Solution:

(i) If the current exchange rate is SFr 1 = \$0.91, what is the expected future exchange rate in one year?

HOME = SWITZERLAND FOREIGN = USA

$$S \Rightarrow 1 \text{ SFr} = \$0.91$$

$$\frac{E(S)}{S} = \frac{1+i_f}{1+i_h} \quad \frac{E(S)}{0.91} = \frac{1+0.07}{1+0.02}$$

$$E(S) = 0.9546$$

EXPECTED SPOT RATE $1 \text{ SFr} = \$0.9546$

(ii) If a change in expectations regarding future U.S. inflation causes the expected future spot rate to rise to \$1.00, what should happen to the U.S. interest rate?

$$\frac{E(S)}{S} = \frac{1+i_f}{1+i_h} \quad \frac{1.00}{0.91} = \frac{1+i_f}{1+0.02}$$

$$i_f = 0.1121 \quad \text{INTEREST RATE IN USA} = 11.21\%$$

21. International Fisher Effect

Given the interest rate on one-year loan is 14.5 % and inflation is expected to be 6.5% in India. What should be the interest rate on one-year maturity loan in Thailand when expected inflation rate is 8.5%?

Solution:

$$\text{HOME = INDIA} \quad \text{FOREIGN = THAILAND}$$
$$i_h = 14.5\% \quad \pi_h = 6.5\% \quad \pi_f = 8.5\% \quad i_f = ?$$

$$\frac{1 + \pi_f}{1 + \pi_h} = \frac{1 + i_f}{1 + i_h}$$

Putting values

$$\frac{1 + 0.085}{1 + 0.065} = \frac{1 + i_f}{1 + 0.145} \implies i_f = 0.1665$$

16.65%

22. Exchange Rates and Relative Competitiveness

We understand that higher inflation leads to depreciation of the home currency, but should we only aim for the appreciation of the currency? What happens if the home currency is highly appreciated?

Advantages of a Strong Home Currency

- 1. Lower Prices for Imports:** When the home currency is strong, it takes fewer units of the currency to buy goods and services from other countries. This means that imported goods, services, and raw materials become cheaper for domestic consumers. As a result, consumers enjoy greater purchasing power, which can lead to increased consumption and improved living standards.
- 2. Controlled Domestic Inflation:** Cheaper import prices help to keep the prices of domestically produced goods and services in check. When imported inputs are less expensive, the cost of production for domestic firms decreases. This, in turn, can prevent or mitigate inflationary pressures within the domestic economy, as the costs of production and distribution remain stable.
- 3. Lower Costs for Foreign Investment:** A strong home currency makes it more affordable for domestic firms and individuals to invest in assets denominated in foreign currencies. This can encourage outward foreign investment, diversification of investment portfolios, and access to potentially higher returns in international markets.
- 4. Lower Domestic Interest Rates:** Foreign investors are attracted to countries with strong currencies due to the stability and potential returns they offer. As a result, there is increased demand for domestic currency and assets, leading to lower interest rates domestically. Lower interest rates can stimulate borrowing and investment, boosting economic activity and growth.

Disadvantages of a Strong Home Currency

- 1. Reduced Competitiveness of Exports:** A strong home currency makes domestically produced goods and services more expensive for foreign buyers. This can lead to a decline in export competitiveness as foreign consumers opt for cheaper alternatives from other countries. This, in turn, can negatively impact export-dependent industries, leading to lower production levels and potential job losses.
 - 2. Increased Competition from Imports:** With cheaper imported goods flooding the domestic market, domestic firms face heightened competition from foreign producers. This can put pressure on domestic industries to lower prices or improve the quality of their products to remain competitive. In some cases, domestic firms may struggle to compete effectively, leading to decreased market share and profitability.
 - 3. Job Losses in Traded-Goods Sector:** Industries that rely heavily on exports or compete directly with imported goods may experience job losses or reduced employment opportunities. This can have ripple effects throughout the economy, affecting related industries and contributing to overall unemployment levels.
 - 4. Reduced Foreign Direct Investment (FDI):** A strong home currency can deter foreign investors from investing in the country's economy. This is because foreign investors may perceive their returns on investment to be lower when converting profits back into their own currencies. As a result, there may be reduced inflows of foreign capital, leading to slower economic growth and potentially fewer job opportunities created by foreign-owned businesses.
-

23. Foreign Exchange Market Intervention

Foreign exchange market intervention refers to official purchases and sales of foreign exchange that nations undertake through their central banks to influence their currencies.

When a central bank intervenes in the foreign exchange market, it typically buys or sells its own currency in exchange for foreign currency. This buying and selling activity can affect the supply and demand for the currency, thereby impacting its exchange rate.

There are 2 ways in which the Central bank does Foreign exchange market intervention.

Unsterilized Intervention

Unsterilized intervention occurs when a central bank engages in foreign exchange transactions without counteracting the impact on the domestic money supply.

When a central bank conducts unsterilized intervention, it directly intervenes in the foreign exchange market by buying or selling its own currency without taking measures to offset the resulting impact on the domestic money supply. For instance, if the central bank decides to buy foreign currency, it pays for it by issuing more of its own currency into the market. This increases the supply of domestic currency, potentially leading to inflationary pressures if the increase in money supply exceeds the demand for money.

Suppose the Reserve Bank of India (RBI) decides to intervene in the foreign exchange market by purchasing US dollars to prevent the Indian Rupee (INR) from appreciating too rapidly. Without sterilization, RBI directly injects more INR into the economy to buy dollars. This increase in the domestic money supply can lead to inflationary pressures.

Sterilized Intervention

Sterilized intervention involves the central bank taking actions to counteract or neutralize the impact of its foreign exchange transactions on the domestic money supply.

In sterilized intervention, the central bank conducts foreign exchange transactions while simultaneously engaging in offsetting operations in the domestic money market. Typically, this involves **open market operations**, where the central bank buys or sells government securities. For example, if the central bank buys foreign currency, it will sell government securities in the domestic market, withdrawing an equivalent amount of money from circulation. This helps to prevent changes in the money supply that could lead to inflation or deflation.

Impact of Intervention

On Exchange Rates: Foreign exchange market intervention can influence exchange rates by altering the supply and demand dynamics of currencies. For example, if a central bank buys its own currency, it increases demand for that currency, leading to appreciation. Conversely, selling its own currency can lead to depreciation.

On Inflation: Changes in the money supply resulting from foreign exchange intervention can impact inflation rates. An increase in the money supply may lead to higher inflation, while a decrease may lead to lower inflation.

On Interest Rates: Changes in the money supply can also affect interest rates. An increase in the money supply may lead to lower interest rates, as there is more liquidity in the market. Conversely, a decrease in the money supply may lead to higher interest rates.

24. International Taxation

Tax planning influences profitability and cash flow. The taxation planning becomes even more crucial in case of international business, because it has impact on following decisions:

- Location of operations
- Choice of operating form, such as export or import, licensing agreement, or overseas investment
- Legal form of the new enterprise, such as branch or subsidiary
- Possible facilities in tax-haven countries to raise capital and manage cash
- Method of financing, such as internal or external sourcing, and debt or equity
- Capital budgeting decisions
- Method of setting transfer prices

Differences in tax practices around the world, have been challenging for businesses. Lack of familiarity with laws and customs can create confusion. In some countries, tax laws are loosely enforced. In others, taxes may generally be negotiated between the tax collector and the taxpayer if they are ever paid at all. In still others, they must be rigidly followed.

Variations among countries in GAAP can lead to differences in determining taxable income. In countries where tax laws allow firms to depreciate assets faster than accounting standards allow but where the firms must use the same standards for tax and book accounting, higher depreciation expenses result in lower income and therefore lower taxes. Revenue recognition is also an important issue. Some countries tax income from worldwide revenues of MNEs, whereas others only recognize income from revenues generated in the domestic environment.

Corporate tax rates also vary from country to country.

Some countries adopt the **separate entity approach** (also known as the classical approach) for taxation of corporate income, while others adopt the integrated system approach. In the separate entity approach, each separate unit company or individual is taxed when it earns income. For example, a corporation is taxed on its earnings, while stockholders are taxed on the distribution of earnings (dividends). The result can be double taxation.

Many other countries use an **integrated approach** to eliminate double taxation. For example, a country may give a dividend credit to shareholders to shelter them from double taxation. This means that when shareholders report the dividends in their taxable income, they also get a credit for taxes paid on that income by the company that issued the dividend. That keeps the shareholders from paying tax on the dividend because the company has already done so.

A **foreign branch** is an extension of the parent company rather than an enterprise incorporated in a foreign country. Any income the branch generates is taxable immediately to the parent, whether or not cash is remitted by the branch to the parent as a distribution of earnings. However, if the branch suffers a loss, the parent is allowed to deduct that loss from its taxable income, reducing its overall tax liability.

Whereas a branch is a legal extension of a parent company, a **foreign corporation** is an independent legal entity set up in a country (incorporated) according to that country's laws of incorporation. When an MNE purchases a foreign corporation or sets up a new one in a foreign country, it is called a **subsidiary** of the parent. Income earned by the subsidiary is either reinvested in the subsidiary or remitted as a dividend to the parent company. Subsidiary income is either taxable to the parent or tax-deferred—that is, it is not taxed until it is remitted as a dividend to the parent.

24. International Taxation

For the purpose of management accounting and reporting, Multinational Companies (MNCs) have some amount of discretion while defining how to distribute the profits and expenses to the subsidiaries located in various countries. Transfer pricing helps in allocating revenue and expenses to such subsidiaries in the right manner. The profitability and taxes of a subsidiary depends on prices at which the inter-company transactions occur. These days the inter-company transactions are facing increased scrutiny by the governments, so that the companies may pay due and correct tax.

Thus, the **Transfer pricing** can be defined as the value which is attached to the goods or services transferred between related parties. In other words, transfer pricing is the price which is paid for goods or services transferred from one unit of an organization to its other units situated in different countries.

Companies establish transfer prices primarily because of differences in taxation between countries. For example, if the corporate tax rate is higher in the parent company's country than in the subsidiary's country, the parent could set a low transfer price on products it sells to the subsidiary to keep taxable profits low in its country and high in the subsidiary's country. The parent could also set a high transfer price on products sold to it by the subsidiary.

A transfer price is the cost associated with intra-corporate transactions within a corporate family, typically between a subsidiary and other branches. There are two primary methods for determining transfer prices. The first, **market-based transfer pricing**, relies on open market prices to set rates for transferring goods between corporate units. For instance, Samsung may determine the transfer price for memory chips between its South Korean and U.S. subsidiaries based on market rates. The second method, **non-market-based transfer pricing**, establishes prices through negotiations, cost-based approaches, or fixed markups. This method may apply to various services or assets provided by the parent company, such as administrative services, technology usage rights, or intellectual property fees, often linked to a percentage of subsidiary sales.

Arm's Length Pricing is a type of pricing in which one subsidiary of a company sells/transact goods with another subsidiary at a price, which would be same price, if transaction would have been with a third party (outside the company). The prices are not deflated or inflated. Thus, for the purpose of transaction, the buyers and sellers of a product act independently and have no relationship to each other. The concept of an arm's length transaction is to ensure that both parties in the deal are acting in their own self-interest and are not subject to any pressure or duress from the other party.

One of the obvious benefits of transfer pricing is that it allows the multinational to reduce taxes. A second benefit is that the strategy lets the firm concentrate cash in specific locales such as with the first subsidiary, or to move funds away from a country facing significant exchange rate risk, or to reduce payment of import tariffs.

One of the problems with transfer pricing is that the financial statements do not accurately reflect subsidiary performance because the profit margins are manipulated. A second problem is that the strategy may not encourage efficient performance by the seller in a low-tax jurisdiction, whose primary objective is to unload merchandise on the other subsidiary at a profit as high as can be justified.

Base Erosion and Profit Shifting (BEPS) refer to strategies adopted by taxpayers having cross-border operations to exploit gaps and mismatches in tax rules of different jurisdictions which enable them to shift profits outside the jurisdiction where the economic activities giving rise to profits are undertaken and where value is created. BEPS has been a cause of concern for developing and emerging economies for long as it erodes their tax base depriving them of much needed resources for developmental activities.

24. International Taxation

Double taxation is an issue related with taxation of income that crosses boundaries. Here, an individual or a company may be earning his/ its income in a foreign country. But that income is transferred to the home country. The issue is that who has the right to tax such an income. Definitely, the source country (the country where income has generated, the country where the company or individual worked) would like to tax the income generated there. Similarly, the resident country (where the individual is residing or the company is incorporated) to which he/it belongs also tries to tax the income. This is because the income is generated by its resident. Now if both countries try to tax the person/company, it is double taxation. Double taxation means taxing the same income twice, once in the home country and again in the host country.

Such a double taxation discourages the individual/company to engage in economic activities overseas.

The Foreign Tax and Tax Research (FT&TR) Division under Department of Revenue, Ministry of Finance, negotiates and finalizes the Double Taxation Avoidance Agreements (DTAAs) which are entered into for twin purpose of:

- allocation of taxation rights between the Contracting States with a view to avoid double taxation and
- prevention of fiscal evasion through exchange of information, assistance in collection of taxes.

India has signed many types of DTAAs agreements with more than 90 countries.

25. International Monetary System

The **international monetary system** serves as the framework that governs the exchange of currencies among nations. It encompasses a complex network of policies, institutions, practices, regulations, and mechanisms that collectively determine the value of one currency in relation to another.

