

CA FINAL AFM

TEST – 02 FOREX

(30/June/2025)

Time Allowed – 2 Hours

Maximum Marks – 60

1. The question paper comprises two parts, Part I and Part II.
2. Part I comprises Case Scenario based Multiple Choice Questions (MCQs)
3. Part II comprises questions which require descriptive type answers.
4. Working note should form part of the answer. Wherever necessary, suitable assumptions may be made by the candidates and disclosed by way of note. However, in answers to Questions in Division A, working notes are not required.

PART I – Case Scenario based MCQs (18 Marks)

Write the most appropriate answer to each of the following multiple choice questions by choosing one of the four options given. All questions are compulsory.

Case Scenario 1

On 1 October 2023 Mr. X an exporter enters into a forward contract with a BNP Bank to sell US\$ 1,00,000 on 31 December 2023 at ₹ 85.40/\$. However, due to the request of the importer, Mr. X received the amount on 28 November 2023. Mr. X requested the bank the take delivery of the remittance on 30 November 2023 i.e., before due date. The inter-banking rates on 28 November 2023 was as follows:

Spot ₹ 85.22/85.27

One Month Premium 10/15

Note:

- (1) Consider 365 days in a year.
- (2) Prevailing Prime Lending Rate is 12%

Based on above case scenario, choose the most appropriate answer of the following:

- I.** The bank may accept the request of customer of delivery before due date of forward contract provided the customer is ready to bear the loss if any consisting of.....
- (a) Swap Difference
 - (b) Interest on Outlay of Fund
 - (c) Swap Difference Plus Interest on Outlay of Fund
 - (d) Fixed Charges Plus Swap Difference and Interest on Outlay of Fund
- II.** Swap Difference for US\$ 1,00,000 is.....
- (a) ₹ 5,000
 - (b) ₹ 20,000
 - (c) ₹ 18,000
 - (d) ₹ 8,000
- III.** Interest on outlay of funds shall be approximately.....
- (a) ₹ 92 payable by X
 - (b) ₹ 183 payable by X
 - (c) ₹ 183 payable by Bank
 - (d) ₹ 122 payable by Bank
- IV.** Net inflow to Mr. X is approximately.....
- (a) ₹ 85,42,183
 - (b) ₹ 85,20,000

(c) ₹ 85,19,817

(d) ₹ 85,40,000

(4 × 2 = 8 Marks)

I. (d) Fixed Charges Plus Swap Difference and Interest on Outlay of Fund

II. (b) ₹ 20,000

III. (b) ₹ 183 payable by X

IV. (c) ₹ 85,19,817

Case Scenario2

An Indian exporting firm, Rohit and Bros. exported good worth of AUD 1 million to an importer in Sydney. Rohit and Bros. are worried about likely depreciation of AUD in near future as it is likely that the export sum will be received after 3 months. Today as such as there is no derivative contract is available in AUD to hedge itself from such depreciation.

The following data is given:

Spot rate : ₹ 56.00/AUD

3 months interest rate : India : 12 per cent per annum

: Australia : 5 per cent per annum

From the information given above, choose the correct answer to the following questions:

V. hedging technique can be used Rohit and Bros. to hedge itself against the risk of depreciation of AUD.

(a) Forward Contract

(b) Future Contract

(c) Option Contract

(d) Money Market Hedge

VI. Suppose if Rohit and Bros. want to borrow some amount in AUD in such a manner that the receivable amount can be used to repay the amount borrowed along with interest. The amount to be borrowed by Rohit and Bros. shall be approximately.....

(a) AUD 1 million

(b) AUD 9,87,654

(c) ₹ 5,53,08,624

(d) ₹ 5,69,67,882

VII. Suppose if Rohit and Bros. borrows a designated amount in AUD for 3 months in such a manner that the receivable amount can be used to repay the amount borrowed along with interest and plan to invest same amount in Indian spot market. The same amount available for investment shall be approximately.....

