(CBCS)  
Paper – 3.1 : FOREX MANAGEMENT  
  
Time : 3 Hours  
Max. Marks : 70  
  
SECTION – A  
Answer any seven questions out of ten. Each question carries two marks : (7×2=14)  
1. a) What do you mean by International Fisher Effect ?  
b) What is a Mark-To-Market (MTM) ?  
c) What is meant by Currency Devaluation ?  
d) What do you mean by Exchange traded derivatives ?  
e) Distinguish between ‘Caps and Collars’.  
f) What is the meaning of forward rate agreement ?  
g) Write four advantages of netting.  
h) Consider the following bid-ask prices : Rs 65.00 – 65.75/US $. Find the Bid-Ask spread.  
i) Find out the forward rate differential if spot rate of US $ is Rs. 65.00 and one-month forward rate is Rs. 65.80.  
j) A spot rate is DM = $0.3302-10. Another spot rate is FF = $0.1180-90. Compute the direct quote of FF in Germany.  
  
SECTION – B  
Answer any four questions out of six. Each question carries five marks : (4×5=20)  
2. Distinguish between ‘Ask price’ and ‘Bid price’ in foreign exchange.  
3. Futures contract as hedging tools and help in protecting the risks associated with uncertainties in exchange rates, explain.  
4. How do firms manage economic risk due to fluctuations in forex market ?  

P.T.O.
5. Following information is made available:
   Spot rate for US $1 Rs. 66.0123
   180-day forward rate for US $1 Rs. 66.8190
   Annualised interest rate for 6 months – Rupee 12%
   Annualised interest rate for 6 months – US $ 8%
   Explore arbitrage possibility.

6. A customer with whom the PQR Bank had entered into 3 months forward purchase contracts for Swiss Francs 1,00,000 at the rate Rs. 36.25 comes to the bank after two months and requests cancellation of the contract. On this date, the rates are:

<table>
<thead>
<tr>
<th>Spot</th>
<th>CHF 1 = Rs. 36.30</th>
<th>36.35</th>
</tr>
</thead>
<tbody>
<tr>
<td>One month forward</td>
<td>36.45</td>
<td>36.52</td>
</tr>
</tbody>
</table>

   Determine the amount of profit or loss to the customer due to cancellation of the contract.

7. Following are the details of cash inflows and outflows in foreign currency denominations of DMS Co. an Indian export firm, which have no foreign subsidiaries:

<table>
<thead>
<tr>
<th>Currency</th>
<th>Inflow</th>
<th>Outflow</th>
<th>Spot rate</th>
<th>Forward rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>US $</td>
<td>4,00,00,000</td>
<td>2,00,00,000</td>
<td>48.01</td>
<td>48.82</td>
</tr>
<tr>
<td>French Franc (FFr)</td>
<td>2,00,00,000</td>
<td>80,00,000</td>
<td>7.45</td>
<td>8.12</td>
</tr>
<tr>
<td>U. K. (£)</td>
<td>3,00,00,000</td>
<td>2,00,00,000</td>
<td>75.57</td>
<td>75.98</td>
</tr>
<tr>
<td>Japanese Yen</td>
<td>1,50,00,000</td>
<td>2,50,00,000</td>
<td>3.20</td>
<td>2.40</td>
</tr>
</tbody>
</table>

   i) Determine the net exposure of each foreign currency in terms of Rupees.
   ii) Are any of the exposure positions offsetting to some extent?
SECTION – C

Answer any three questions out of five. Each question carries twelve marks: (3×12=36)

8. Briefly discuss the three kinds of foreign exchange exposure.

9. EFD Ltd. is an export business house. The company prepares invoice in customers’ currency. Its debtors of US $ 10,000,000 is due on April 1, 2016. Market information as at January 1, 2016 is

<table>
<thead>
<tr>
<th>Exchange rates US$/INR</th>
<th>Currency Futures US$/INR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spot</td>
<td>0.016667</td>
</tr>
<tr>
<td>1-month forward</td>
<td>0.016529</td>
</tr>
<tr>
<td>3-months forward</td>
<td>0.016129</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initial Margin</th>
<th>Interest rates in India</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Month</td>
<td>Rs. 17,500</td>
</tr>
<tr>
<td>3-Months</td>
<td>Rs. 22,500</td>
</tr>
</tbody>
</table>

On April 1, 2016 the spot rate US$/INR is 0.016136 and currency future rate is 0.016134 which of the following methods would be most advantageous of EFD Ltd.?

i) Using forward contract

ii) Using currency futures

iii) Not hedging the currency risk.