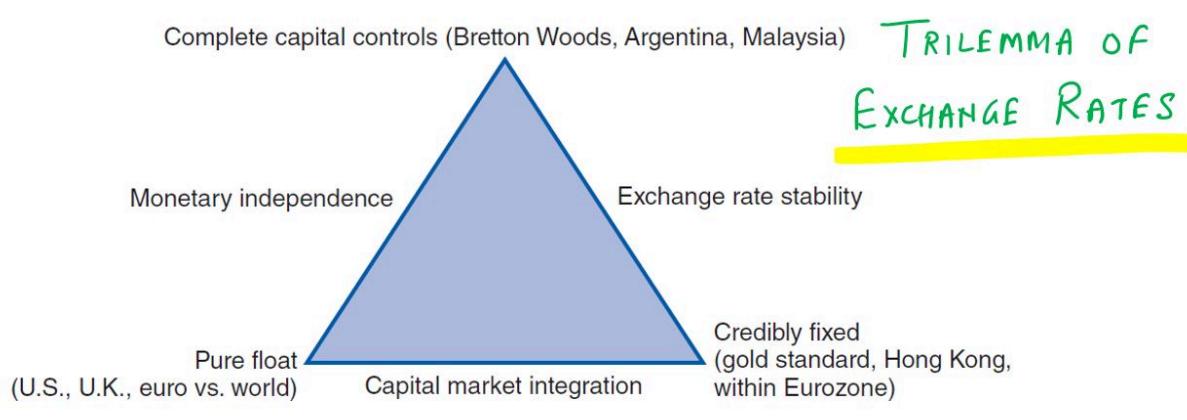
This system includes components such as exchange rate regimes (fixed, floating, or managed), international financial institutions like the International Monetary Fund (IMF), agreements and treaties between countries, and various financial instruments used for currency trading and hedging.

Additionally, it involves central banks and governments managing their currencies, intervening in foreign exchange markets, and cooperating to maintain stability and address economic imbalances.

The international monetary system plays a vital role in facilitating global trade, investment flows, capital movements, and economic cooperation among nations.

25. International Monetary System

The Trilemma of Exchange Rate Regime refers to the concept that nations face constraints in achieving three key objectives simultaneously in international finance: exchange rate stability, monetary independence, and capital market integration.



- 1. Stable Exchange Rate:** A stable exchange rate fosters economic stability, reduces risk for businesses and investors engaged in international transactions, and supports trade and economic growth. However, achieving exchange rate stability may require interventions and policies that can limit monetary independence and capital mobility.
- 2. Monetary Independence:** Having an independent monetary policy allows a nation to use tools such as control over the money supply and interest rates to stabilize the economy. Central banks can adjust monetary policy to address economic challenges like inflation or recession. However, maintaining monetary independence may be incompatible with fixed exchange rates or unrestricted capital flows.
- 3. Capital Market Integration:** Opening up to international capital flows enables better allocation of capital, portfolio diversification, and access to foreign investment. It can lower the cost of capital and attract foreign investors. Yet, fully integrating capital markets may require sacrificing either exchange rate stability or monetary independence.

The trilemma suggests that countries must prioritize two of these objectives, while sacrificing the third.

Ignoring the trilemma and attempting to achieve all three objectives simultaneously can lead to currency crises, as seen in various historical examples.

25. International Monetary System

In a free float, exchange rates are determined solely by the forces of supply and demand in the foreign exchange market. Various factors influence these supply and demand schedules, including changes in price levels, interest rate differentials between countries, and economic growth rates.

When economic parameters change due to factors like government policies or natural disasters, market participants adjust their current and anticipated future currency needs accordingly. This adjustment leads to shifts in the supply and demand for currencies, which in turn result in new equilibrium exchange rates.

In a free float, exchange rates fluctuate continuously as market participants react to new information. This system, often referred to as a "clean float," resembles the fluctuation of prices in other financial markets in response to news and market sentiment.

The freely floating nature of exchange rates acts as an automatic stabilizer for the economy. For example, in response to a negative economic shock, the exchange rate may depreciate. This depreciation stimulates exports by making them cheaper for foreign buyers and reduces imports by making them relatively more expensive. These adjustments help cushion the impact of economic shocks on the domestic economy.

A freely floating exchange rate allows the central bank to pursue an independent monetary policy. This means that the central bank can adjust interest rates and the money supply to address domestic economic conditions, such as inflation or unemployment, without being constrained by the need to maintain a fixed exchange rate.

However, there are drawbacks to a free float system:

Exchange Rate Volatility: The freely floating exchange rate system is inherently volatile, leading to fluctuations in exchange rates over short periods. This volatility can increase uncertainty and risk for businesses engaged in international trade and investment, affecting their profitability and decision-making processes.

Impact on Multinationals: Exchange rate volatility can significantly impact the profits and production sourcing decisions of multinational corporations. Fluctuations in exchange rates can affect the value of foreign earnings when repatriated to the home currency and can also influence the cost of sourcing materials and production inputs from foreign suppliers.

25. International Monetary System

The fear with free float is that too abrupt a change in the value of a nation's currency could imperil its export industries (if the currency appreciates) or lead to a higher rate of inflation (if the currency depreciates).

Exchange rate uncertainty also reduces economic efficiency by acting as a tax on trade and foreign investment.

Therefore, most countries with floating currencies have attempted, through central bank intervention, to smooth out exchange rate fluctuations. Such a system of managed exchange rates, called a managed float, is also known as a dirty float.

Managed floats represent a middle ground between fixed and flexible exchange rate systems, where central banks intervene in the foreign exchange market to influence the exchange rate.

There are 3 distinct categories of central bank intervention within managed floats:

1. **Smoothing out daily fluctuations:** Governments following this approach aim to maintain an orderly pattern of exchange rate changes by occasionally intervening in the market to buy or sell currency. The goal is to ease the transition from one exchange rate to another, moderating short- and medium-term fluctuations caused by temporary events. For example, if a negative shock causes a currency to depreciate excessively, the central bank may intervene to stabilize its value.

A variant of this approach is the **crawling peg system**, where the currency's value is adjusted regularly against a reference currency or basket. This gradual depreciation or appreciation helps maintain competitiveness without large losses, making it suitable for transitioning between fixed and flexible exchange rate regimes.

2. **Leaning against the Wind:** This strategy involves central bank intervention aimed at moderating abrupt exchange rate fluctuations caused by temporary events. Instead of resisting fundamental exchange rate adjustments, the central bank seeks to delay these adjustments to reduce uncertainty for exporters and importers.

3. **Unofficial Pegging:** In this approach, central banks resist fundamental exchange rate movements unrelated to market forces. Countries may adopt unofficial pegging as a temporary measure to prevent currency appreciation or depreciation that could adversely impact their economies. However, unlike fixed-rate systems, there is no publicly announced government commitment to maintaining a specific exchange rate level, allowing for more flexibility in response to changing economic conditions.

25. International Monetary System

The primary objective of a target-zone arrangement is to keep exchange rates within a predetermined band or target zone around agreed-upon central exchange rates. This system aims to provide stability in currency values while allowing for some flexibility to accommodate economic shocks.

Participating countries adjust their national economic policies to maintain their exchange rates within the target zone. This may involve interventions in the foreign exchange market by central banks to buy or sell their currencies in order to keep exchange rates within the specified range.

25. International Monetary System

A fixed-rate system, exemplified by the Bretton Woods system, is a currency regime where governments commit to maintaining specific target exchange rates for their currencies.

Under a fixed-rate system, each participating central bank actively intervenes in the foreign exchange market to buy or sell its currency whenever its exchange rate deviates from the agreed-upon par value by more than a predetermined percentage. This intervention ensures that exchange rates remain stable and within the established parameters.

In a fixed-rate system, participating countries coordinate their monetary policies to maintain stable exchange rates. This coordination aims to achieve uniform inflation rates across member nations. Consequently, monetary policy becomes subservient to exchange rate policy, with member countries accepting the group's joint inflation rate as their own.

One challenge of fixed exchange rates is that countries may have different monetary policy objectives despite pegging their currencies to the same benchmark. For instance, a country pegged to the U.S. dollar may import the low interest rates and inflationary policies of the United States, even if it faces different economic conditions.

Fixed-rate systems entail a loss of monetary autonomy for participating countries. However, this loss may be desirable, especially for emerging economies seeking to curb inflationary pressures. By committing to fixed exchange rates, central banks are compelled to pursue policies that reduce inflation. This commitment is reinforced by mechanisms like currency boards or complete adoption of another country's currency (dollarization or euroization), which enhance credibility and deter pressures for devaluation.

Maintaining a fixed exchange rate may necessitate monetary tightening, potentially leading to higher interest rates and slower economic growth. Governments may resort to austerity measures, such as reducing government expenditures and increasing taxes, to curb inflation and stabilize exchange rates.

26. Interest Rate Swaps

Interest Rate Swaps (IRS) are financial derivatives in which two parties agree to exchange interest rate cash flows based on a specified notional principal amount over a predetermined period. These agreements typically involve swapping fixed-rate interest payments for floating-rate interest payments or vice versa.

In an interest rate swap, there are typically two parties: the fixed-rate payer and the floating-rate payer. These parties could be corporations, financial institutions, or investors seeking to manage their exposure to interest rate fluctuations.

The parties enter into a contractual agreement to exchange interest rate payments. The terms of the swap include the notional principal amount (the hypothetical amount used to calculate interest payments), the fixed interest rate, the floating interest rate (usually tied to a benchmark such as LIBOR or the prime rate), and the payment frequency (e.g., quarterly, semi-annually).

In a typical interest rate swap, one party agrees to make fixed-rate payments to the other party, while the other party agrees to make floating-rate payments. The fixed-rate payer pays a predetermined fixed rate of interest on the notional principal amount, while the floating-rate payer pays a variable interest rate based on the benchmark rate plus a spread.

Instead of exchanging the full principal amount, only the net difference in interest payments is exchanged between the two parties. This simplifies the transaction and reduces credit risk.

Interest rate swaps are commonly used for several purposes:

Managing Interest Rate Risk: Entities can use interest rate swaps to hedge against interest rate fluctuations. For example, a company with floating-rate debt may enter into a swap to convert its variable interest payments into fixed payments to protect against rising interest rates.

Arbitrage: Investors may engage in interest rate swaps to exploit differences in interest rates between markets or to capitalize on mispricing in the swap market.

Restructuring Debt: Companies can use interest rate swaps to modify the terms of their existing debt obligations, such as converting fixed-rate debt into floating-rate debt or vice versa, to better align with their financial objectives.

27. Currency Swaps

Currency swaps are agreements between two parties to exchange principal amounts and interest payments denominated in different currencies over a specified period. These swaps are commonly used by multinational corporations, financial institutions, and investors to manage currency risk, obtain cheaper financing, or hedge against fluctuations in exchange rates.

In a currency swap, there are typically two parties, often referred to as the "counterparties." These counterparties could be corporations, financial institutions, or investors with exposure to different currencies.

The parties agree to exchange cash flows based on a specified notional principal amount, which represents the amount of currency being swapped. The terms of the swap include the notional amount, the exchange rates at which the currencies will be exchanged, the interest rates for each currency, and the maturity date of the swap.

In a currency swap, each party agrees to make periodic interest payments to the other party in their respective currencies, based on the agreed-upon notional amount. These payments are typically made at regular intervals, such as quarterly or semi-annually, throughout the life of the swap.

At the beginning and end of the swap agreement, the parties exchange the notional principal amounts in the respective currencies. However, no actual funds are exchanged; instead, the exchange is purely for accounting purposes to calculate interest payments.

Currency swaps are commonly used for several purposes:

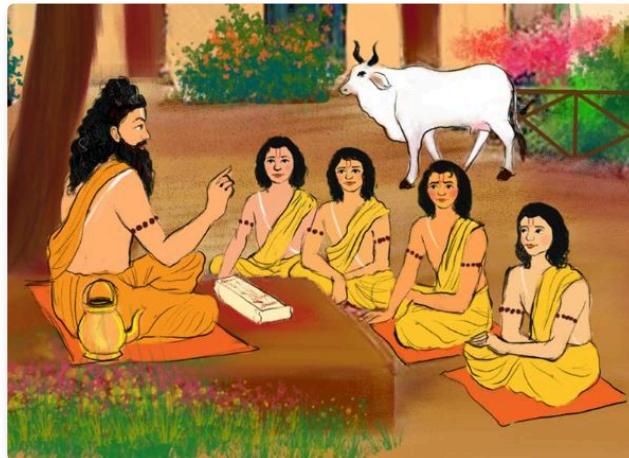
Managing Currency Risk: Multinational corporations may use currency swaps to hedge against currency risk arising from their international operations. By swapping their foreign currency-denominated debt into their domestic currency, they can mitigate the impact of exchange rate fluctuations on their cash flows and financial performance.

Accessing Cheaper Financing: Companies or governments may use currency swaps to obtain financing in a foreign currency at lower interest rates than they could obtain domestically. This can be advantageous when interest rates are lower in one currency compared to another.

Speculation: Investors may engage in currency swaps to speculate on future movements in exchange rates. By taking positions in currency swaps, investors can potentially profit from favorable changes in exchange rates.

1. Introduction and Features

Education in ancient India was a rich and profound tradition that laid the foundation for intellectual and spiritual growth. With roots dating back thousands of years, ancient Indian education was characterized by a holistic approach, emphasizing not only academic knowledge but also moral and ethical development.



Features of Education in Ancient India

Some of the key features of education in ancient India is given below.

- Ancient Indian education prioritized the overall development of individuals, addressing moral, physical, spiritual, and intellectual dimensions.
- Emphasis on values like humility, truthfulness, discipline, self-reliance, and respect for all living beings, fostering a sense of harmony with nature.
- Medium of instruction was Sanskrit and students learned orally.
- Specialized curriculums were taught for students studying in Higher Education.
- A clear distinction was made between "Shastras," which encompassed learned disciplines, and "Kavyas," which represented imaginative and creative literature.
- Education drew from a diverse range of fields, including *Itihas* (history), *Anviksiki* (logic), *Mimamsa* (interpretation), *Shilpashastra* (architecture), *Arthashastra* (politics), *Varta* (agriculture, trade, commerce, and animal husbandry), and *Dhanurvidya* (archery).
- Physical education held a significant place in the curriculum, with students engaging in activities such as *krida* (games and recreational activities), *vyayamaprakara* (exercises), *dhanurvidya* (archery) to acquire martial skills, and *yogasadhana* for mental and physical training.
- To evaluate students' knowledge, learned debates called "shastrartha" were organized.
- Both formal and informal ways of education system existed.
- Indigenous education was imparted at home, in temples, pathshalas, tols, chatuspadis and gurukuls.
- Students went to viharas and universities for higher knowledge.