(a) AUD 1 million

(b) AUD 9,87,654

(c) ₹ 5,53,08,624

(d) ₹ 5,69,67,882

VIII. Suppose if Rohit and Bros. borrows a designated amount for 3 months in AUD in such a manner that the receivable amount can be used to repay the amount borrowed along with interest. Further he plans to invest same amount in Indian spot market. The amount obtained after 3 months of investment shall be approximately.....

(a) AUD 1 Million

(b) AUD 9,87,654

(c) ₹ 5,53,08,624

(d) ₹ 5,69,67,883

IX. Suppose if Interest Rate Parity theory is held between INR and AUD, then forward rate between INR and AUD for 6 month should be.....

(a) ₹ 51.54/AUD

(b) ₹ 57.91/AUD

(c) ₹ 52.50/AUD

(d) ₹ 59.73/AUD

(5 × 2 = 10 Marks)

I. (d) Money Market Hedge

II. (b) AUD 9,87,654

III. (c) ₹ 5,53,08,624

IV. (d) ₹ 5,69,67,883

V. (b) ₹ 57.91/AUD

PART II – Descriptive Questions (42 Marks)

Question No. 1 is compulsory.

Attempt any 2 questions out of the remaining 3 questions.

Question – 01

(a) Telereal Trillium, a UK Company is in the process of negotiating an order amounting €5.5 million with a large German retailer on 6 month's credit. If successful, this will be first time for Telereal Trillium has exported goods into the highly competitive German Market. The Telereal Trillium is considering following 3 alternatives for managing the transaction risk before the order is finalized.

- (i) Mr. Grand, the Marketing head has suggested that in order to remove transaction risk completely Telereal Trillium should invoice the German firm in Sterling using the current €/£ average spot rate to calculate the invoice amount.
- (ii) Mr. John, CE is doubtful about Mr. Grand's proposal and suggested an alternative of invoicing the German firm in € and using a forward exchange contract to hedge the transaction risk.
- (iii) Ms. Royce, CFO is agreed with the proposal of Mr. John to invoice the German first in €, but she is of opinion that Telereal Trillium should use sufficient 6 month sterling future contracts (to the nearest whole number) to hedge the transaction risk.

Following data is available

Spot Rate	€1.1980 - €1.1990/£
6 months forward points Cents.	0.60 - 0.55 Euro
6 month future contract is currently trading at €	1.1943/£
6 month future contract size is	£70,500
After 6 month Spot rate and future rate	€ 1.1873/£

You are required to

- (a) Advise the alternative you consider to be most appropriate.
- (b) Interpret the proposal of Mr. Grand from non-financial point of view.

Note: Calculate (to the nearest £) the £ receipt.

(6 Marks)

SOLUTION:-

(a) (i) Receipt under three proposals

(a) Proposal of Mr. Grand

$$\text{Invoicing in } \pounds \text{ will produce} = \frac{\pounds 5.5 \text{ million}}{1.1985} = \pounds 45,89,070$$

(b) Proposal of Mr. John

$$\text{Forward Rate} = \pounds 1.1990 - 0.0055 = 1.1935$$

Using Forward Market hedge Sterling receipt would be

$$\frac{\pounds 5.5 \text{ million}}{1.1990} = \pounds 46,08,295$$

(c) Proposal of Ms. Royce

The equivalent sterling of the order placed based on future price

$$(\pounds 1.1943) = \frac{\pounds 5.5 \text{ million}}{1.1990} = \pounds 46,05,208 \text{ (rounded off)}$$

$$\text{Number of Contracts} = \frac{\pounds 46,05,208}{70,500} = 65 \text{ Contracts (to the nearest whole number)}$$

$$\text{Thus, } \pounds \text{ amount hedged by future contract will be} = 65 \times \pounds 70,500 = \pounds 45,82,500$$

$$\text{Buy Future at} \quad \pounds 1.1943$$

$$\text{Sell Future at} \quad \underline{\pounds 1.1873}$$

$$\underline{\pounds 0.0070}$$

$$\text{Total loss on Future Contracts} = 65 \times \pounds 70,500 \times \pounds 0.0070$$

$$= \pounds 32,078$$

After 6 months

$$\text{Amount Received} \quad \pounds 55,00,000$$

SOLUTION:

For 3 months, $r_{CAD} = 2.25\%$ and $r_{DEM} = 1.75\%$. Since the exchange rate is in CAD/DEM term the appropriate equation for Interest Rate Parity is as follows:

$$\frac{F}{S} = \frac{(1 + r_{CAD})}{(1 + r_{DEM})}$$

$$\frac{0.780}{0.775} = \frac{(1 + 0.0225)}{(1 + 0.0175)}$$

$$1.00645 \neq 1.00491$$

Since both sides are not equal, Interest Rate Parity does not hold.

(ii) Since IRP does not hold there is an arbitrage opportunity.

$$\text{Interest Differential} = 9\% - 7\% = 2\%$$

$$\text{Premium} = \frac{0.780 - 0.775}{0.775} \times 100 \times \frac{12}{3} = 2.58\%$$

Since the interest rate differential is smaller than the premium, it will be profitable to place money in Deutschmarks the currency whose 3 months interest is lower.

The following operations are carried out:

(i) Borrow CAD 1 Million at 9 per cent for 3- months;

(ii) Change this sum into DEM at the spot rate

$$= (1,000,000 / 0.775) = 1,290,323$$

(iii) Place DM 1,290,323 in the money market for 3 months to obtain a sum of DM

Principal:	1,290,323
Add: Interest @ 7% for 3 months =	22,581
Total	<u>1,312,904</u>

- (iv) Sell DEM at 3-months forward to obtain CAD
 $= (1,312,904 \times 0.780) = \text{CAD } 1,024,065$
- (v) Refund the debt taken in CAD with the interest due on it, i.e.,

	CAD
Principal	1,000,000
Add: Interest @9% for 3 months	22,500
Total	1,022,500

Net arbitrage gain = CAD 1,024,065 – CAD 1,022,500
 $= \text{CAD } 1,565$

Question – 02

(a) ATONEX Ltd., an Indian company that exports precision equipment, has a foreign receivable of EUR 25 million due in 6 months from a client in Italy. Simultaneously, the company has an upcoming payable of EUR 10 million in 6 months for importing specialized machinery from Germany.

The company is evaluating three hedging strategies to manage its net transaction exposure:

Forward Contracts : Forward rates of ₹ 97/EUR for both the receivable and payable.

Money Market Hedge :

Currency	Borrow (%) P.A.	Deposit % P.A.
EUR	3.5 %	3.5 %
INR	9.0 %	7.0 %

Currency Option Hedge :

Purchase a EUR call option with a strike price of ₹ 98/EUR for the receivable (6 months) with a premium of ₹ 2 per EUR.

Purchase a EUR put option with a strike price of ₹ 95/EUR for the payable (6 months) with a premium of ₹ 1.5 per EUR.

Current Spot Rate (EUR / INR) : ₹ 95 / EUR. Expected Spot Rate after 6 months (EUR / INR) : ₹ 99 / EUR.

Required :

- i. Analyze the forward contract hedge strategy for both the receivable and payable.
- ii. Analyze and infer the money market hedge strategy for both the receivable and payable.
- iii. Assess the outcomes using a currency option hedge.
- iv. Synthesize the results from all three hedging strategies and propose a well-justified recommendation for the best strategy to minimize the net transaction exposure.