10. From the following information find call and put option values (premium) using Black-Scholes model:

   Spot rate – Rs. 68.16/$; Strike rate (E) – Rs. 69.50/$; Maturity period – 6 months;
   Continuous compounding interest rate – 10.50% p.a.; Standard deviation – 0.54.
11. The interest rate in XYZ Country is 24 per cent annum, whereas it is only 8 per cent annum in the United States. You are considering investing $10,000 for 180 days in XYZ's securities but are concerned about the exchange risk. XYZ's currency is crown. You find the following quotations in the newspaper in U.S. dollar terms:

<table>
<thead>
<tr>
<th>XYZ country (crown)</th>
<th>30-days forward</th>
<th>90-days forward</th>
<th>180-days forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.1000</td>
<td>0.0980</td>
<td>0.0970</td>
<td>0.0950</td>
</tr>
</tbody>
</table>

Questions:

a) Calculate the forward premium (discount) of the crown against the U.S. dollar (based on the 180-days quotation).

b) What is the net gain in U.S. dollars from investing in XYZ's securities relative to U.S. securities if it is assumed that the exchange rate in 180 days equals today's spot rate?

c) Suppose the crown depreciates by 10 per cent relative to the dollar in the next 180 days. What is your net gain (or loss) from an uncovered position relative to investment in the United States?

d) What is your net gain (or loss) from a covered position? (Ignore transaction cost).

12. Write short notes in the following:

a) Operations in foreign exchange market are exposed to number of risks
b) Exchange control
c) Speculation Vs hedging.
III Semester MIB Examination, December 2015
(CBCS Scheme)
INTERNATIONAL BUSINESS
Paper – 3.1 : Forex Management

Time: 3 Hours
Max. Marks: 70

SECTION – A

Answer any seven sub-questions. (7x2=14)

1. a) What is Basis risk?
   b) Name two major participants in Foreign Exchange.
   c) What is Caps?
   d) What is partial hedging?
   e) What is cross rates?
   f) What is direct method of quoting rates?
   g) A Japanese radio maker sells radios to a French retailer and is paid in French
       Franc. What rate will a Japanese bank quote the radio maker to convert the
       French Francs into Yes? French Franc (6-2150) Yes (126.20).
   h) What is time value of option?
   i) What is Margin?
   j) What is American option?
SECTION – B

Answer any 4 questions: (4x5=20)

2. From the following information you are required to calculate
   a) ready bill buying rate
   b) 2 months forward buying rate for demand bill
   c) ready rate for 60 days usance bill
   d) 2 months forward buying rate for 60 days usance bill.

   Interbank rate US dollar
   Spot USD 1 = Rs. 48.6000/6075
   1 month 3500/3600
   2 months 5500/5600
   3 months 8500/8600
   4 months 1-1500/1-1600
   5 months 1-3500/1-3600
   6 months 1-5500/1-6600

   Transit period is 25 days. All forward rates are for fixed delivery. Exchange margin is 0.10%.

3. What factors influence exchange rates?
4. What determine forward rate?
5. What are futures used for?
6. What factors determine spot exchange rate?
7. Explain absolute version of PPP.
SECTION - C

Answer any three questions: (3x12=36)

8. A foreign exchange dealer quoted the following rate for the pound sterling on Nov. 30-2015.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spot</td>
<td>$ 1.4820/5 $ 1.4920</td>
</tr>
<tr>
<td>30 day</td>
<td>66/45</td>
</tr>
<tr>
<td>90 day</td>
<td>146/124</td>
</tr>
<tr>
<td>180 day</td>
<td>291/223</td>
</tr>
</tbody>
</table>

a) Determine the outright quotations for pound sterling.

b) Was the pound sterling selling at a forward premium or a forward discount on the date? Calculate the forward premium (or discount) on the 90-days forward contract.

c) How many US dollar would it cost you buy ₹ 10,00,000 on Nov. 30, 2015.

d) If you expect to receive ₹ 10,00,000 is 180 days from the quotation date, how many US dollar would you expect to realise by selling them forward?

9. Explain the types and steps in currency swap.

10. Explain the management of translations exposure.

11. Explain the benefits of option pricing and how it helps buyer/seller.

12. Explain in detail the external technique for covering exchange rate risk.