1. Given below are two statements: (UGC NET 01 Mar 2023 Evening)

Statement I: In ancient India, education was free.

Statement II: In ancient India, education was centralised.

- Both Statement I and Statement II are correct.
- Statement I is incorrect but Statement II is correct.
- Statement I is correct but Statement II is incorrect.
- Both Statement I and Statement II are incorrect

 Check

Question: 1 of 4 questions

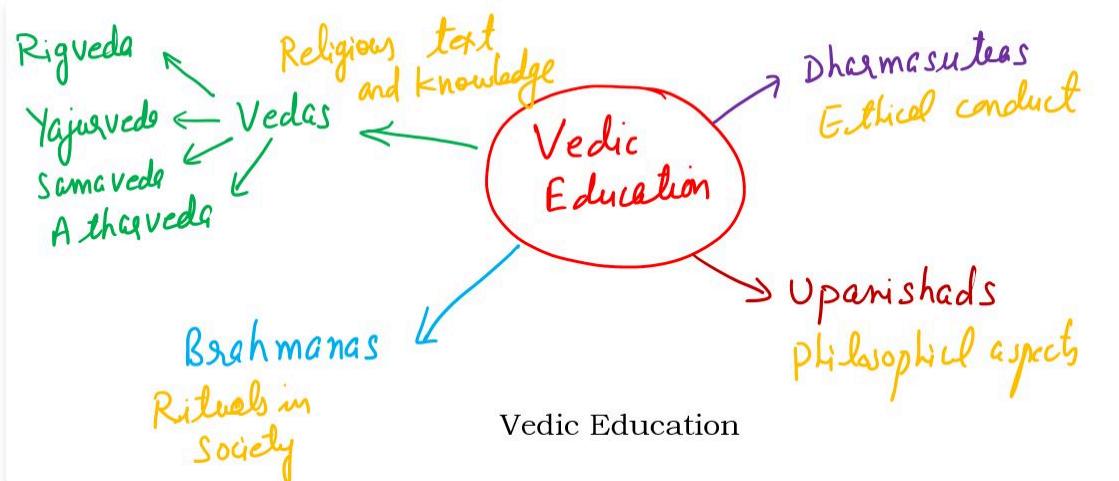
2. Vedic Education

The ancient system of education in India revolved around the teachings and texts of the Vedas, Brahmanas, Upanishads, and Dharmasutras, forming the core of what is often referred to as the Vedic education system.

Vedas

'Vedas' (or *Samhitas*) are the most ancient literary compositions in the world literature. They are the treasure-house of Indian civilization, culture and philosophy. These texts are primarily in the form of hymns, rituals, and chants. Vedas also extensively deals with multiple disciplines such as philosophy, theosophy, ecology, astrology, astronomy, science or poetics etc. They consist of 4 main collections: Rigveda (oldest), Yajurveda, Samaveda, and Atharvaveda.

Note: As per the Indian tradition the Veda is not written by any author but in fact it is the respiration of God. Veda has been seen by the seers, the Rishis (Shruti).



Brahmanas

The Brahmanas are prose texts that serve as a commentary on the rituals and hymns of the Vedas. They provide detailed explanations of the rituals and their symbolic meanings. They provide understanding of the practical aspects of Vedic ritual.

Upanishads

The Upanishads are a collection of philosophical and metaphysical texts that delve into the nature of reality, the self (Atman), and the ultimate truth (Brahman). They are sometimes referred to as Vedanta, which means the "end of the Vedas" because they represent the culmination of Vedic thought. Upanishads are known as '*Para-Vaidya*'. They are considered to be above all kinds of material knowledge (*Vidyas*).

Dharmasutras

Dharmasutras are ancient legal and ethical texts that provide guidelines for ethical conduct, social duties, and law in ancient India. They were written by various sages and scholars and are considered a part of Smriti literature.

1. The ancient system of education in India included education of which of the following ancient texts? (**UGC NET 2023 Morning**)

- A. Vedas
- B. Brahmanas
- C. Upanishads
- D. Dharmasutras

A. C and D Only

A and C Only

A, B, C and D

B and D Only

 Check

Question: 1 of 3 questions

3. Vedangas

The 4 Vedas, Brahmanas, Aranyakas and the Upanishads all together constitute the sacred revealed literature of India. Towards the end of the vedic period some literature was written in sutra style. 'Sutra' means strings. All the works written in this style on various subjects are one uninterrupted string of short sentences twisted together in the most concise form. Brevity is the great object of this style.

Vedang	Dealt in
Shiksha	Phonetics
Kalpa	Rituals
Vyakarana	Grammar
Nirukta	Etymology
Jyotish	Astrology

The works which have been written in sutra style proved to be very useful in understanding the Vedas. That is why they were named as 'Vedangas' also i.e. the studies accessory to the Vedas. Thus the Vedangas are representative of Sutra literature. They are six – Shiksha, Kalpa, Vyakarana, Nirukta, Chandas and Jyotish.

- > **1. Shiksha (Phonetics)**
- > **2. Kalpa (Ritual)**
- > **3. Vyakarana (Grammar)**
- > **4. Nirukta (Etymology)**
- > **5. Jyotisha (Astronomy and Astrology)**
- > **6. Chandas (Prosody)**

1. Which of the following ancient systems is focused on laws of matter and force and of combination and disintegration?
(UGC NET 22 Mar 2023 Morning)

- Vaisesika
- Nirukta
- Chhanda
- Grihya Sutras

Check

Question: 1 of 4 questions

4. Gurukuls

During the Vedic Period, oldest known, education was imparted at centers of learning called gurukuls, ashrams, parishads, etc. Young students were sent from home to the residential schools where they stayed with the guru (*teacher*) and his family. Education was imparted for years together.



Teaching- learning started following an initiation process into the world of education called '*upanayana*'. Women too had access to education during the early Vedic period. Among the **prominent women Vedic scholars**, there are references to *Maitreyi, Viswambhara, Apala, Gargi and Lopamudra*, to name a few.

All were considered equal at the Gurukul and *guru* (*teacher*) as well as *shisya* (*student*) resided in the same house or lived near to each other. This relationship between guru and shishya was so sacred that no fee was taken from the students. However, the student had to offer a '*gurudakshina*' which was a token of respect paid to the teacher. It was mainly in the form of money or a special task that the student had to perform for the teacher.

1. Who among the following were prominent women vedic scholars? **(UGC NET 22 Oct 2022 Evening)**

- A. Maitreyi
- B. Viswambhara
- C. Apala
- D. Gargi
- E. Lopamudra

A, D, E only

A, C, D only

A, B, C, D, E

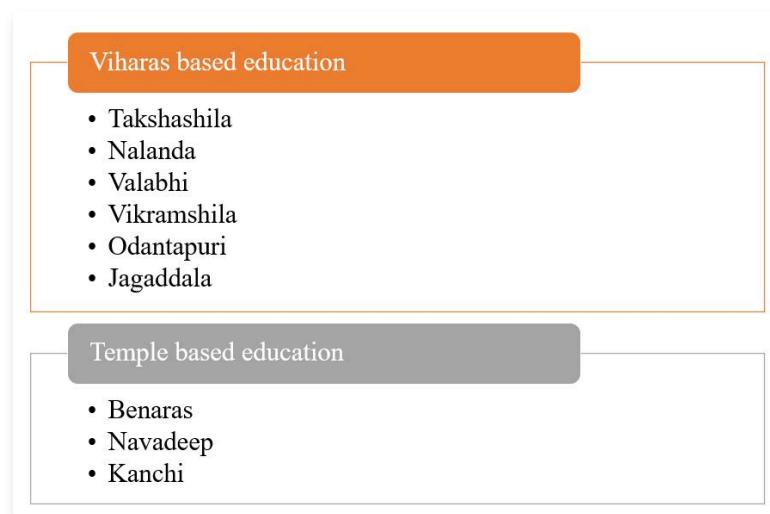
A, C, D, E only

Check

Question: 1 of 3 questions

5. Viharas

About the 6th century BC, rigidities of Vedic rituals and sacrifices along with the overwhelming dominance of the Brahmins over the lower castes became responsible for the disenchantment of the masses with the prevailing system. This resulted into the rise of other deviations such as Buddhism, Jainism, etc.



Viharas refers to a Buddhist monastery or a place of residence for Buddhist monks and nuns. Many monasteries/viharas were set up for monks and nuns to meditate, debate and discuss with the learned for their quest for knowledge during this period. Around these viharas, other educational centres of higher learning developed, which attracted students from China, Korea, Tibet, Burma, Ceylon, Java, Nepal and other distant countries.

Kings and society took active interest in promoting education. As a result, many famous educational centres came into existence. Among the most notable universities that evolved during this period were situated at Takshashila, Nalanda, Valabhi, Vikramshila, Odantapuri and Jagaddala. These universities developed in connection with the viharas. Similarly, those at Benaras, Navadeep and Kanchi developed in connection with temples and became centres of community life in the places where they were situated.

1. During ancient period in India which of the following universities developed in connection with temples and became centres of community life in places of their location? (**UGC NET 05 Mar 2023 Morning**)

- A. Odantapuri
- B. Navadeep
- C. Valabhi
- D. Bananas

A and B only

B and D only

C and D only

A, B and C only

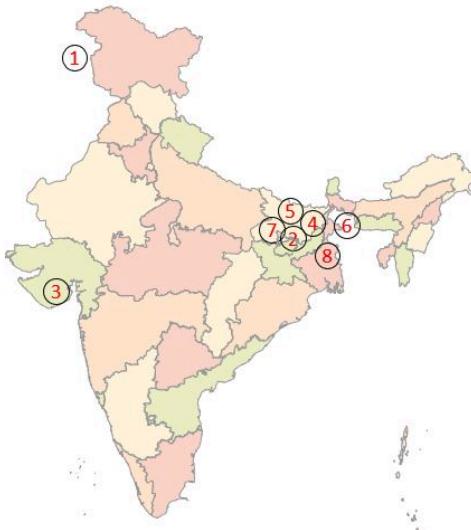
Check

Question: 1 of 4 questions

6. Universities in Ancient India

Let us discuss Ancient Universities of India.

1	Takshashila University
2	Nalanda University
3	Valabhi University
4	Vikramshila University
5	Odantapuri University
6	Jagaddala University
7	Mithila University
8	Nadia University



- > **Takshashila University**
- > **Nalanda University**
- > **Valabhi University**
- > **Vikramshila University**
- > **Odantapuri University**
- > **Jagaddala University**
- > **Mithila University**
- > **Nadia University**

Notable Universities of the time from South India were - *Agraharas, Ghatika* and *Brahmapuri*.

During the medieval period, maktabas and madrassas became part of the education system. Tols in Bengal, pathshalas in western India, chatuspadis in Bihar, and similar schools existed in other parts of India.

1. Given below are two statements: (UGC NET 02 Mar 2023 Morning)

Statement I: Xuan Zang visited India and became a student of Takshashila University.
Statement II: Xuan Zang visited India and became a student of Yogashastra.

- Statement I is incorrect but Statement II is correct.
- Both Statement I and Statement II are correct.
- Statement I is correct but Statement II is incorrect.
- Both Statement I and Statement II are incorrect.

Check

Question: 1 of 6 questions

7. Ancient Text and Personalities

Some of the notable texts and personalities are given below.

Name	Specialisation	Remarks
Panini	Grammian	Student in Takshashila, composed Ashtadhyayi
Jivaka	Physician	Learn traditional medicine at Takshashila
Xuan Zang	Yoga	Chinese Pilgrimage; studied Yogashastra at Nalanda
Banabhatta	Sanskrit Poet	Wrote Kadambri; provide multi-disciplinary education; includes 64 Kalaa of Arts
Charaka	Medical Science	Composed Charak Samhita – oldest known Hindu text on Ayurveda
Aryabhatta	Astronomy	Student of Nalanada; given the names of the 12 divisions of the solar zodiac
Sushruta	Surgery	University of Benaras; Compose Sushruta Samhita
Patanjali	Yogasutras	Credited with compiling and systematizing the Yoga Sutras
Kaṇāda	Physicist	Founded the Vaisheshika school of Indian Philosophy
Bhaskara	Astronomy	Wrote two astronomical works - the Mahābhāskarīya and the Laghubhāskarīya
Varāhamihira	Astronomy	Lived in Ujjain; Composed "Panchsiddhant" - holds a prominent place in the realm of astronomy.

