

Year	1	2	3	4	5
Net Cash flows (USD million)	20	35	40	40	50

The risk-free interest rate is 6% in India and 4% in the United States. The inflation rate is 5% in India and 3% in the United States. The tax rate is 35% in India and 30% in the United States. The risk premium is 10% in India and 8% in the United States. The estimated equity beta for United States investment is 0.90. The general interest rate is 12% in India and 9% in the United States. The current spot exchange rate is USD/INR 46.

Evaluate the project (both in INR and USD).

- (c) Write short notes on: $2\frac{1}{2} \times 4$
- (i) Correspondent banking system ;
 - (ii) Interest acquisition in a foreign bank ;
 - (iii) Features of interest rate swap ; and
 - (iv) Risks in financial swaps.

[Internal Assessment : 10 Marks]

4. Answer any *two* questions :

2×10

- (a) Explain in brief, the major decisions in receivable management of an MNC.

A US based affiliate of an MNC currently has annual sales (domestic) of USD 10 million with 60 days credit period. It is expected that sales and bad-debt losses will increase in the following manner if the credit period is extended.

Credit Policy	Credit Period (days)	Sales (USD million)	Bad debts (% of total sales)
A	60	100	1.0
B	75	130	1.2
C	90	150	1.5

The selling price per unit is USD 20. The average total cost and the variable cost per unit of sale are USD 15 and USD 12 respectively. If the required rate of return on investment is 20%, which credit policy the firm should adopt ?

- (b) An Indian firm wishes to invest in a US project. It is estimated that the project will initially cost USD 100 million. The firm expects to have a debt ratio of 52% in the project funding. The expected free cash flows (net cash flows after tax) for the next five years are as follows:

(e) A has a fixed-rate debt on which it is paying T+1 percent. But it could borrow floating-rate funds at LIBOR. B has floating-rate debt on which it is paying LIBOR+25 b.p. But it could borrow fixed-rate funds at T+1.75 percent. Can the two counterparties go for interest-rate swap? If so, indicate the gains accruing to them. 5

(f) (i) From the following facts, estimate the cost of equity capital required to be earned on a foreign investment project.

1. Systematic risk of foreign project is 1.2.

2. Risk free rate of return (R_f) is 12%, and

3. Required rate of return on the market portfolio (R_m), consisting of all risky assets is 20%.

(ii) Suppose a subsidiary company's cost of equity is 20%. Assume further that the company's entire profits earned are repatriated to its parent company overseas. It is estimated that repatriation costs in terms of withholding taxes and other transfer expenses incurred will be 25%. Determine the cost of retained earnings

(K_T).

$2 \times 2 \frac{1}{2}$

- (i) Counterparty ;
 (ii) Leg of the swap ; and
 (iii) Swap coupon.

$$1\frac{1}{2} + 1\frac{1}{2} + 2$$

- (c) Assume that capital structure of a multinational group is optimal. It uses book value weights for the purpose of determining the overall cost of capital. The abstract of liability side of its consolidated balance sheet along with specific after-tax cost is as follows:

	Amount (USD million)	Specific Cost (percent)
Equity Share capital	30	15
Retained earnings	10	12
Preference shares	15	13
Debt (D ₁)	20	08
Debt (D ₂)	25	06
	100	

Determine the weighted average cost of capital of the multinational group.

- (d) What are the costs associated with inventory management ? How is the optimum level of inventory determined ?

$$2\frac{1}{2} \times 2$$

- (c) (i) Compute the outright forward quotations from the following swap quotations of Canadian dollars in European terms:

Spot	30-Day Swap	90-Day Swap	180-Day Swap
1.4915-20	12-10	15-12	18-22

- (ii) 'Direct market is characterized as a decentralized, continuous, open-bid, double-auction market.' Explain.
- (iii) Explain the effect of fluctuation in the value of the underlying asset on the value of the options contract. 3+4+3

[Internal Assessment : 10 Marks]

(Second Half)

(Marks : 50)

3. Answer any *four* questions : 4×5
- (a) Explain the ways of controlling the activities of international banks.
- (b) Define the following terms in respect of financial swaps:

2. Answer any *two* questions :

2×10

(a) (i) What is a Swap? What are the different types of swap? What are its various uses? What is a Rollover Swap?

(ii) Determine the Settlement dates for the following foreign exchange contracts: 7+3

Date of the contract	Day of the contract	The contract	Period	Date & Day
28.01.2015	Wednesday	Spot	-	-
26.03.2015	Thursday	Forward	3 months	26.06.2015 (Friday)
28.03.2015	Saturday	Forward	2 months	28.05.2015 (Thursday)

(b) Show imaginary options rates as they are quoted in Exchanges and use them to explain the following, as may be necessary:

European Option, American Option, Option Premium, Intrinsic Value, Time Value, In-the-money and Out-of-the-money.

Can Intrinsic Value be ever negative?

2+(1×7)+1

- (b) Make a clear distinction between nominal exchange rate and real exchange rate. Explain it with an example.
- (c) Explain the concept of 'hedging' in the foreign exchange market.
- (d) From the following data find out the correct order of trading to derive triangular arbitrage gain, if any:
 Dresdner Bank's quote: €0.7627/\$1.00
 Credit Suisse's quote: SF1.1806/\$1.00
 Union Bank of Switzerland's quote: €0.6395/SF1.00
- Assume that you have \$5,000,000 with which to conduct the arbitrage trading. Also compute the possible arbitrage loss for wrong order of trading.
- (e) Explain with example the 'Marking to Market' principle in Futures contract.
- (f) To avoid the risk of fluctuations in Rupee-(US) Dollar exchange rate on an export proceeds of \$62,500 an Indian exporter buys a put option with an option premium of 0.05 per dollar and an exercise price of \$1 = Rs.62.30. What decisions the exporter will take to exercise the contract or not to exercise it depending on the following alternate spot rates:
- (i) \$1 = Rs.62.20, and
 (ii) \$1 = Rs.62.60 ?

2015

M B A

4th Semester Examination

Subject : INTERNATIONAL FINANCIAL MANAGEMENT

(Specialization : Financial Management)

PAPER—F-402

Full Marks : 100

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Write the answers to Questions of each Half in separate books.

(First Half)

(Marks : 50)

1. Answer any *four* questions : 4×5
- (a) What is Multinational Corporation ? What motivates business firms to go international ?

(Turn Over)