(7 Marks)

SOLUTION:-

Alternative – I With Netting

(i) Forward Contract

$$€ 15m \times 97 = ₹ 1455m$$

(ii) Money Market Hedge

- Borrow money from Italy @ 3.5 % p.a. for 6 months

$$\frac{€15m}{1.0175} = €14742014.7$$

- Buy ₹ @ ₹ 95

$$14742014.74 \times 95 = 1400491400.50$$

- Deposit above amount in Indian Money Market for 6 months @ 7% p.a.

$$€ 1400491400.50 (1.035) = ₹ 1449508600$$

(iii) Option Hedging

Receivable = € 15 m

Call Option

EP = ₹ 98

Premium = ₹ 2

6 Month SR = ₹ 99

Call Option → Exercise

<u>Total Receivable Amount</u>	(₹)
Option gain € 15 m (99 – 98)	₹ 15 m
Premium € 15 m × 2	(₹ 30 m)
Amount Receivable € 15 m × 99	₹ 1485
	₹ 1470 m

Net Amount Receivables

Forward Contract	₹ 1,45,50,00,000
Money Market Hedge	₹ 1,44,95,08,600
Option	₹ 1,47,00,00,000

Alternative – II Without Netting

(i) Forward Contract

$$\text{Receivable} = \text{€}25 \text{ m} \times 97 = \text{₹} 2425 \text{ m}$$

$$\text{Payable} = 105 \text{ m} \times 97 = \text{₹} 970 \text{ m}$$

(ii) Money Market Hedges

$$\text{SR } \text{₹} / \text{€} = \text{₹} 95$$

$$\text{Expected 6 month SR} = \text{₹} / \text{€} = \text{₹} 99$$

Receivable

Since Euro is Receivable after 6 Month and we want to avoid risk of Foreign Fluctuation

- We will borrow money from Italy Money Market @ 35 % p.a for 6 Months.

$$\frac{\text{€ } 25 \text{ m}}{1.0175} = \text{€ } 2,45,70.024.57$$

- Buy ₹ for € 24570024.57 at ₹ 95

$$\text{Euro } 24570,024.57 \times \text{₹} 95 = \text{₹} 2,33,41,52,334.15$$

- Deposit above Amount in India Money Market for 6 Month @ 7% p.a.

$$= \text{₹} 2334152334.15 (1.035)$$

$$= \text{₹} 2415847665.84$$

Payable

- Borrow Money from India Money Market @ 9% p.a. for 6 months

$$\frac{\text{€ } 1,00,00,000}{1.0175} = \text{€ } 9828009.83$$

- Amount to be Deposited in Germany
= € 9828010
- Amount to be Borrowed from India
= € 9828010 × ₹ 95 = ₹ 933660950
- Amount Payable after 6 Month
= ₹ 933660950 (1.045)
= ₹ 9,75,67,569

(iii) Option

Receivable

Call Option

EP = ₹ 98 ↑

Premium = ₹ 2 per €

6 Months SR = ₹ 99

Call Option → Exercise

Total Receivable	(₹)
Gain € 25 m × (₹99 – 98)	25 m
Premium 25 m × 2	(50 m)
Amount Receivable 25 × 99	2475
Receivable	<u>2450 m</u>

Payable

Put Option

EP = 95

Premium = ₹1.5 / e

6 m SR = 99

Put Option → Lapse

Total Payable	(₹)
Gain from Option	—
Premium Paid (10 × 1.5)	15 m
Amount Payable (10m× 99)	990 m
	<u>1.005</u>

Net Outcomes

	Receivable	Payable	Net Outcome
Forward Contract	₹ 2,42,50,00,000	₹ 97,00,00,000	₹ 1,43,30,00,000
Money Market	₹ 2,41,58,47,666	₹ 9,75,67,569	₹ 2,31,82,80,000
Option Hedge	₹ 2,45,00,00,000	₹ 1,00,50,00,000	₹ 1,44,50,00,000

Answer: Forward Contract is Better option.

(b) XYZ Ltd. has imported goods to the extent of US\$ 8 Million. The payment terms are as under:

- (a) 1% discount if full amount is paid immediately; or
- (b) 60 days interest free credit. However, in case of a further delay up to 30 days, interest at the rate of 8% p.a. will be charged for additional days after 60 days. M/s XYZ Ltd. has ₹ 25 Lakh available and for remaining it has an offer from bank for a loan up to 90 days @ 9.0% p.a.