1. Which of the following ancient texts relate to Law? (**UGC NET 03 Mar 2023 Evening**)

- A. Grihya Sutra
- B. Nyaya Sutra
- C. Dharma Sutra
- D. Samkhya pravacana Sutra

A, C and D only

A, B, C and D

B and D only

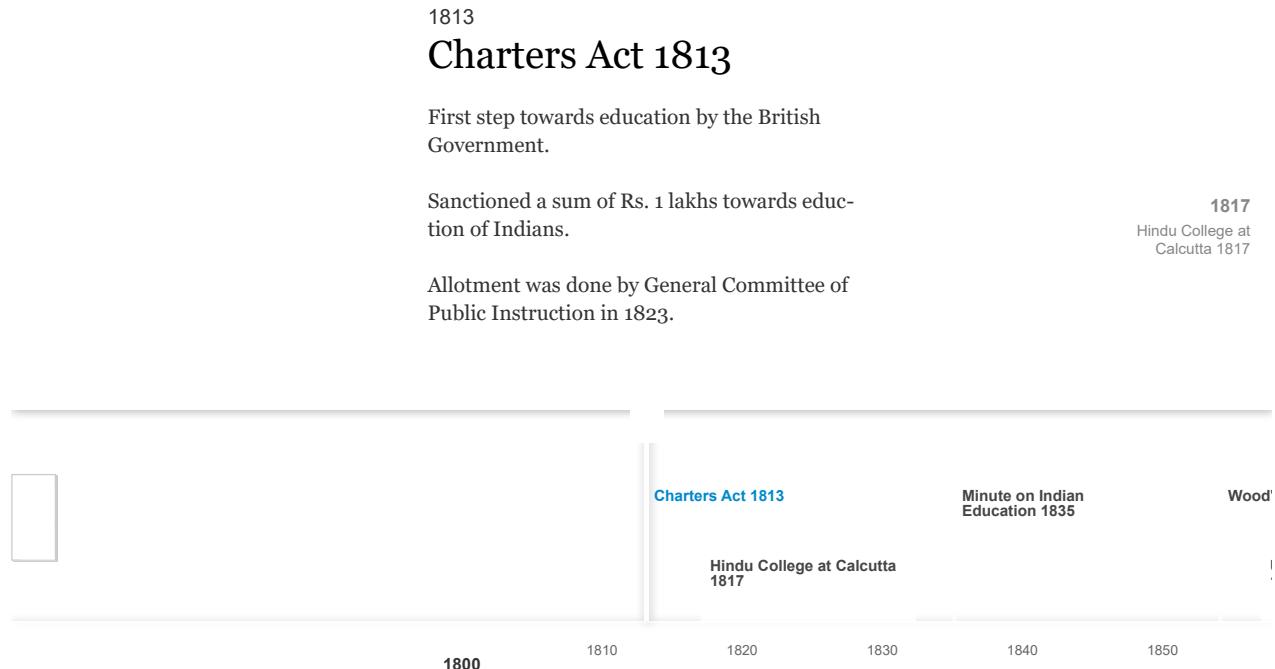
A and C only

Check

Question: 1 of 6 questions

1. Evolution from 1813 to 1947

The timeline below illustrates the evolution of various activities in higher education from 1800 to 1947, the year India gained independence. You may scroll right to view all the events. Next, we will discuss each of these events in more detail one by one.



Arrange the following in chronological order of their occurrence: (UGC NET 28 Nov 2021 Evening)

- A. Hartog Commission
- B. Sadler Commission
- C. Macaulay's Minutes
- D. Sargent Plan
- E. Wood's Despatch

C, E, B, D, A

C, B, E, A, D

C, E, B, A, D

C, E, A, B, D

Check

2. Charters Act 1813

The **Charter Act of 1813** was the first step towards education by the British Government. The act sanctioned a sum of Rs. 1 lakh towards education of Indians in British ruled India. This act also gave an impetus to the missionaries who were given official permission to come to India. But there was a split in the government over what kind of education was to be offered to the Indians. The orientalists preferred Indians to be given traditional Indian education. Some others, however, wanted Indians to be educated in western style of education and be taught western subjects.

There was also another difficulty regarding the language of instruction. Some wanted the use of Indian languages (*called vernaculars*) while others preferred English. Due to these issues, the sum of money allotted was not given until 1823 when the **General Committee of Public Instruction** decided to impart oriental education. In 1835, it was decided that western sciences and literature would be imparted to Indians through the medium of English, by Lord William Bentinck's Government.

During the same time, **Raja Ram Mohan Roy** opened the Hindu College at Calcutta in 1817 to impart modern education, along with David Hare and Sir Edward Hyde East. He was in favour of imparting western education, especially its science education, so as to liberate the minds of the Indians and modernize them.

Which act sanctioned a sum of Rs.1 lakh towards education of Indians in British ruled India? This act also gave air to the missionaries who were given official permission to come to India.

- Charter Act of 1813
- English Education Act 1935
- Charter Act of 1833
- None of above

Check

3. Minute on Indian Education 1835

Lord Macaulay (Thomas Babington Macaulay) landed in India in June 1834 and was immediately appointed as President of 'General Committee of Public Instruction'. This Committee was responsible for education matters at that time.

Lord Macaulay wrote '**Minute on Indian Education**' in February 1835. He wrote that "we must, at present, do our best to form a class of persons Indian in blood and colour and English in taste, opinions in morals and in intellect,".



The other recommendations were:

- English education should be imparted in place of traditional Indian learning, because oriental culture was 'defective' and 'unholy'.
- He believed in education for a few upper- and middle-class students. In the course of time, education would trickle down to the masses. This was called **infiltration theory**.
- He wished to create a class of Indians who were Indian in colour and blood but English in taste and affiliation.

In March 1835, Lord William Bentinck (then Governor General) accepted Macaulay's recommendations and sanctioned it officially. The **English Education Act 1835** gave effect to a decision in 1835 by Lord William Bentinck, to reallocate funds the East India Company was required by the British Parliament, to spend on education and literature in India.

Key features of the English Education Act of 1835:

- To make English a medium of instruction in higher educational institutions.
- To no longer promote oriental institutions such as the Calcutta Madrasa and Benaras Sanskrit College.
- To introduce English textbooks in schools.

In 1837 English was made the court language and a Government Resolution of 1844 threw high posts open to Indians. These measures resulted in a rapid growth of English education. The missionaries also established a number of English schools and colleges.

1. Which of the following were the outcomes of the introduction of English system of higher education in India? (**U 13 Mar 2023 Morning**)

- A. Status quo in Indian education system.
- B. Relegation of women's education to the lowest level.
- C. Rise of social consciousness in India.
- D. Emphasis on material prosperity.
- E. Acquaintance of western literature and scientific knowledge.

A, C and E only

C, D and E only

A, B and C only

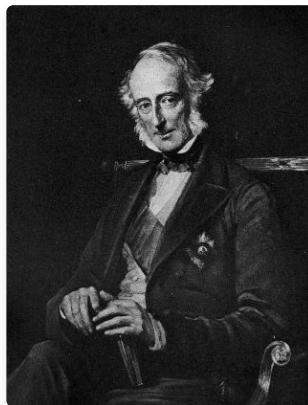
B, C and D only

Check

Question: 1 of 2 questions

4. Wood's Despatch 1854

The East India Company had to renew its Charter after every 20 years. Before renewing the Charter in 1853, the British Parliament constitutes a Selection Committee to enquiry into the Progress of education in India and suggests reform. The suggestions of the Committee were issued as a Charter of Education on 19th July 1854. Charles Wood was the President of the Board of Control. So, this is known as Wood's Despatch of 1854. The Despatch asked the government to take up the responsibility of the education of the people. This is regarded as the *Magna Carta of English education in India*.



Outlining the educational policy that was to be followed in India, it emphasised once again the practical benefits of a system of European learning, as opposed to Oriental knowledge. One of the practical uses the Despatch pointed to was economic. European learning, it said, would enable Indians to recognize the advantages that flow from the expansion of trade and commerce, and make them see the importance of developing the resources of the country. Introducing them to European ways of life, would change their tastes and desires, and create a demand for British goods, for Indians would begin to appreciate and buy things that were produced in Europe.

Recommendations

The recommendations of the Wood's Despatch are given below:

- Regularize the education system from the primary to the university levels.
- Indians were to be educated in English and their native language. Suggested primary colleges to adopt vernacular languages, high schools must adopt Anglo vernacular language and on college level English language.
- An education system was to be set up in every Province.
- Affiliated private schools could be granted aid.
- Education of women should be emphasised.

1. Which of the following recognised for the first time that the government should give 'frank and cordial support' to education and take effective measure for its expansion? (**UGC NET 08 Oct 2022 Evening**)

- National Council of Women
- Women's Indian Association
- The Woods Despatch
- All India Women's Conference

Check

Question: 1 of 2 questions

5. University Incorporation 1857

Because of the culmination of prominent members of Bombay association (estb. 1852), Lord Canning, Governor-General passed the acts of incorporation in January 1857, which provided for the establishment of universities at Calcutta, Bombay and Madras on the model of University of London. Henceforth, Universities of Madras, Calcutta and Bombay were set up by 1857. Universities set up by the act of incorporation in 1857 were affiliating universities for distant geographical areas.

Name	Year of Incorporation
University of Calcutta	Jan 1857
University of Bombay	July 1857
University of Madras	Sep 1857



Similarly, University of Punjab was set up in 1882 and University of Allahabad in 1887. Also note that it was in 1877 that Calcutta University first opened its doors for girl students, and Bombay University followed suit in 1883.

1. The Universities of Calcutta, Bombay and Madras were to be set up on the model of: (**UGC NET 02 Mar 2023 I**)

- University of Edinburgh
- Cambridge University
- University of London
- Oxford University

Check

Question: 1 of 4 questions

6. Hunter Commission 1882

There were complaints that Wood's Dispatch of 1854 had not been properly followed. For this purpose, Lord Ripon appointed on 3rd February 1882 the **Indian Education Commission** under the chairmanship of William Hunter, a member of the executive council of Viceroy. There was a good representation of missionaries and Indians in the commission like Sayed Mahmud, Bhudev Mukherjee, Anand Mohan Bose and K. T. Telang.



Recommendations

Major Recommendations of Hunter Commission of 1882 on Primary Education were.

- Primary education should be regarded as education of the masses.
- Education should be able to train the people for self-dependence.
- Medium of Instruction in primary education should be the mother tongue.
- Appointment of teachers should be made by the district authority and approved by the government.
- School houses and furniture should be simple and economical.
- Schools should be established for the training of teachers.
- Curriculum should include useful subjects like agriculture, elements of natural and physical science and the native method of arithmetic and measurement etc.
- School equipments should be economical and less expensive.
- Spread of primary education for the tribal and backward people should be the responsibility of the Government.

The first Indian Education Commission was set up in

- 1868
- 1872
- 1882
- 1878

Check

7. University Education Commission 1902

Lord Curzon tried to introduce some administrative reform of university



education by instituting a University Education Commission in 1902 with Sir Thomas Raleigh as its Chairman. The Commission's recommendations of university education have been regarded merely rehabilitation and strengthening the existing system. The Commission had several other drawbacks which led to the amendments and the introduction of The University Act, 1904 through the strong push from Lord Curzon.

1. Who among the following founded the Imperial Library which he wanted to see as a Future Bodleian Library or Museum of the East? **(UGC NET 03 Mar 2023 Morning)**

- Charles Wood
- Lord Curzon
- Lord Canning
- Lord Mountbatten

Check

Question: 1 of 3 questions

8. Government of India Resolution 1913

In 1910, Indian veteran leader Gopal Krishna Gokhale introduced a bill in the Legislative Council proposing compulsory and free primary education for



children aged 6-10 in areas where only 35% of boys were attending school. The Government promised to consider his proposal, however he withdrew it. In 1911, Gokhale again presented a bill for compulsory primary education, but it was more lenient. Unfortunately, the bill was defeated.

Despite this, the Government acknowledged the need for primary education and promised to provide financial support. In 1913, they introduced a new policy called the Government of India Resolution 1913, which covered primary, secondary, higher, and women's education.

Which initiative is responsible for Compulsory Primary Education in our country?

- Sadler Commission in 1927
- Gokhale's Bill of 1921
- Sadler Commission in 1917
- Gokhale's Bill of 1911

Check

9. Sadler Commission 1917

In 1917 the Government appointed the Sadler Commission to inquire into the "conditions and prospects of the University of Calcutta," an inquiry that was in reality, nationwide in scope. Its chairman was Dr. Michael E. Sadler, the Vice Chancellor of the University of Leed. It is also called the **Calcutta University Commission**.



Major Recommendations of Sadler Commission were:

- The Commission reported the need for better quality at the secondary level to ensure the improvement of university education.
- It stressed the need for a substantial increase in the output of trained teachers.
- It recommended establishing an inter-university board in the country for maintaining proper liaison and coordination between the universities.

Which Commission laid emphasis on the Teacher's training and thus the Central advisory Board of Education was

- Sargent Commission in 1917
- Sadler Commission in 1907
- Sadler Commission in 1917
- Sargent Commission in 1907

Check

10. Central Advisory Board of Education 1920

The idea that there should be a central Advisory Board of Education was first put forward by the Calcutta University Commission (1917-19). Almost simultaneously the Government of India Act, 1919 decided to make education mainly a provincial and a transferred subject and to limit the 'control' of the Central Government over it to the minimum. Consequently, to enhance control, in 1920 the Central Advisory Board of Education (CABE) was set up to advise the government on issues related to education. It was subsequently dissolved and set up again in 1935. The need for adult education was realized by the proponents of mass education. During 1937-39 the CABE committee stressed the need for adult education to be taken up on a wider scale and also suggested that voluntary organisations may also be involved in this cause.

Which is the highest body to advise central and state governments on education? (**UGC NET 11 Nov 2020 Morni**)

- UGC
- NSDA
- CABE
- NIEPA

Check

11. Inter-University Board 1925

It took final shape in a conference of the vice-chancellors of Universities convened by the then viceroy of India at Simla in 1924. The Inter-University Board (IUB) of India was subsequently formed in 1925, to promote university activities, by sharing information and cooperation in the field of education, culture, sports, and allied areas. The Board acquired a legal status with its registration in 1967 as a society under the Societies Registration Act, of 1860. In 1973, it assumed its present name "Association of Indian Universities (AIU)".

12. Hartog Commission 1929

By responding to the dissatisfaction felt by the Indian people about the Government of India Act of 1919, the Simon Commission was appointed in November 1927, to inquire into the working of the administration under the Government of India Act, 1919. About this time as agitation against the Government was going on, it was felt necessary to give due importance to education in India. The Government therefore authorised the commission to appoint a Committee to help it in preparing a report on education. So, the Commission appointed a committee in 1929 under the chairmanship of Sir Phillip Hartog to inquire into the conditions of education in India. Since he was the chairman of the Committee, the Committee was known as Hartog Committee.



