

### Model Question Paper

### Fourth Semester MBA Degree Examination

### Global Financial Management

**Time: 3 Hours**

**Max. Marks: 100**

**Note: 1. Answer any FOUR full questions from Q1 to Q7.**

**2. Question No. 8 is compulsory.**

**3. M: Marks, L: RBT (Revised Bloom's Taxonomy) level, C: Course outcomes.**

			M	L	C
Q1	a.	An exporter in India ships goods to a buyer in Germany and needs to receive payment in euros through their respective banks. Explain how the SWIFT mechanism facilitates this international payment securely and efficiently.	03	L2	CO1
	b.	A country starts importing more electronic goods while its exports of agricultural products remain the same. This change in trade patterns may lead to a balance of payments problem. Based on this situation, identify the causes of disequilibrium that are most relevant.	07	L2	CO1
	c.	A country wants to set up a fixed exchange rate system like those used in the past. Using the Gold Standard, Bretton Woods system, and Smithsonian Agreement, explain the steps the country should take and explain the challenges it might face.	10	L2	CO1
Q2	a.	Following quotes are available Rs 78.99/Rs 79.25 per US \$ Rs 82.25/Rs 82.64 per € Identify the above quotes and calculate the corresponding quote	03	L3	CO2
	b.	A Danish exporter is negotiating a contract with a US importer and wants to lock in exchange rates for future payments. The Danish Kroner is quoted in New York at \$0.18536/DKr spot, \$0.18524/DKr 30 days forward, \$0.18510/DKr 90 days forward and \$0.18485/DKr 180 days forward. As the exporter's financial advisor, determine whether the Kroner is trading at a forward premium or discount.	07	L3	CO2
	c.	An Indian importer expects to make a payment in USD after six months. The current spot rate is ₹42.0010 = \$1, and the 6-month forward rate is ₹42.8020 = \$1. The annualized 6-month interest rate is 12% for INR and 8% for USD. As a currency trader, solve it to find whether covered interest arbitrage possibility exist and determine the potential profit.	10	L3	CO5
Q3	a.	A coffee exporter in India wants to lock in the price of US dollars for a shipment due in three months. Should they use a forward contract or a futures contract? Differentiate between the two to help them decide.	03	L2	CO2
	b.	A Japanese investor is considering currency trading between the Japanese Yen (¥) and the Mexican Peso (MP). In Tokyo, the Peso is quoted at ¥28.8358/MP (bid) and ¥28.8725/MP (ask). In Mexico City, it is quoted at \$0.04418/MP (bid) and \$0.04488/MP (ask). As a currency analyst, calculate the bid-ask spread as a percentage of the bid price from both the Japanese and Mexican perspectives, and evaluate the potential arbitrage opportunity.	07	L3	CO5
	c.	A portfolio manager in New York is evaluating whether to hedge a €10 million receivable due in three months. Based on market analysis, the Euro is expected	10	L3	CO2

