QUESTION – 63

£

An exporter is a UK based company. Invoice amount is \$3,50,000. Credit period is three months. Exchange rates in London are :

Spot Rate	(\$/£)	1.5865 – 1.5905
3-month Forward Rate	(\$/£)	1.6100 – 1.6140

Rates of interest in Money Market:

	Deposit	Loan
\$	7%	9%
£	5%	8%

Compute and show how a money market hedge can be put in place. Compare and contrast the outcome with a forward contract.

(Study Material & PM)

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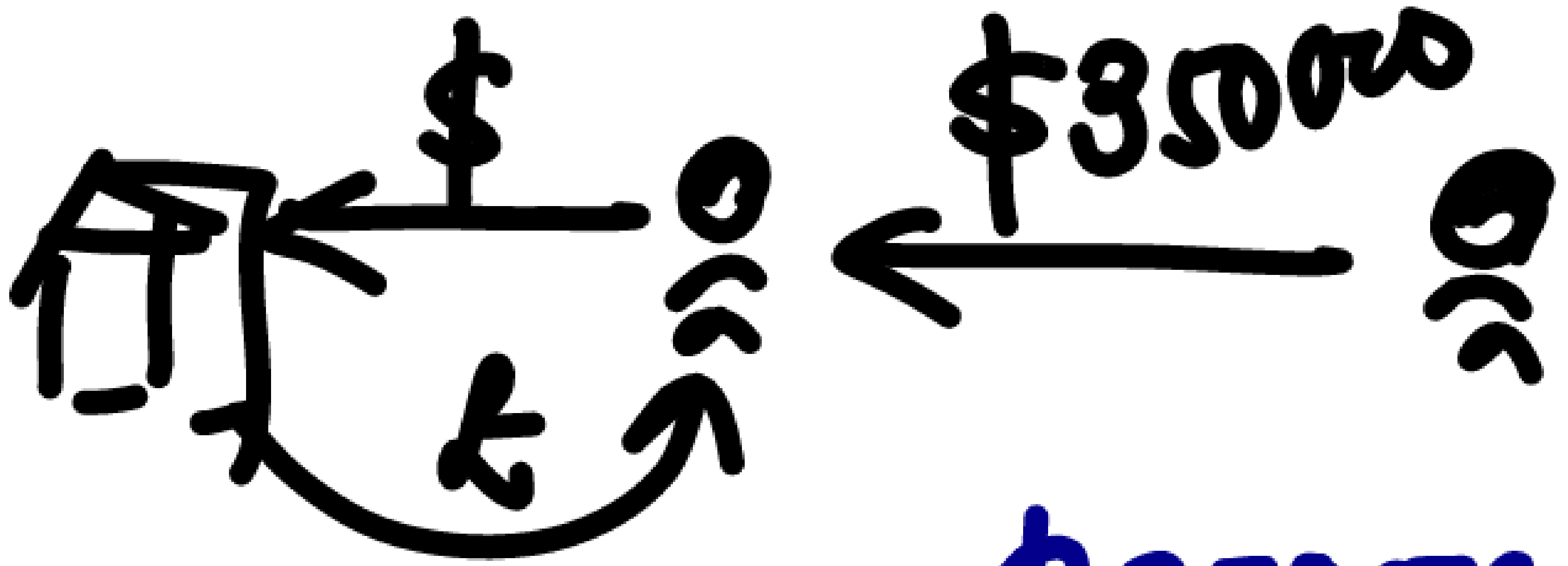
Option 1 Forward Cover



$$\text{Cash Inflows} = \frac{\$350000}{1.6140}$$

$$= £216852.54$$

Option 2 Money Market Cover

Step 1 Borrowing Amount from US money market @ 9% p.a. for 3 Months

$$\frac{\$350000}{1.0225} = \$342298.29$$

Step 2 Sell \$342298.29 at SR

$$\frac{\$342298.29}{1.5905} = £215214.27$$

Step 3 Invest £215214.27 in UK Money Market @ 5% p.a. for 3 Months

$$\text{Cash Inflows} = £215214.27\,(1.0125)$$
$$= £217904.45$$

MMC is better due to Higher Cash Inflows.