The Committee recommended that:

- Equal importance should be given to the education of the boys as well as girls.
- More primary schools for the girls should be established in rural areas where convenient, girls should also be allowed to study in the schools meant for boys.
- The curriculum for girls should include home science, hygiene, music etc. in secondary schools.
- Greater attention should be paid towards the training of women so that sufficient numbers of trained lady teachers could take up the teaching jobs.
- The number of inspecting staff should also be raised.
- The education of the girls at the primary level should be gradually made compulsory.
- Priority should be given to education of women in India.

Note: It was the recommendations of Hartog Committee that resulted in the Central Advisory Board of Education (CASE) to be revived in 1935.

Following the recommendations of which of the following Committee the Central Advisory Board of Education (CA
revived in 1935? **(UGC NET 21 Mar 2023 Morning)**

S.H. Wood Committee

Sadlar Committee

Hartog Committee

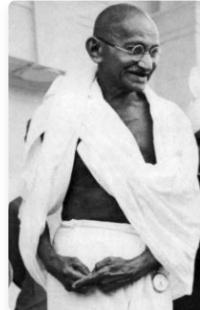
Wood-Abbot Committee

Check

Question: 1 of 1 questions

13. Wardha Scheme of Basic Education 1937

Mahatma Gandhi was fully conversant with the deplorable condition of education in the land and lack of availability of funds for education. He expressed his views on education through a series of articles in 'Harijan' on June 31, 1937, which later on developed into the Wardha Scheme of Basic Education. Indian National Congress decided to officially propose the scheme with some modifications. Therefore, in this regard 'All India National Educational Conference' was held at Wardha.



In this, 3 basic resolutions were passed:

1. Nationwide Free and Compulsory Education for up to age 7 years.
2. Mother Tongue will be the Medium of Instruction.
3. Education will be centered around manual or productive work, not just for Degree and examination. Hence it integrated the Physical Environment, Social Environment, and Craft Work.

Based upon this meeting at Wardha, a committee under the chairmanship of Dr. Zakir Hussain was formed. The Committee submitted the first extensive National Basic Education Scheme in its report in March 1938, which is known as the Wardha Scheme of Basic Education.

In 1937, Gandhiji evolved a scheme popularly known as the Wardha Scheme of Basic National Education. In order to implement the recommendation of Wardha Scheme, a committee was set up under the Chairmanship of: (UGC N 2023 Morning)

- B.G. Kher
- M.K. Gandhi
- A.K. Azad
- Zakir Hussain

Check

14. Sargent Report 1944

In 1944, Sir John Sargent, the Educational Adviser to the Government of India was asked to prepare a comprehensive report on education. The report of the committee was submitted to the Central Advisory Board of Education (CABE) in 1944. It was known as Sargent Scheme of Education. It is also known as the 'Report by the Central Advisory Board of Education'. This scheme has historical importance as it was the first attempt to develop a National System for Education in India. The report of the Committee consisted of 12 different chapters covering from pre-primary to university education. It was a full-fledged educational plan for the future educational reconstruction in India. The report diagnosed every problem critically and gave definite and clear-cut solutions. It deals with almost all types of education for all classes of people in India.

Given below are two statements: **(UGC NET 29 Oct 2022 Morning)**

Statement I: The recommendations of the Radhakrishnan Commission in 1949 resemble those of Calcutta University Commission in 1917.

Statement II: The recommendations of the Mudaliar Commission in 1953 resemble those of John Sargent's post-war Educational Development Plan in 1944.

- Statement I is true but Statement II is false.
- Both Statement I and Statement II are false.
- Statement I is false but Statement II is true.
- Both Statement I and Statement II are true.

Check

15. Sarkar Committee 1945

Sir Nalini Ranjan Sarkar Committee, set up in 1945, recommended that at least four Higher Technical Institutes on the lines of Massachusetts Institute of Technology, U.S.A. should be established in the envisioning future of the Indian Eastern, Western, Northern and Southern regions of the country. Accordingly, the first IIT was established at Kharagpur, followed by Mumbai, Madras, Kanpur and Delhi.

According to the recommendation of Sarkar Committee (1945), higher technical institutes were formed based on the four regions of India. **(UGC NET 04 Mar 2023 Evening)**

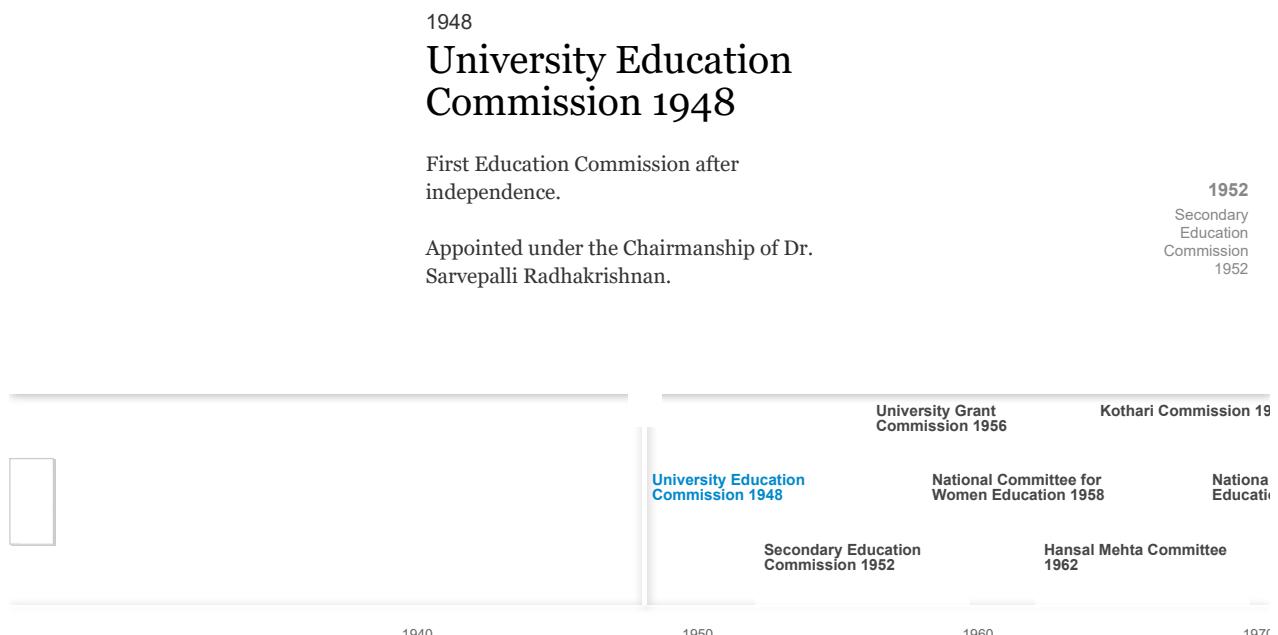
- Massachusetts Institute of Technology, USA
- Max-Planck Institute, Germany
- California Institute of Technology, USA
- Imperial College of Science and Technology, UK

Check

1. Evolution of Higher Education - Post-Independence

Following India's independence, the government initiated numerous measures to enhance education. The timeline below illustrates the evolution of various activities in higher education, spanning from 1947 to the present day.

You may scroll horizontally to view all the events, and subsequently, we'll discuss each of these events individually.



1. Match the following. (**UGC NET 23 Oct 2022 Morning**)

List I (Commissions)

- A. University Education Commission 1948
- B. Secondary Education Commission 1952
- C. Education Commission 1964
- D. National Knowledge Commission 2005

List II (Chairperson)

- I. Dr. Sam Pitroda
- II. Dr. Sarvepalli Radhakrishnan
- III. Dr. D.S. Kothari
- IV. Dr. Lakshmanaswami Mudaliar

A-III, B-I, C-II, D-IV

A-IV, B-III, C-I, D-II

A-I, B-II, C-IV, D-III

A-II, B-IV, C-III, D-I

Check

Question: 1 of 2 questions

2. University Education Commission 1948

After independence, the first significant step taken by the Government of India in the field of education was the appointment of the "University Education Commission" in 1948 under the Chairmanship of **Dr. Sarvepalli Radhakrishnan**, a distinguished scholar and former vice-chancellor of Banaras Hindu University and who became the second President of India.



The Commission was appointed by the Government of India to go into the problems and prospects of Indian University Education and to suggest improvements and extensions that might be considered desirable to suit the present and future requirements of the country. The Commission was appointed in November 1948, and it submitted its report in August 1949. It is also known as 'Radhakrishnan Commission'. The constitution of Commission was recommended by the Inter-University Board of Education (IUBE) and Central Advisory Board of Education (CABE).

1. Which of the following recommendations were put forward by University Education Commission appointed after independence by the Indian Government concerning medical education in India? (**UGC NET 04 Mar 2023 Mornir**)

- A. Medical colleges should admit a maximum number of hundred students.
- B. History of medicine with special reference to Indian systems should be taught in the first-degree course in med
- C. More importance should be attached to public health, Engineering and Nursing.
- D. There should be provision of ten beds per student admitted in the medical college.

B, C and D only

A and B only

A, B, C and D

B and C only

Check

Question: 1 of 4 questions

3. Secondary Education Commission 1952

The Secondary Education Commission was appointed under the chairmanship of Dr. L.S. Mudaliar on September 23, 1952. So, it is popularly known as Mudaliar Commission. The commission gave important recommendations with regard to the aims of secondary education and the principles of curriculum construction. The main aim of secondary education was to produce perfect citizens who may provide leadership and who are self-reliant, obedient and disciplined.

1. Which one of the following groups of commission on education has been chronologically in an order of year in which they were constituted? **(UGC NET 5 Dec 2019 Evening)**

- Radhakrishnan Commission, Kothari Commission, Mudaliar Commission
- Mudaliar Commission, Kothari Commission, Radhakrishnan Commission
- Radhakrishnan Commission, Mudaliar Commission, Kothari Commission
- Kothari Commission, Mudaliar Commission, Radhakrishnan Commission

 Check

Question: 1 of 3 questions

4. University Grants Commission 1956

Initially, the University Grant Committee was first formed in 1945 to oversee the work of the 3 Central Universities of Aligarh, Banaras, and Delhi. Its responsibility was extended in 1947 to cover all Indian universities.



In August 1949 a recommendation was made to reconstitute the UGC along similar lines to the University Grants Committee of the United Kingdom. This recommendation was made by the University Education Commission of 1948-1949. In 1952 the government decided that all grants to universities and higher learning institutions should be handled by the UGC. Subsequently, an inauguration was held on 28 December 1953 by Maulana Abul Kalam Azad, the Minister of Education, Natural Resources and Scientific Research.

In November 1956, the UGC became a statutory body upon the passing of the "University Grants Commission Act, 1956" by the Indian Parliament.

The University Grants Commission was constituted on the recommendation of which of the following? (**UGC NET 2022 Morning**)

Kothari Commission

Radhakrishnan Commission

Sargent Commission

Mudaliar Commission

Check

5. Hansal Mehta Committee 1962

In 1962, the National Council on Women's Education (*constituted in 1958 with Durgabai Deshmukh as Chairperson*) created the Hansa Mehta Committee to recommend steps to improve women's education. One of the major recommendations of the Committee is that at the primary school level, no distinction should be made in the curricula for boys and girls.

Other Recommendations includes:

- expansion of educational facilities,
- appointment of female teachers along with male teachers in secondary schools and colleges, and
- home science and vocational courses to be introduced for boys and girls.

1. Who among the following was the Chairperson of the Committee setup by the National Council for Women Edu 1962 to examine the differentiation of curriculum for boys and girls at all stages of education? **(UGC NET 10 Oct : Evening)**

Margaret Cousins

Durgabhai Deshmukh

Bhaktavatsalam

Hansa Mehta

Check

Question: 1 of 2 questions

6. Kothari Commission 1964-66

The Indian Education Commission 1964-66 was appointed by the Government of India in 1964. Dr. D. S. Kothari was appointed as the Chairman of the commission. It is also called Kothari Commission. The Commission submitted its report in 1966. The report of the commission has been entitled 'education and national development'. The Commission is considered as the first one in the post-independent India has paid attention all the levels of education.

The programmes of educational reconstructions proposed in this Report fall into 3 broad categories:

1. Internal transformation of the educational system so as to relate it to the life, needs and aspirations of the nation.
2. Qualitative improvement of education so that the standards achieved are adequate, keeping continually rising and, at least in a few sectors become internationally comparable; and
3. Expansion of educational facilities broadly on the basis of man - power needs and with an accent on equalization of educational opportunities.

Recommendations

Some important recommendations of the Kothari Commission were:

- The Commission proposed a common school system that would provide equal educational opportunities to all children, regardless of their socio-economic background.
- The Commission recommended free and compulsory education for children up to the age of 14 to ensure universal access to basic education.
- Three language formula of Kothari Commission was suggested. Students in schools should learn three languages: the mother tongue or regional language, the official language of the state, and English.
- Recommended standardization of the educational system based on 10+2+3 pattern throughout the country.
- Establishment of clusters of advanced centres in major universities.
- Establishment of six major universities.
- Improving the quality and content of lecturing.