The quotes for foreign exchange are as follows:

Spot Rate INR/ US\$ (buying)	₹ 66.98
60 days Forward Rate INR/ US\$ (buying)	₹ 67.16
90 days Forward Rate INR/ US\$ (buying)	₹ 68.03

Advise which one of the following options would be better for XYZ Ltd.

- Pay immediately after utilizing cash available and for balance amount take 90 days loan from bank.
- Pay the supplier on 60th day and avail bank's loan (after utilizing cash) for 30 days.
- Avail supplier offer of 90 days credit and utilize cash available.

Further presume that the cash available with XYZ Ltd. will fetch a return of 4% p.a. in India till it is utilized.

Assume year has 360 days. Ignore Taxation.

Compute your working upto four decimals and cash flows in Crore.

(6 Marks)

SOLUTION:-

To evaluate which option would be better we shall compute the outflow under each option as follows:

(i) Pay Immediately availing discount

Particulars	
Spot Rate	₹ 66.98
Amount required in US\$ $\frac{[\text{US\$ 8 million (1-0.01)}]}{[\text{₹ 66.98} \times \text{US\$ 7.92 million}]}$	US\$ 7.92 Million
Amount required in ₹	₹ 53.0482 Crore

Cash Available	₹ 0.2500 Crore
Loan required	₹ 52.7982 Crore
Interest for 90 days @ 9%	₹ 1.1880 Crore
Total Outflow	₹ 53.9862 Crore

(ii) **Pay the supplier on 60th day and avail bank's loan (after utilizing cash) for 30 days.**

Particulars	
Applicable forward rate	₹ 67.16
Amount required in [₹ 67.16 × US\$ 8 million]	₹ 53.7280 Crore
Loan required [₹ 53.7280 crore – ₹ 0.251667 crore]	₹ 53.47633 Crore
Interest for 30 days @ 9%	₹ 0.4010725 Crore
Total Outflow	₹57.88813 Crore

(iii) **Avail supplier offer of 90 days credit and utilize cash available**

Particulars	
Amount Payable	US\$ 8 Million
Interest for 30 days @ 8%	US\$ 0.0533 Million
Amount required in ₹	US\$ 8.0533 Million
Applicable Forward Rate	₹ 68.03

Amount required in ₹[₹ 68.03 × US\$ 8.0533 million]	₹ 54.7866 Crore
Cash Available	₹ 0.2500 Crore
Interest earned on cash for 90 days @ 4%	₹ 0.0025 Crore
Total Outflow	₹ 54.5341

Decision: Cash outflow is least in case of Option (ii) same should be opted for.

Question – 03

(a) KGF Bank's Sydney branch has surplus funds of USD \$ 7,00,000 for a period of 2 months. Cost of funds to the bank is 6% p.a. They propose to invest these funds in Sydney, New York or Tokyo and obtain the best yield, without any exchange risk to the bank. The Following rates of interest are available at the three centers for investment of domestic funds there for a period of 2 Months.

Sydney	7.5% p.a.
New York	8% p.a.
Tokyo	4% p.a.

The market rates in Australia for US Dollars and Yen are as under:

Sydney on New York:

Spot	0.7100/0.7300
1 Months	10/20
2 Months	25/30

Sydney on Tokyo:

Spot	79.0900/79.2000
1 Months	40/30
2 Months	55/50

At which centre, will the investment be made & what will be the net gain to the bank on the invested funds?