QUESTION – 64

ABC Ltd. has imported specialty computer equipment worth US $ 2,50,000 from a company in US. The amount due for the imports is payable after 3 months, the treasury manager of ABC Ltd. has collected the following market quotes:

Exchange rates:

Spot ₹ /$ 47.15/47.30

Forward 3 months swap 55/60

47.70/47.90

Interest rates (p.a.):

Dollar (3 months) 6% / 6.50%.

Rupee (3 months) 10.00%/11.00%

The supplier of the equipment has offered a discount of $5,000 if the payable is settled at the current date. The manager is reviewing the following alternative to settle the payable:

(a) Cover through forward market. 2

(b) Cover through money market.

H.W

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$246305.42

x4730

1.0275

(c) Avail the cash discount of $ 5,000 by taking a bridge loan at 9% p.a. from a Financial Institution.

You are required to suggest the best alternative to settle the payable.

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\$245000

X47.30

= 11588500

X1.0225

= 11849241

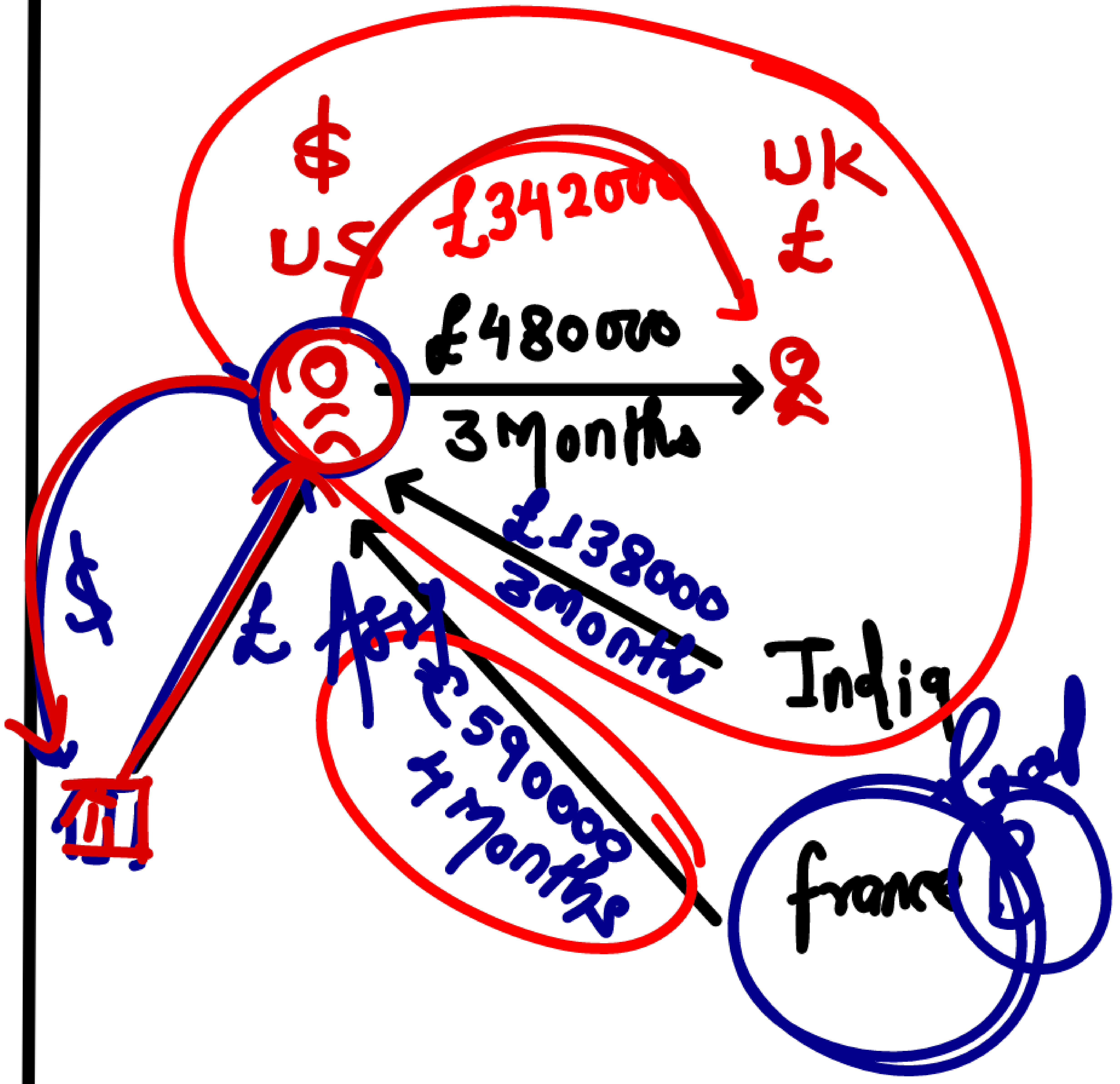
QUESTION – 62

Columbus Surgicals Inc. is based in US, has recently imported surgical raw materials from the UK and has been invoiced for £ 480,000, payable in 3 months. It has also exported surgical goods to India and France.

The Indian customer has been invoiced for £ 138,000, payable in 3 months, and the French customer has been invoiced for € 590,000, payable in 4 months.

Current spot and forward rates are as follows:

$\boxed{\text{£ / US\$}}$	£/$	
Spot:		0.9830 – 0.9850
Three months forward:		~~0.9520 – 0.9545~~
US$ / €		
Spot:		1.8890 – 1.8920
Four months forward:		1.9510 – 1.9540



Current money market rates are as follows:

UK:	10.0% – 12.0% p.a.
France:	14.0% – 16.0% p.a.
USA:	11.5% – 13.0% p.a.