		to be \$1.11 (probability 0.25), \$1.13 (probability 0.50), or \$1.15 (probability 0.25). The 90-day forward rate is \$1.12. As the manager's currency advisor, assess whether entering into a forward contract is advantageous or not?																										
Q4	a.	An Indian importer needs to pay a supplier in Japanese Yen but only has access to USD/INR and USD/JPY exchange rates from the bank. Explain the concept of cross rates and how the importer can use them to determine the INR/JPY rate.	03	L2	CO2																							
	b.	A business is planning to invest in a foreign country and is concerned about exchange rate fluctuations. Identify and explain various factors should it examine to predict possible currency movements	07	L2	CO1																							
	c.	<p>XYZ US company is considering to invest Rs 50 million in India to create a wholly owned subsidiary. After 5 years the subsidiary would be sold to Indian investor for Rs 100 million. The proforma income statement are as follows</p> <table><tr><td>Annual sales</td><td>: Rs 30 million</td></tr><tr><td>(-) Operating expenses</td><td>: 17 million</td></tr><tr><td>Less: Depreciation</td><td>: 1 million</td></tr><tr><td>Less: Tax</td><td>: 6 million</td></tr><tr><td>Add: Depreciation</td><td>: 1 million</td></tr></table> <p>The initial investment will be made on 31st December 2002. US corporate tax is 50%. XYZ uses weighted average cost of capital of 14% on domestic investment but will added 6% more for the Indian investment because of perceived risk. The forecasted Rs, \$ exchange rate are as follows</p> <table><tr><th>Year</th><th>Exchange rate</th></tr><tr><td>2002</td><td>50/\$</td></tr><tr><td>2003</td><td>54/\$</td></tr><tr><td>2004</td><td>58/\$</td></tr><tr><td>2005</td><td>62/\$</td></tr><tr><td>2006</td><td>68/\$</td></tr><tr><td>2007</td><td>70/\$</td></tr></table> <p>Using the company's required rate of return, explain the concept of Net Present Value (NPV) and determine whether establishing the Indian subsidiary would be a financially worthwhile decision.</p>	Annual sales	: Rs 30 million	(-) Operating expenses	: 17 million	Less: Depreciation	: 1 million	Less: Tax	: 6 million	Add: Depreciation	: 1 million	Year	Exchange rate	2002	50/\$	2003	54/\$	2004	58/\$	2005	62/\$	2006	68/\$	2007	70/\$	10	L4
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Q5	a.	A US tourist visiting India sees the exchange rate displayed as ₹84.50 = \$1. Later, in New York, the same rate is shown as \$0.01183 = ₹1. Explain the concepts of direct and indirect quotes using this scenario.	03	L2	CO1																							
	b.	A UK exporter is finalizing a contract to receive payment in US dollars after 90 days. The current spot rate is \$0.8576/£, while the 90-day forward rate is \$0.8500/£. As the exporter's financial consultant, determine whether the pound is trading at a forward premium or discount and calculate the annualized percentage.	07	L3	CO5																							
	c.	<p>An American firm purchases \$4000 worth of perfume (FF 20000) from a French firm. The American distributor must make the payment in 90 days in French Francs. The following quotation and expectations exist for the FF.</p> <table><tr><td>Present spot rate \$0.2000</td><td>US interest rate 15%</td></tr><tr><td>90 day forward rate 0.2200</td><td>French interest rate 10%</td></tr></table> <p>Your expectation of the SR days hence 0.2400</p> <p>As a currency strategist, you must: Determine the forward premium or discount</p>	Present spot rate \$0.2000	US interest rate 15%	90 day forward rate 0.2200	French interest rate 10%	10	L4	CO4																			
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		on the French Franc, the interest rate differential, and whether covered interest arbitrage is possible, if arbitrage is possible, outline the steps for an arbitrageur borrowing either \$4,000 or FF 20,000 with no transaction costs, assess whether a \$50 transaction cost would eliminate the arbitrage opportunity.															
Q6	a.	An Indian investor is comparing fixed deposit rates between India (6% per year) and the USA (3% per year) before deciding where to invest. Explain the International Fisher Effect and how it can help the investor predict currency movements when making the decision.	03	L2	CO1												
	b.	A company sells goods overseas and is also considering setting up a factory abroad. Based on this situation, what kinds of currency exposure should it be concerned about for its current sales and future investment, and how might these exposures affect its financial performance	07	L2	CO1												
	c.	<table><tr><td>A</td><td>B</td></tr><tr><td>US \$ floating</td><td>LIBOR + 0.5</td></tr><tr><td>Can (\$) Fixed</td><td>LIBOR + 1</td></tr><tr><td>5%</td><td>6.5%</td></tr></table> <p>Company A needs to borrow US dollars at a floating interest rate, while Company B wants to borrow Canadian dollars at a fixed interest rate. A bank acts as an intermediary and charges 50 basis points for facilitating the transaction. Illustrate how a currency swap can be structured between A and B through the bank.</p>	A	B	US \$ floating	LIBOR + 0.5	Can (\$) Fixed	LIBOR + 1	5%	6.5%	10	L4	CO3				
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Q7	a.	An Indian multinational company owns a subsidiary in the USA. When preparing its consolidated financial statements, it must convert the subsidiary's assets, liabilities, and income from USD to INR. Explain the concept of translation exposure using this scenario.	03	L2	CO1												
	b.	<p>In September, MNC used the march spot rate for Pound sterling at the following rates</p> <table><tr><td>Rate</td><td>Probability</td></tr><tr><td>1.2</td><td>15%</td></tr><tr><td>1.22</td><td>20%</td></tr><tr><td>1.28</td><td>25%</td></tr><tr><td>1.3</td><td>20%</td></tr><tr><td>1.32</td><td>20%</td></tr></table> <p>If 6 month forward rate is \$ 1.3. should the firm sell forward its receivable due in march?</p>	Rate	Probability	1.2	15%	1.22	20%	1.28	25%	1.3	20%	1.32	20%	07	L3	CO2
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c.	<p>Indian pharma Ltd. An Indian based multinational company is evaluating on overseas investment proposal. Indian pharma export of pharmaceutical products have increased to such an extent that is considering a project to build a plant in the US. The project will entail on initial outflows of \$ 100 million and is expected to generate the following cashflow</p> <table><tr><td>Year</td><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>Cas flow (million)</td><td>30</td><td>40</td><td>50</td><td>60</td></tr></table> <p>The current spot exchange rate is Rs 45 per US\$. Risk free rate in India is 11% and risk-free rate of interest in US is 6%. Indian pharma required rate of return on a project of this kind is 15%. Should Indian pharma undertake this project? Use both home and foreign currency approach.</p>	Year	1	2	3	4	Cas flow (million)	30	40	50	60	10	L4	CO4			
Year	1	2	3	4													
Cas flow (million)	30	40	50	60													
Q8		<p style="text-align: center;"><b>CASE STUDY (Compulsory)</b></p> <p>An automobile company in Gujarath export its goods to Singapore at a price of Singapore dollar \$ 500 per unit. The company also imports components from Italy and the cost of components for each unit is E 200. The company's CEO executed an agreement for the supply of 20,000 units on Jan 1, 2010 and on the</p>															

		<p>same date paid for the imported components. The company's variable cost of producing per unit is Rs 1250/- and the allocable fixed costs of the company are Rs 1,00,00,000. The exchange rate as on Jan 1, 2010 were as follows</p> <p style="text-align: center;">Spot:                      SD\$/Rs                      Rs 33.00/33.04    E/Rs                                      Rs 56.449/56.56</p> <p>Mr. A the treasury manager of the company is observing the movements of exchange rates on a day to day basis and has expected that the rupee would appreciate against Singapore Dollar and would depreciate against Euro. As per his estimates, the following are expected rates for 30<sup>th</sup> June 2010.</p> <p style="text-align: center;">Spot:                      SD\$/Rs                      Rs32.15/32.21    E/Rs                                      Rs 57.27/57.32</p>			
	a.	As a financial analyst, determine (a) the change in profitability caused by this translation exposure for the current contract, and	10	L4	C04
	b.	(b) the additional number of units the company must sell to maintain its current profit level despite the currency impact.	10	L4	CO4

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