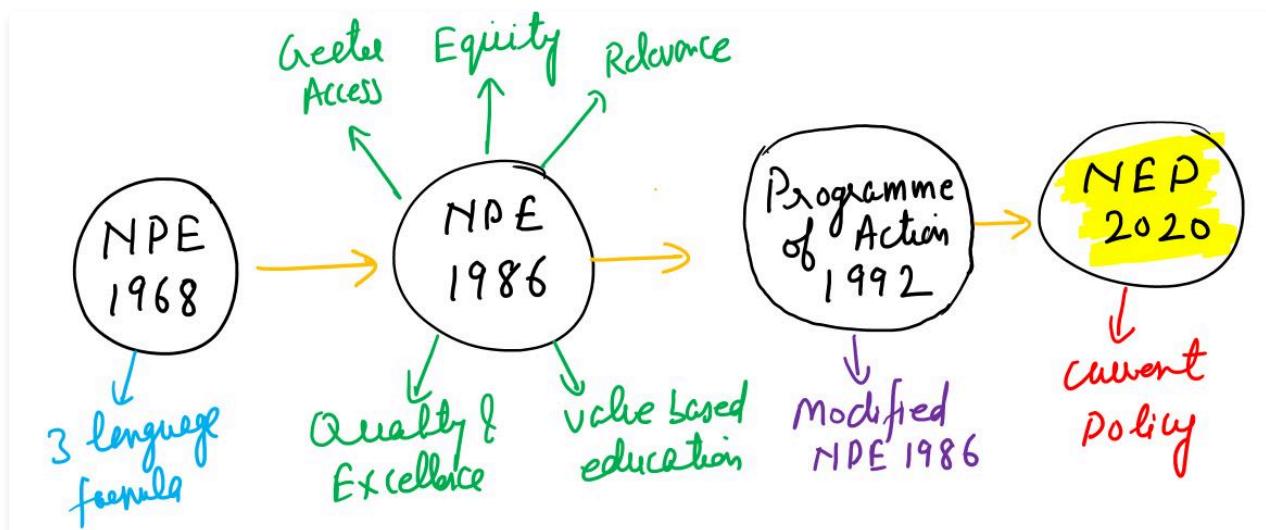
1. Which of the following education commissions of India noted that - "It is obvious that if higher education is not improved, our administration and technical progress, our intellectual standards and social advance, will all be most handicapped"? (**UGC NET 06 Mar 2023 Morning**)

- University Education Commission of 1948
- Kothari Commission
- Hunter Commission
- Radhakrishnan Commission

Check

Question: 1 of 4 questions

7. National Policy on Education 1968 and 1986



- > National Policy on Education in 1968
- > National Policy of Education of 1986
- > National Programme of Action of 1992

8. National Knowledge Commission 2005

The National Knowledge Commission (in year 2005) was an Indian think-tank charged with considering possible policies that might sharpen India's comparative advantage in the knowledge-intensive service sectors. It was constituted on 13 June 2005. In particular, the Commission was to advise the Prime Minister's Office on policy related to education, research institutes and reforms needed to make India competitive in the knowledge economy. The chairman was Sam Pitroda. The Commission submitted its report in 2009. It was a high-level advisory body to the Prime Minister of India.

› **Terms of Reference**

› **Recommendations**

1. Given below are two statements: **(UGC NET 14 Mar 2023 Evening)**

Statement I: The Indian universities to reach global standards need sustained support for programmes in research development.

Statement II: The 'knowledge economy', as envisaged by the Knowledge Commission, does not need government involvement in higher education.

- Both Statement I and Statement II are false.
 - Statement I is true but Statement II is false.
 - Both Statement I and Statement II are true.
 - Statement I is false but Statement II is true.
-

Check

Question: 1 of 2 questions

9. Right to Education 2009

The Constitution (86th Amendment) Act, 2002 inserted Article 21-A in the Constitution of India to provide free and compulsory education of all children in the age group of 6 to 14 years as a Fundamental Right in such a manner as the State may, by law, determine.



The Right of Children to Free and Compulsory Education (RTE) Act, 2009, which represents the consequential legislation envisaged under Article 21-A, means that every child has a right to full time elementary education of satisfactory and equitable quality in a formal school which satisfies certain essential norms and standards. The Act came into effect on 1 April 2010.

1. Background

- > **T.S.R. Subramanian Committee**
- > **Kasturirangan Committee – Draft NEP**

The Government finally approved the National Education Policy, 2020 in July 2020. We will study NEP 2020 in detail.

1. Which among the following are the main thrusts of the NEP-2020 regarding institutional restructuring and consolidation?
(UGC NET 29 Nov 2021 Evening)

1. A rigid separation of discipline, with early specialization and streaming of students into narrow areas of study.
2. Developing a spectrum of institutions with a focus on research only.
3. To establish stage-wise mechanism for granting graded autonomy to colleges
4. Developing vibrant communities of scholars, breaking down harmful silos, enable students in disciplines including creative and sports.
5. To end the fragmentation by transforming higher education institutions into large multidisciplinary universities.

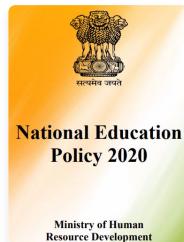
- 1, 4 and 5 only
- 1, 2 and 3 only
- 3, 4 and 5 only
- 2, 3 and 4 only

Check

Question: 1 of 2 questions

2. NEP 2020 - Introduction

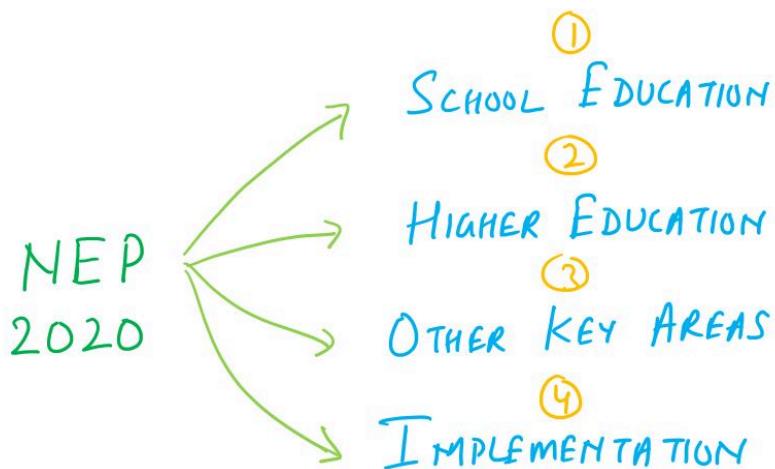
The Government approved the National Education Policy 2020 in July 2020. The new policy aims to pave way for transformational reforms in school and higher education systems in the country.



This Policy proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st century education, including SDG4, while building upon India's traditions and value systems.

The Vision of the New Education Policy 2020:

- An education system that contributes to an equitable and vibrant knowledge society, by providing high-quality education to all.
- Develops a deep sense of respect towards fundamental rights, duties and Constitutional values, bonding with one's country, and a conscious awareness of one's role and responsibilities in a changing world.
- Instils skills, values, and dispositions that support responsible commitment to human rights, sustainable development and living, and global well-being, thereby reflecting a truly global citizen.



The NEP 2020 document is divided into 4 parts:

1. School Education
2. Higher Education
3. Other Key Area of Focus
4. Making it Happen (implementation related)

1. Given below are two statements: (UGC NET 02 Mar 2023 Morning)

Statement I: According to the National Education Policy document, the teacher must be the locus of basic reforms country's educational reforms.

Statement II: Historically marginalized or the disadvantaged student sections of society should get paid quality ed irrespective of their place of residence.

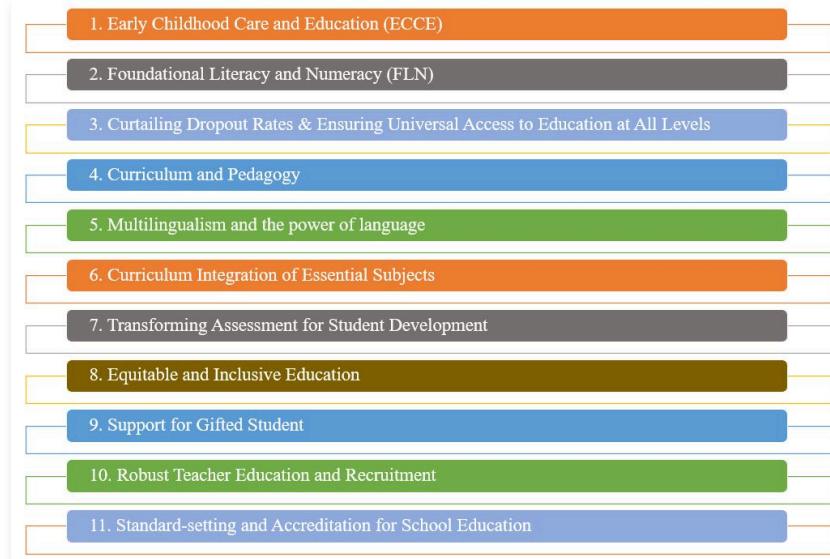
- Statement I is true but Statement II is false.
- Statement I is false but Statement II is true.
- Both Statement I and Statement II are true.
- Both Statement I and Statement II are false.

Check

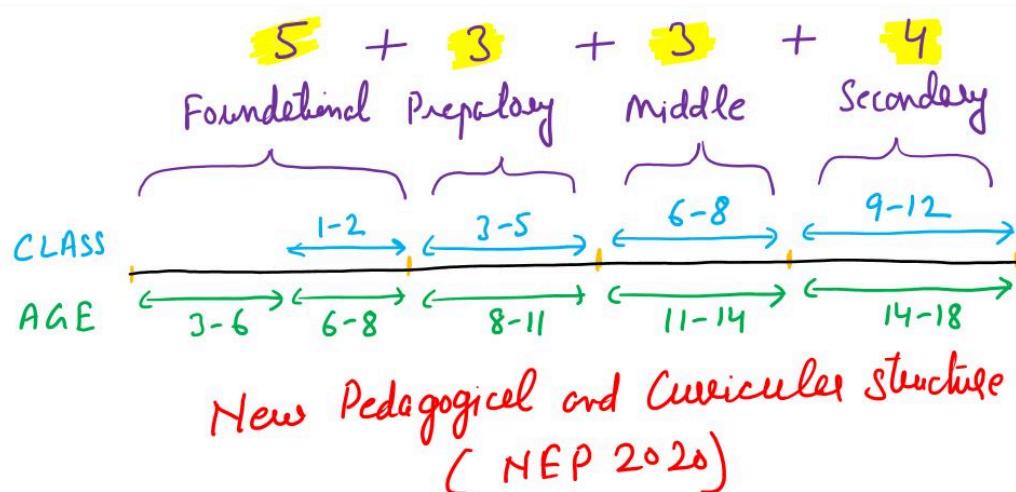
Question: 1 of 2 questions

3. Part I: School Education

The first part of the National Education Policy (NEP 2020) covers the "School Education". The recommendations are further categorized into 11 sub sections.



- > 1. Early Childhood Care and Education (ECCE)
- > 2. Foundational Literacy and Numeracy (FLN)
- > 3. Curtailing Dropout Rates and Ensuring Universal Access to Education at All Levels
- > 4. Curriculum and Pedagogy



- > **5. Multilingualism and the power of language**
- > **6. Curriculum Integration of Essential Subjects**
- > **7. Transforming Assessment for Student Development**
- > **8. Equitable and Inclusive Education**
- > **9. Support for Gifted Student**
- > **10. Robust Teacher Education and Recruitment**
- > **11. Standard-setting and Accreditation for School Education**

1. As per NEP 2020 Gross Enrolment Ratio (GER) is sought to be achieved to the extent of 50% by: (**UGC NET 0 2023 Evening**)

- 2035
- 2040
- 2030
- 2047

Check

Question: 1 of 2 questions

4. Part II: Higher Education

Vision for Higher Education

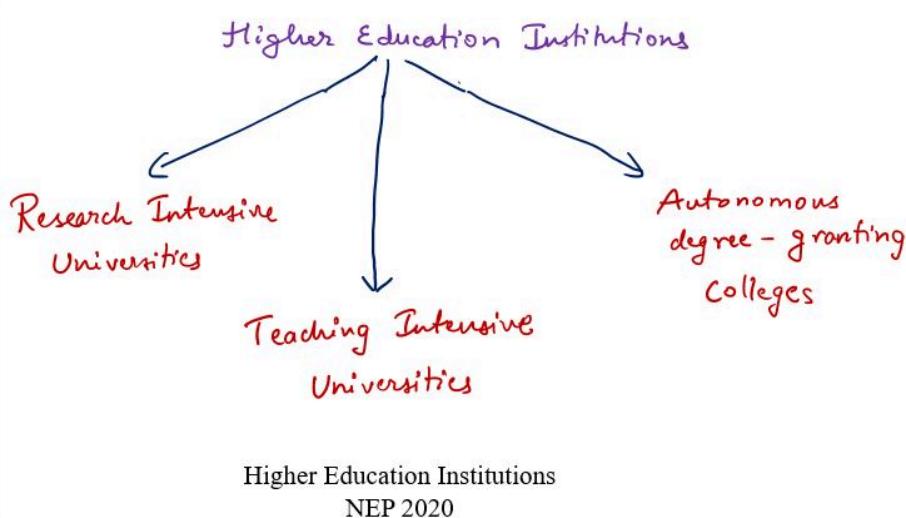
The NEP 2020 vision includes the following key changes to the current system w.r.t. to Higher Education:

- moving towards a higher educational system consisting of large, multidisciplinary universities and colleges, with at least one in or near every district, and with more HEIs across India that offer a medium of instruction or programs in local/Indian languages.
- moving towards faculty and institutional autonomy.
- revamping curriculum, pedagogy, assessment, and student support for enhanced student experiences;
- reaffirming the integrity of faculty and institutional leadership positions through merit appointments and career progression.;
- establishment of a National Research Foundation to fund outstanding peer-reviewed research and to actively seed research in universities and colleges;
- governance of HEIs by highly qualified independent boards having academic and administrative autonomy;
- “*light but tight*” regulation by a single regulator for higher education;
- increased access, equity, and inclusion through a range of measures, including scholarships by private/ philanthropic universities for SEDG students, and more ODL programmes.

The NEP 2020 states that the vision for higher education involves redefining the concept/perception of a higher education institution (HEI) which includes university or college.