(8 Marks)

SOLUTION:

(i) If investment is made at Sydney

Convert US\$ 7,00,000 at Spot Rate (7,00,000/0.7300)	= A\$ 9,58,904
Add: A\$ Interest for 2 months on A\$ 9,58,904 @ 7.5%	= A\$ 11,986
	= A\$ 9,70,890

Less: Amount Invested	\$ 7,00,000
Interest accrued thereon	\$ 7,000
	= \$ 7,07,000

Equivalent amount of £ required to pay the above sum (\$ 7,07,000/0.7125*) = A\$ 9,92,281

Arbitrage Loss = A\$ 21,391

(ii) If investment is made at New York

Gain \$ 7,00,000 (8% – 6%) × 2/12 = \$ 2,333.33

(iii) If investment is made at Tokyo

Convert US\$ 700,000 at Spot Rate (Cross Rate) 79.0900/0.7300	= ¥ 108.34
Yen equivalent US\$ 7,00,000	= ¥ 7,58,38,000
Add: Interest for 2 months @ 4%	= ¥ 5,05,587
	= ¥ 7,63,43,587

3 month Forward Rate of selling ¥ (1/79.1950) = A\$ 0.0126

Sell ¥ in Forward Market ¥ 7,63,43,587 × A\$ 0.0126	= A\$ 9,61,929
Less: Amounted invested and interest thereon	= A\$ 9,92,281
Arbitrage Loss	= A\$ 30,352

Out of three options the profit is in case of investment is made in New York. Hence it should be opted.

* Due to conservative outlook.

(b) A dealer in foreign exchange has the following position in Swiss Francs on 31st January, 2018 ;

(Swiss Francs)

Balance in the Nostro A/c Credit	1,00,000
Opening Position Overbought	50,000
Purchased a bill on Zurich	70,000
Sold forward TT	49,000
Forward purchase contract cancelled	41,000
Remitted by TT	75,000
Draft on Zurich cancelled	40,000

Examine what steps would the dealer take, if he is required to maintain a credit balance of Swiss Francs 30,000 in the Nostro A/c and keep as overbought position on Swiss Francs 10,000 ?

(6 Marks)

SOLUTION:-

Exchange Position:

Particulars	Purchase Sw. Fcs.	Sale Sw. Fcs.
Opening Balance Overbought	50,000	
Bill on Zurich	80,000	
Forward Sales		60,000
Cancellation of Forward Contract		30,000
TT Sales		75,000
Draft on Zurich cancelled	30,000	---
	1,60,000	1,65,000
Closing Balance Oversold	5,000	---
	1,65,000	1,65,000

Cash Position (Nostro A/c)

	Credit	Debit
Opening balance credit	1,00,000	---
TT sales	---	75,000
	1,00,000	75,000
Closing balance (credit)	---	25,000
	1,00,000	1,00,000

The Bank has to buy spot TT Sw. Fcs. 5,000 to increase the balance in Nostro account to Sw. Fcs. 30,000.

This would bring down the oversold position on Sw. Fcs. as Nil.

Since the bank requires an overbought position of Sw. Fcs. 10,000, it has to buy forward Sw. Fcs. 10,000.

Question – 04

(a) On 1st February 2020, XYZ Ltd. a laptop manufacturer imported a particular type of Memory Chips from SKH Semiconductor of South Korea. The payment is due in one month from the date of Invoice, amounting to 1190 Million South Korean Won (SKW). Following Spot Exchange Rates (1st February) are quoted in two different markets:

USD/ INR 75.00/ 75.50 in Mumbai

USD/ SKW 1190.00/ 1190.75 in New York

Since hedging of Foreign Exchange Risk was part of company's strategic policy and no contract for hedging in SKW was available at any in-shore market, it approached an off-shore Non Deliverable Forward (NDF) Market for hedging the same risk.

In NDF Market a dealer quoted one-month USD/ SKW at 1190.00/1190.50 for notional amount of USD 100,000 to be settled at reference rate declared by Bank of Korea.

After 1 month (1st March 2020) the dealer agreed for SKW 1185/ USD as rate for settlement and on the same day the Spot Rates in the above markets were as follows:

USD/ INR 75.50/ 75.75 in Mumbai

USD/ SKW 1188.00/ 1188.50 in New York

Analyze the position of company under each of the following cases, comparing with Spot Position of 1st February:

(i) Do Nothing.