You as Treasury Manager are required to show how the company can hedge its foreign exchange exposure using Forward markets and Money markets hedge and suggest which the best hedging technique is.

(Study Material & PM)

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Receivable

option 1 forward cover

Sell € 590000 at 4 Month FR

€590000 × 1.9510 = $ 1151090

option 2 Money Market cover

step 1 Borrowing Amount from france Money Market @ 16% p.a. for 4 Months

$$\frac{€590000}{1.0533} = €560144.31$$

step 2 Sell € at SR

€560144.31 × 1.8890 = $1058112.60

step 3 Invest $1058112.60 in US Money Market @ 11.5% for 4 Months

Cash Inflows = $1058112.60 × 1.0383

= $1098638.31

Forward Cover is better due to Higher CI.

payable

Since company has payable £480000 & Receivable £138000 at same time, hence Netting is possible & we hedge only for (£480000 - £138000) = £342000

option 1 forward cover

Buy £342000 at 3 Month FR

$$\frac{£342000}{0.9520} = \$359243.70$$

option 2 Money Market cover

Step 1 Calculation of Amount to be invested in UK money market @ 10% p.a. for 3 Months

$$\frac{£342000}{1.025} = £333658.54$$

Step 2 Buy £333658.54 at SR $\frac{£333658.54}{0.9830} = \$339428.83$

Step 3 Borrow \$339428.83 from US money market @ 13% p.a. for 3 Months

Cash outflows = \$339428.83 × 1.0325
= \$350460.27

MMC is Better due to Lower Cash Outflows.

QUESTION – 65

An Indian exporting firm, Rohit and Bros., would be covering itself against a likely depreciation of pound sterling. The following data is given:

Receivables of Rohit and Bros	:	£500,000
Spot rate	:	₹ 56.00/£
Payment date	:	3-months
3 months interest rate		
	:	India : 12 per cent per annum
	:	UK : 5 per cent per annum

What should the exporter do?

(Study Material & PM)

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In this situation, Exporter should Hedge the Receivables with the help of MMC.