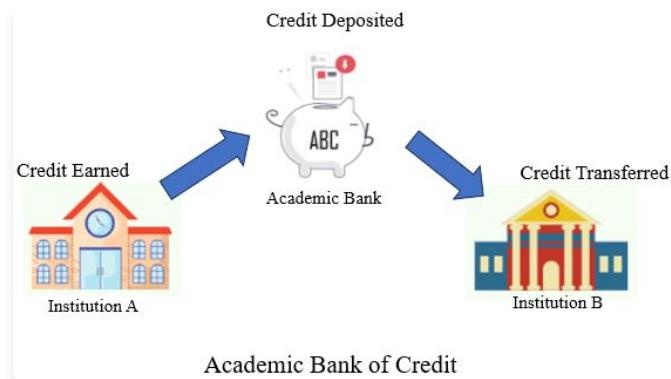
- A *University* is envisioned as a diverse institution that provides both undergraduate and graduate programs, emphasizing high-quality teaching, research, and community engagement. This definition allows for a range of institutions, including *Research-intensive Universities* that prioritize both teaching and research and *Teaching-intensive Universities* that prioritize teaching with significant research involvement.
- On the other hand, an *Autonomous degree-granting College (AC)* is described as a large, multidisciplinary institution primarily focused on undergraduate education but not limited to it. It may also engage in other activities and is typically smaller than a traditional university.

These 3 broad types of institutions are not in any natural way a rigid, exclusionary categorization, but are along a continuum.

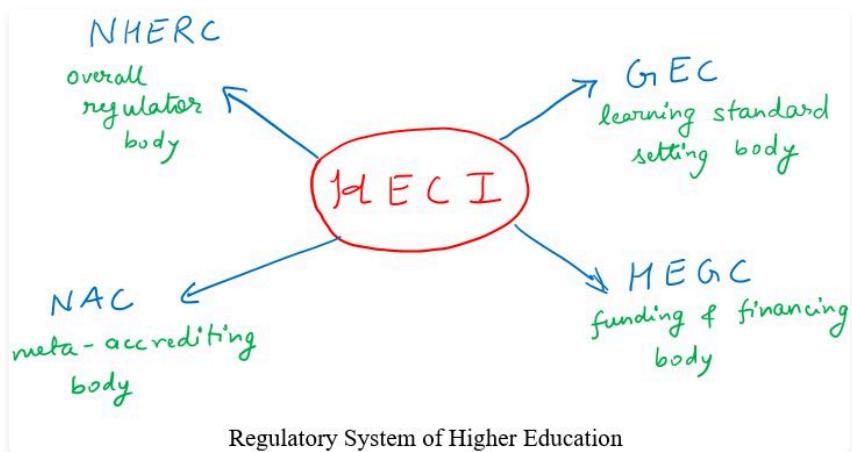


Key Recommendations are given below.

- > **1. Institutional Restructuring & Consolidation**
- > **2. Holistic Multidisciplinary Education**



- > **3. Optimal Learning Environments and Support for Students**
- > **4. Internalization of HEIs**
- > **5. Teacher Education**
- > **6. Vocational Education**
- > **7. National Research Foundation**
- > **8. Regulatory System of Higher Education**



- > **9. Equity and Inclusion in Higher Education**

1. The Aim of NEP 2020 is to increase the Gross Enrolment Ratio in higher education including Vocational education from 26.3 % in (2018) to: **(UGC NET 11 Mar 2023 Morning)**

- 40% by 2030
- 60 % by 2030
- 50% by 2035
- 35% by 2030

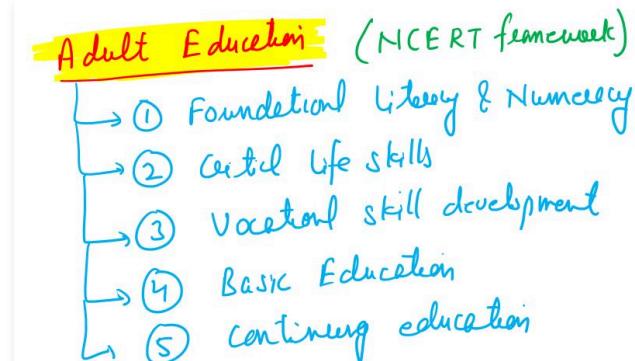
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Question: 1 of 7 questions

5. Part III: Other Key Area of Focus

The Indian National Education Policy encompasses diverse aspects of education. It focuses on achieving youth and adult literacy, promoting Indian languages, arts, and culture, and establishing the National Educational Technology Forum (NETF) for technological advancements. Additionally, it advocates for increased public investment, philanthropic support, common entrance exams, and stringent quality standards across educational institutions.

> 1. Adult Education



> 2. Promotion of Indian Languages, Arts, and Culture

> 3. National Educational Technology Forum (NETF)

> 4. Miscellaneous

1. According to NEP 2020, which of the following will not be the function of National Educational Technology Forum (UGC NET 21 Mar 2023 Morning)

- To articulate new directions for research and innovation in educational technology.
- To build intellectual and institutional capacities in educational technology.
- To envision strategic thrust areas in educational technology.
- To provide grants for setting up educational technology centres in central government institutions.

Check

Question: 1 of 3 questions

1. Oriental Studies

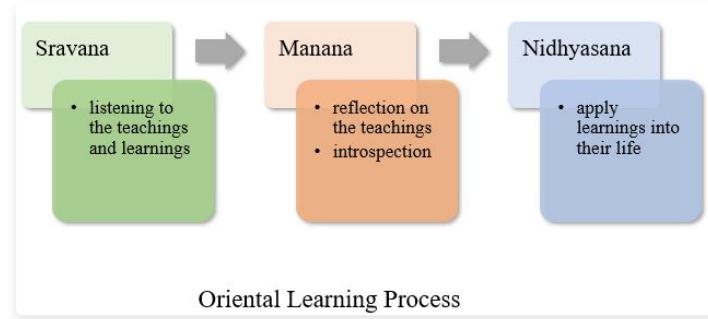
Oriental studies are the academic field that studies Near Eastern and Far Eastern societies and cultures, languages, peoples, history and archaeology. In recent years, the subject has often been turned into the newer terms of Middle Eastern studies and Asian studies. The term arose in the context of colonial rule in the 18th and 19th centuries. Encouraged by the increased interest and intellectual energy afforded by the era there was a wave of scholarship in this period which established the study of South Asian traditions in the Western academy.



In relation to India, the specific term that is used is "*Indology*" which refers to the academic study of India, its people, culture, languages and literature. It is now more likely to be referred to as Indian or South Asian studies within Western academies. It is antique in its origin owing its specific origin to 1784 by Sir William Jones of Calcutta. It was in the year 1987 that Sir William Jones founded the Asiatic Society of Bengal where he introduced the 2 departments of Sanskrit and Indology. It is the beginning of Indology in India, which has been followed by several other scholars.

Indology provides glimpses of traditional modes of education in India of ancient times. The foundation of this knowledge transmission rested on an oral tradition, where wisdom was passed down from one generation to the next through a structured process of orthodox education.

This process of oriental learning encompassed 3 fundamental stages:



> 1. Sravana

> 2. Manana

> 3. Nidhyasana

Some of the subjects and skills imparted during Oriental Learning in India are given below.

- Religious Texts (*Gita, Puranas, Upanishads etc*)
- Philosophies of different philosophers like Shankaracharya, Ramanujan etc.
- Mathematics (*Notable includes Aryabhata*)
- Medicine (*Sushruta taught Surgical Techniques*)
- Specific Skills like Spinning, Weaving, Pottery Making, Bead Making, Handicrafts, Seal Making etc.
- Others include Sanskrit Literature, Ayurveda, Yoga, Classical Dance and Music etc.

The work of Oriental Institutes consisted chiefly in collecting and collating rare manuscripts in the oriental languages like Prākṛt and Sanskrit dealing with religion, philosophy, literature, grammar, arts and sciences, editing them and publishing them with or without translations and explanatory notes.

Oriental Institutes

Some of the major Oriental Institutes in India are listed below:

- Adyar Library and Research Center, Chennai
- Asiatic Society, Kolkata
- Bhandarkar Oriental Research Institute, Pune
- Government Oriental Manuscripts Library and Research Centre, Chennai
- Oriental Research Institute, Mysuru
- Sanskrit Sahitya Parishat, Kolkata

The education imported through institutions of higher learning in India such as 'Sanskrit Vidyapith' is an example of **Conventional Learning**.
NET 17 Oct 2020 Evening)

- Value Education Programmes
- Oriental Learning Programmes
- Non-conventional learning programmes
- Professional education programmes

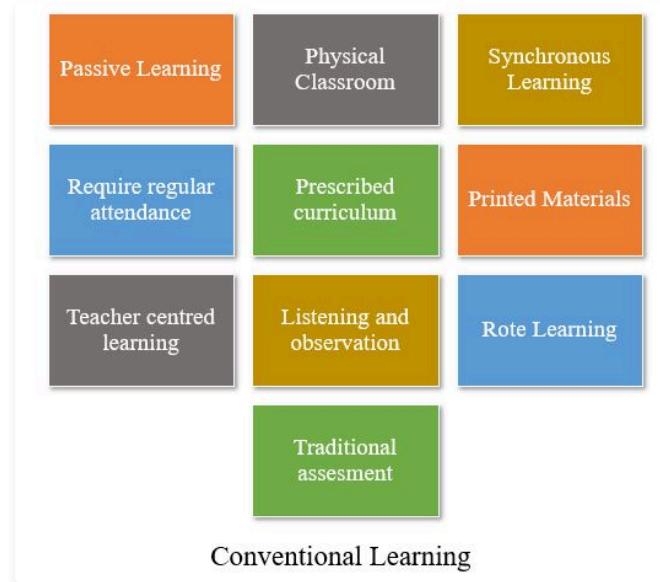
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2. Conventional vs. Non-Conventional Learning

Conventional and Non-Conventional learning represent different approaches to teaching and acquiring knowledge, each with its unique characteristics, advantages, and challenges. Let us discuss both one by one.

2. Conventional vs. Non-Conventional Learning

Conventional learning, which is a traditional or formal education, has been the prevailing model for centuries. It is characterized by structured classrooms, standardized curricula, textbooks, and typically involves face-to-face instruction. Conventional learning emphasizes teacher-led pedagogy, where educators impart knowledge, and students absorb and regurgitate information through lectures, examinations, and assignments. It is the educational model commonly associated with schools, colleges, and universities and is often seen as a structured and systematic approach to learning.



The characteristics of conventional learning are:

- Passive Learning (Lecture Method)
- Physical Classroom
- Synchronous Learning (Teacher Student present at the same time and at the same place)
- Require regular attendance
- Prescribed curriculum
- Printed Materials
- Teacher centred learning (Emphasis on Teaching rather than Learning)
- Student learn through listening and observation
- Rote Learning
- Student assessment through traditional way (written exams)

1. Given below are two statements: (UGC NET 03 Mar 2023 Evening)

Statement I: Conventional education uses traditional teaching-learning methods in which teachers and learners aim by interacting in a face-to-face manner in the classroom.

Statement II: In active learning the timely feedback from either the instructor or fellow students is not critical to the process.

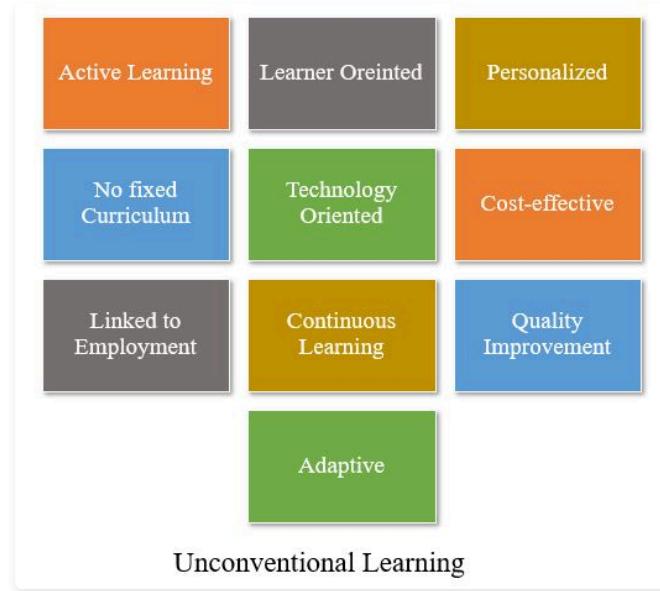
- Statement I is true but Statement II is false
- Both Statement I and Statement II are true.
- Statement I is false but Statement II is true
- Both Statement I and Statement II are false

Check

Question: 1 of 4 questions

2. Conventional vs. Non-Conventional Learning

Non-Conventional learning, on the other hand, represents a departure from the established norms of education. It is a more flexible and dynamic approach that often leverages technology and experiential methods to foster learning. Non-Conventional learning can take various forms, such as online courses, distance education, self-directed learning, and experiential learning. It encourages students to take control of their education, explore diverse sources of information, and engage in collaborative and project-based learning. This approach values real-world application, critical thinking, and creativity, often moving away from rigid curricular boundaries.



The characteristics of non-conventional learning are:

- Learners oriented (Students acquire knowledge as per their needs and preferences)
- Personalized
- No fixed Curriculum
- Technology Oriented
- Cost-effective
- Linked to Environment
- Continuous Learning
- Quality Improvement
- Adaptive

1. Which of the following are the characteristics of non-conventional learning? (**UGC NET 14 Mar 2023 Morning**)

- A. Controlled and assessed by the teacher
B. Learner oriental
C. Based on lecture method
D. No fixed curriculum
E. Cost-effective

A, C and D only

A, C and E only

B and D only

B, D and E only

Check

1. UGC Act 1956



The University Grants Commission (UGC) came into existence on 28th December 1953 and became a statutory body of the Government of India by an Act of Parliament in 1956, for the coordination, determination, and maintenance of standards of university education. As per the Act, the UGC shall be a body corporate having perpetual succession and a common seal and shall by the said name sue and be sued.

The UGC has established 7 Regional Offices in Hyderabad, Pune, Bhopal, Kolkata, Guwahati, Bangalore, and Delhi.