(ii) Opting for NDF Contract. Note: Both Rs./ SKW Rate and final payment (to be computed in Rs. Lakh) to be rounded off upto 4 decimal points.

(8 Marks)

SOLUTION:-

(i) Do Nothing

We shall compute the cross rates in spot market on both days and shall compare the amount payable in INR on these two days.

On 1st February 2020

Rupee – Dollar selling rate = ₹ 75.50

Dollar – SKW = SKW 1190.00

Rupee – SKW cross rate = ₹ 75.50/1190.00

= ₹ 0.0634

Amount payable to importer as per above rate (1190 millions × ₹ 0.0634)
₹ 754.4600 lakh

Rupee – Dollar selling rate = ₹ 75.75

Dollar – SKW = SKW 1188.00

Rupee – SKW cross rate = ₹ 75.75/1188.00

= ₹ 0.0638

Amount payable to importer as per above rate (1190 millions × 0.0638)
₹ 759.2200 lakh.

Thus, Exchange rate loss

= (₹ 759.2200 lakh - ₹ 754.4600 lakh) ₹ 4.7600 lakh

(ii) Hedging in NDF

Since company needs SKW after one month it will take long position in SKW at quoted rate of SKW 1190/USD and after one-month it will reverse its position at fixing rate of SKW 1187/USD. The profit/loss position will be as follows:

Buy SKW 1190 million and sell USD (1190 million/1190)	USD 10,00,000
Sell SKW 1190 million and buy USD at fixing rate (1190 million/1185)	USD 10,04,219
Profit	USD 4,219

Final position

Amount payable in spot market (as computed earlier)	₹ 759.2200 Lakh
	₹ 3.1853 Lakh
Less: Profit form NDF market USD 4219 × 75.50	₹ 756.0347 lakh

Thus, Exchange rate loss = (₹ 756.0347 lakh - ₹ 754.4600 lakh) ₹ 1.5747 lakh.

Decision: Since exchange loss is less in case of NDF same can be opted for.

(b) AMK Ltd. an Indian based company has subsidiaries in U.S. and U.K.

Forecasts of surplus funds for the next 30 days from two subsidiaries are as below:

U.S. \$12.5 million

U.K. £ 6 million

Following exchange rate information is obtained:

\$/₹

£/₹

Spot	0.0215	0.0149
30 days forward	0.0217	0.0150

Annual borrowing/deposit rates (Simple) are available.

₹	6.4%/6.2%
\$	1.6%/1.5%
£	3.9%/3.7%

The Indian operation is forecasting a cash deficit of ₹500 million.

It is assumed that interest rates are based on a year of 360 days.

- (i) Calculate the cash balance at the end of 30 days period in ₹ for each company under each of the following scenarios ignoring transaction costs and taxes:
- Each company invests/finances its own cash balances/deficits in local currency independently.
 - Cash balances are pooled immediately in India and the net balances are invested/borrowed for the 30 days period.
- (ii) Which method do you think is preferable from the parent company's point of view?

(6 Marks)

SOLUTION:-

Cash Balances:

(‘000)

Acting independently

	<u>Capital</u>	<u>Interest</u>	<u>₹ in 30 days</u>
India	-5,00,000	-2,666.67	-5,02,667
U.S.	12,500	15.63	5,76,757

U.K.	6,000	18.50	<u>4,01,233</u>
			<u>4,75,323</u>

Cash Balance:-

Immediate cash pooling

		₹
India	-	5,00,000
U.S.	$\frac{12,500}{0.0215} =$	5,81,395
U.S.	$\frac{6,000}{0.0149} =$	<u>4,02,685</u>
		<u>4,84,080</u>

Immediate cash pooling is preferable as it maximizes interest earnings

Note: If the company decides to invest pooled amount of ₹ 4,84,080/- @ 6.2% p.a. for 30 days an interest of ₹ 2,501/- will accrue.