Step 1 Amt to be Borrowed from UK money market @ 5% p.a. for 3 month

$$\frac{\cancel{£500000}}{\cancel{1.0125}} = £493827.16$$

Step 2 Sell £ at SR £493827.16 × 56 = ₹27654321

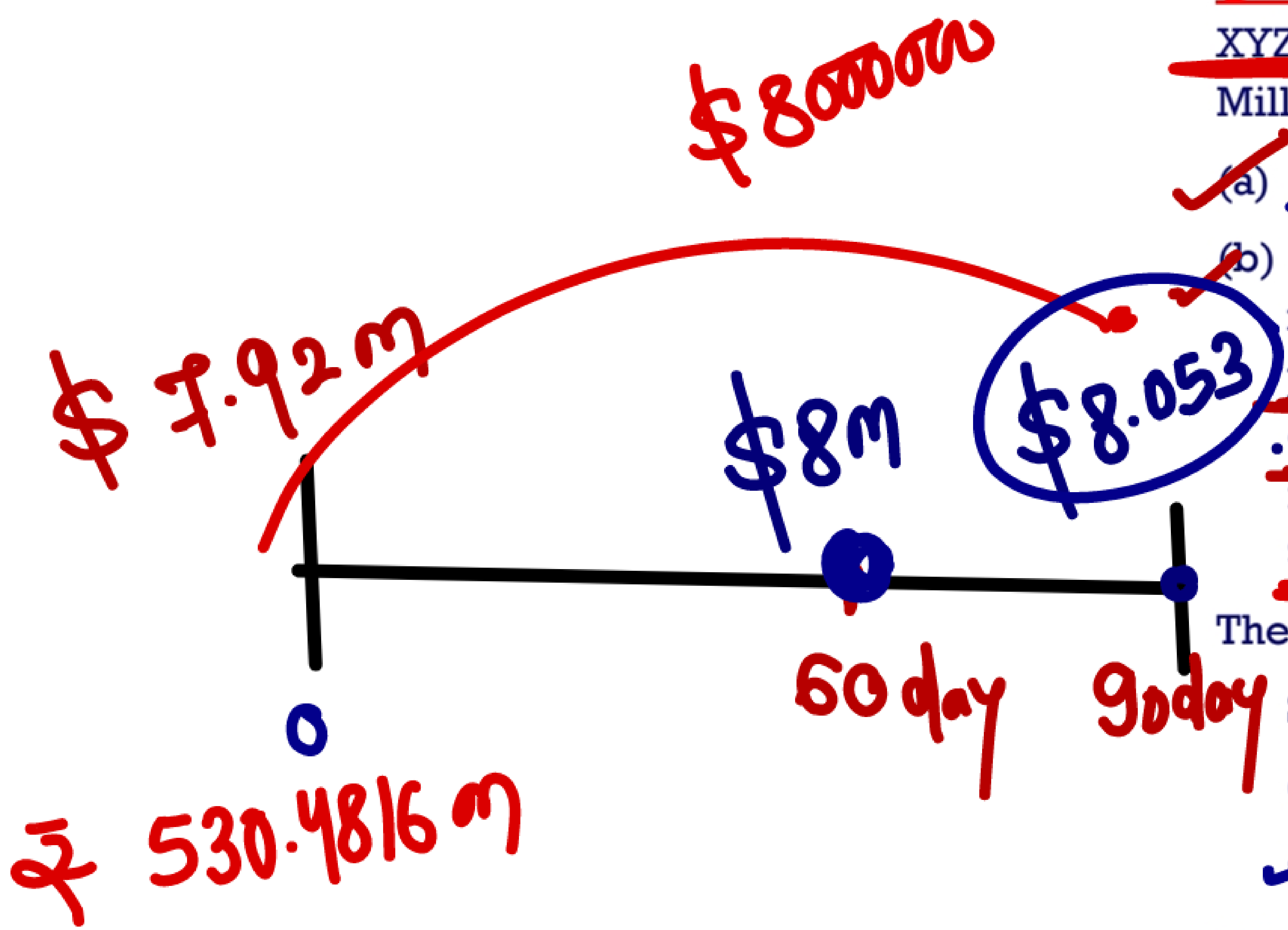
Step 3 Invest ₹27654321 in Indian Money market @ 12% p.a. for 3 months

27654321 × 1.03 = ₹28483951

IRP

$$\underbrace{\left(₹56 \times \frac{1.03}{1.0125}\right) \times £500000}_{FR}$$

FC = MMC



QUESTION – 83

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.

(i) Pay immediately after utilizing cash available and for balance amount take 90 days loan from bank.

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