1. Given below are two statements: **(UGC NET 22 Mar 2023 Evening)**

Statement I: UGC is a Central Government organization established by an Act of Parliament in 1956.

Statement II: UGC has established five regional centres in order to ensure proper functioning.

- Both Statement I and Statement II are incorrect.
- Both Statement I and Statement II are correct.
- Statement I is incorrect but statement II is correct.
- Statement I is correct but Statement II is incorrect.

Check

Question: 1 of 3 questions

1. UGC Act 1956

Important definitions under the UGC Act 1956 are discussed below.

The Act differentiates between 'University' and 'deemed to be University' as given below.

- **University:** It defines a university as established or incorporated under a Central Act or a State Act, and includes any such institution as may, in consultation with the University concerned, be recognised by the Commission.
- **Deemed to be a University:** The Central Government, on the advice of the Commission, can declare in the Official Gazette that any higher education institution (other than a University) shall be deemed to be a University under this Act. Once such a declaration is made, all the rules and regulations of the UGC Act will apply to that institution as if it were a university.

The Act provides for the affiliation of Colleges with the University. **College** as any institution means:

- which provides for a course of study for obtaining any degree from a university, and
- which is recognized as competent to provide for such a course of study by the university and
- which presents students undergoing such course of study for the examination for the award of degree.

Affiliation, in relation to a college, means:

- recognition of such college by a university,
- association of such college with a university, and
- granted access to such college to the privileges of a university.

Note: The right of conferring or granting degrees is exercised only by:

- a university established or incorporated by or under a Central Act or a State Act or
- an institution deemed to be a university or
- an institution specially empowered by an Act of Parliament to confer or grant degrees (like IITs, IIMs)

1. Given below are two statements: (**UGC NET 11 Mar 2023 Evening**)

Statement I: The purpose of higher education is to promote critical and creative thinking abilities among students.

Statement II: Deemed Universities can design their own syllabus and course work but cannot grant degrees.

- Both Statement I and Statement II are true.
- Statement I is true but Statement II is false.
- Statement I is false but Statement H is true.
- Both Statement I and Statement II are false.

Check

Question: 1 of 4 questions

1. UGC Act 1956

The UGC's mandate includes:

- Promoting and coordinating university education.
- Determining and maintaining standards of teaching, examination and research in universities.
- Framing regulations on minimum standards of education.
- Monitoring developments in the field of collegiate and university education.
- Disbursing grants to the universities and colleges.
- Serving as a vital link between the Union and state governments and institutions of higher learning.
- Advising the Central and State governments on improvement of university education.

1. Which of the following come under the mandate of the University Grants Commission (UGC)? (**UGC NET 11 Nov Evening**)

- (i) Promotion and coordination of University education.
- (ii) Determining and monitoring standards of teaching, examination and research in Universities.
- (iii) Organizing continuous professional development Programmes for college and University teachers.
- (iv) Framing regulations on minimum standards of education.
- (v) Disbursing and regulating grants to the universities and colleges.

(i), (ii), (iv), (v) only

(i), (iii), (iv), (v) only

(ii), (iii), (iv), (v) only

(i), (ii), (iii), (iv) only

Check

Question: 1 of 3 questions

2. Types of Universities

The main categories of University in India are given below:

- > **1. Central University**
- > **2. State University**
- > **3. Private University**
- > **4. Deemed-to-be University**

1. A deemed to be University: (UGC NET 24 Dec 2021 Evening)

- A. must come through a gazette notification of the Central Government on the advice of the Commission.
B. has autonomy to run its own courses.
C. can use the word 'University'.
D. is a Central University.
E. is a State University.

- B and C only
 D and E only
 C and D only
 A and B only

Check

Question: 1 of 4 questions

2. Types of Universities

> **Composition**

> **Term**

> **Funding**

Most of the Universities in India are funded by

- Private bodies and Individuals
- University Grants Commission
- Central Government
- State Governments

Check

Question: 1 of 1 questions

3. Central Universities in India

As reported till Nov 2025, there are 57 Central Universities in India.

> **Andhra Pradesh**

> **Arunachal Pradesh**

> **Assam**

> **Bihar**

> **Chhattisgarh**

> **Delhi**

> **Gujarat**

> **Haryana**

> **Himachal Pradesh**

> **Jammu & Kashmir**

> **Jharkhand**

> **Karnataka**

> **Kerala**

> **Ladakh**

> **Madhya Pradesh**

> **Maharashtra**

> **Manipur**

> **Mizoram**

> **Meghalaya**

> **Nagaland**

> **Odisha**

> **Puducherry**

> **Punjab**

> **Rajasthan**

> **Sikkim**

> **Tamil Nadu**

> **Telangana**

> **Tripura**

> **Uttarakhand**

> **Uttar Pradesh**

> **West Bengal**

Note: Out of 57 listed above, 11 universities are NOT funded by UGC, as these are directly funded by the Government of India:

1. Bihar Nalanda University, Rajgir, Dist. Nalanda
2. Dr. Rajendra Prasad Central Agricultural University, Samastipur
3. South Asian University, New Delhi
4. Indira Gandhi National Open University, New Delhi
5. Gujarat Gati Shakti Vishwavidyalaya, Vadodara
6. Manipur Central Agricultural University, Imphal
7. National Sports University, Kouruk
8. Indian Maritime University, Chennai
9. Rajiv Gandhi National Aviation University, Rae Bareli
10. Rani Lakshmi Bai Central Agricultural University, Jhansi
11. Sammakka Sarakka Central Tribal University, Mulugu

1. Which of the following are the Central Universities of India? (**UGC NET 05 Mar 2023 Morning**)

- A. Nagaland University, Nagaland
- B. Acharya Nagarjuna University, Andhra Pradesh
- C. Sikkim University, Sikkim
- D. Manipur University, Manipur
- E. Guwahati University, Assam

C and D only

A, B, C and E only

D and E only

C, D and E only

Check

Question: 1 of 4 questions

4. New Universities

In Dec 2023, the Central Universities Act, 2009 was amended to set up **Sammakka Sarakka Central Tribal University** in Telangana.

In 2022, the Central Universities Act, 2009 was amended to set up **Sindhu Central University** in the Union territory of Ladakh.

In 2022, the Central Universities (Amendment) Act, 2023 converted the National Rail and Transportation Institute, Vadodara (a deemed university) to the Gati Shakti Vishwavidyalaya, which will be a central university.

In March 2022, **Rashtriya Raksha University**, in Gandhinagar, Gujarat was established by the Indian Parliament Act as an Institution of National Importance of India, pioneering National Security and Police University of India. The University aims to become an academic-research-training ecosystem for national security and police.

In March 2020, the Central Sanskrit Universities Act, 2020 was passed by Parliament. It is intended to convert following India's 3 deemed-to-be Sanskrit universities into Central Sanskrit Universities:

- Rashtriya Sanskrit Sansthan, New Delhi
- Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi
- Rashtriya Sanskrit Vidyapeeth, Tirupati

The National Forensic Science University (NFSU) Act, 2020 was passed by the Parliament in September 2020 which seeks to establish the National Forensic Sciences University. The Act establishes the Gujarat Forensic Sciences University, Gandhinagar and the Lok Nayak Jayaprakash Narayan National Institute of Criminology and Forensic Sciences, New Delhi, as NFSU at Gujarat, as an institution of national importance.

In September 2023, NCERT was granted the status of deemed to be university.

- **Gati Shakti Vishwavidyalaya**
 - **Rashtriya Raksha University**
 - **Central Sanskrit Universities**
 - **National Forensic Sciences University**
-

5. Institution of National Importance

An Institution established by Act of Parliament and declared as Institution of National Importance. They serve as a pivotal player in developing highly skilled personnel within the specified region of the country/state. They are usually supported by the Government of India or even any other international institutes to develop centers of excellence in research, academics, and other such elite schools of education.

Some of the examples include Aligarh Muslim University, Indian Institute of Information Technology, Allahabad, IITs, IIMs, and AIIMS among others.

1. Match the following. (**UGC NET 14 Oct 2022 Morning**)

List I (Institutes of National Importance)

- A. National Institute of Design
- B. National Institute of Pharmaceutical Education and Research
- C. Vishvesvaraya National Institute of Technology
- D. School of Planning and Architecture

List II (Locations)

- I. Mohali
- II. Ahmedabad
- III. Vijayawada
- IV. Nagpur

- A-III, B-IV, C-II, D-I
- A-I, B-III, C-IV, D-II
- A-II, B-I, C-IV, D-III
- A-IV, B-III, C-I, -II

Check

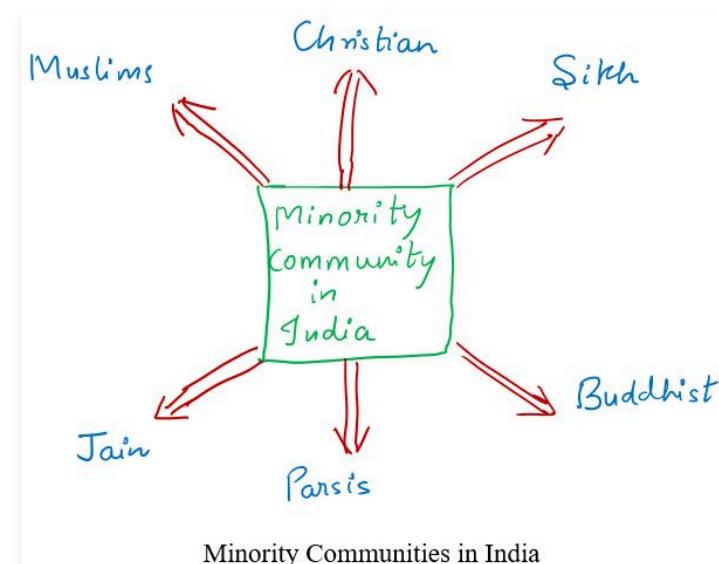
Question: 1 of 2 questions

6. Minority Institutions

As iterated by Article 30 of the Constitution of India, minority institutions are the ones that are established and administered by the religiously or linguistically minority communities, to keep alive and foster what it considers its unique and special features. Constitutionally, there are various features that differentiate a minority and a non-minority institution:

- Establishment of a minority institution is covered under the fundamental rights whereas it is not explicit in the case of other institutions.
- Minority institution reserves 50% seats for the minority community which is in contravention of Article 15 which prohibits discrimination on grounds of religion and other criteria.
- Redressal for state encroachment – minority institutions can directly approach the Supreme Court for redressal in case the state hampers its status under Article 30, whereas other institutions have to follow the normal course of legal procedure in case of such a scenario.
- Reservation for SC, ST provided under Article 15(4) cannot be forced in the case of minority educational institutions.
- Minority educational institutions are exempted from enforcing the right to education under Article 21A.

The National Commission for Minorities Educational Institutions (NCMEI) gives minority status to educational institutions on the basis of 6 religious communities (Muslims, Christians, Sikhs, Buddhists, Zoroastrians (Parsis), and Jains) notified by the Ministry of HRD under the NCMEI Act, 2004.



The NCMEI, a quasi-judicial body, regulates the certification of minority educational institutions all over India. Its chairman should be who has been a Judge of the High Court, and 3 members are to be nominated by the Central Government.

Choose the institutions which are not authorized to confer degree according to UGC Act 1956: (**UGC NET 5 Dec : Evening**)

- (a) Institutions established under linguistic minority
- (b) Deemed to be Universities
- (c) Constituent Colleges
- (d) Affiliated Colleges

(b), (c) and (d) only

(a), (c) and (d) only

(a), (b) and (d) only

(a), (b) and (c) only

Check

7. Institute of Eminence

The Institute of Eminence Scheme was launched by UGC in 2017 with an objective to provide an enabling regulatory architecture to 10 public and 10 private Higher Educational institutions to emerge as world-class Teaching and Research institutions. The Regulatory Architecture has been provided in the form of UGC (Declaration of Government Institutions as Institutions of Eminence) Guidelines, 2017 for public Institutions and UGC (Institutions of Eminence Deemed to be Universities) Regulations, 2017 for private Institutions.

- **Criteria**
- **Autonomy**
- **Privileges**
- **Financial Assistance**
- **Selection**

As of Nov 2025, 12, including 8 public and 4 private institutes, have been granted the IoE status by the Government of India.

The list of 10 institutes from the *Private Sector* is:

1. Jio Institute (Reliance Foundation), Pune (*selected under Green Field category*)
2. Birla Institute of Technology & Sciences, Pilani, Rajasthan (*notified*)
3. Manipal Academy of Higher Education, Manipal, Karnataka (*notified*)
4. Amrita Vishwa Vidyapeetham, Bangalore
5. VIT Vellore, Tamil Nadu
6. Jamia Hamdard, New Delhi
7. Kalinga Institute of Industrial Technology, Bhubaneswar
8. O.P. Jindal University, Haryana (*notified*)
9. Shiv Nadar University, Uttar Pradesh (*notified*)
10. Bharti (Satya Bharti Foundation), Delhi

The list of 10 institutes from *Public Sector* is:

1. Indian Institute of Science, Bangalore (*notified*)
2. IIT, Bombay (*notified*)
3. IIT, Delhi (*notified*)
4. IIT Madras (*notified*)
5. IIT Kharagpur(*notified*)
6. Delhi University (*notified*)
7. University of Hyderabad (*notified*)
8. Jadavpur University, Kolkata
9. Anna University, Chennai
10. BHU, Varanasi (*notified*)

1. Which of the following universities have been recognised as Institutes of Eminence? (UGC NET 08 Oct 2022 E)

- A. Banaras Hindu University
- B. Amrita Vishwa Vidyapeetham
- C. Calcutta University
- D. Central University of Hyderabad
- E. Jawaharlal Nehru University

A, B and D only

A, B, C, D only

A, B and E only

C, D and E only

Check

Question: 1 of 7 questions

Chapters 2901-3000 of 6035