Sl. No. 100053

No. of Printed Pages : **3**

PJ-526

III Semester M.Com. (F.A) Examination, January - 2020
(CBCS Scheme)
COMMERCE
Paper - 3.3 : FOREX AND DERIVATIVES

Time : 3 Hours Max. Marks : 70

SECTION - A

1. Answer **any seven** sub-questions. Each sub-question carries **2** marks. **7x2=14**
   (a) What is a Foreign Exchange Market ?
   (b) Define Spread and Pips.
   (c) State any four benefits of Foreign exchange trading.
   (d) What do you mean by American and European options ?
   (e) Expand CHIPS and SWIFT.
   (f) Define hedge and arbitrage.
   (g) What do you mean by credit derivatives ?
   (h) Consider the following bid-ask prices : ₹ 87.50 – 87.97/EUR. Find the spread and spread in %.
   (i) If £/₹ = 94.19/94.40 and \$/₹ = 70.69/70.93, calculate cross rate for £/\$.
   (j) What do you mean by International Fisher Effect ?

SECTION - B

Answer **any four** questions. Each question carries **5** marks. **4x5=20**

2. Explain the characteristics of Foreign exchange market.

3. Distinguish between Future and Option contracts.

4. If spot rate is given as £1 = \$1.6035, rate of interest for UK = 14% p.a. and USA = 17% p.a., assuming IRP holds good, calculate 3 months forward rate :
   (a) If ROI compounded quarterly
   (b) If ROI compounded continuously

P.T.O.

5. Following are the details of cash inflows and outflows in foreign currency denominations of MGM co., an Indian export firm which have no subsidiaries.

Currency	Inflow	Outflow	Spot Rate	Forward Rate
USA($)	450,00,000	275,00,000	69.97	70.19
French Franc (FFr)	235,00,000	180,00,000	9.45	10.14
UK(£)	545,00,000	454,00,000	94.79	95.19
Japanese Yen(¥)	195,00,000	305,00,000	3.65	2.48

(a) Determine the net exposure expected gain or loss of each Foreign currency in terms of rupees.

(b) Are any of the exposure positions offsetting to some extent ?

6. A foreign exchange trader gives the following quotes for the French franc spot, 1 month, 3 months and 6 months to US based treasures $ 0.2968/75, 6/8, 11/9 and 15/13.

(a) Calculate the outright quotes for 1 month, 3 months and 6 months forward.

(b) What is the premium or discount in the 1, 3 and 6 month forward rate in annual percentages (assume you are buying French franc).

7. Describe Forward rate agreements.

SECTION - C

Answer **any three** questions. Each question carries **12** marks. **3x12=36**

8. Describe various methods of managing the translation or Accounting exposures.

9. From the following information, calculate call and put option values using Black-Scholes model.

Current market price = ₹ 94/£, Exercise price/Strike price = ₹ 86/£, maturity period = 2 years, and standard deviation = 17%

Continuous compounding risk free interest rate = 8% p.a..

10. Given the following bid ask quotes on different foreign exchange markets, calculate the potential arbitrage USD profit if any using strategy from an initial position of $1 million.

In Switzerland	CHF/USD	= 1.3510 – 1.3530
In USA	USD/GBP	= 1.8300 – 1.8320
In Great Britain	CHF/GBP	= 2.5050 – 2.5070

11. A US based MGM company will need £ 665,000 in 180 days. In this connection, the following information is available.

Spot rate : 1 £ = $ 4.15

180 days forward rate of £ as of today = $ 3.96

Rates of interest in money market are as follows.

	UK	US
180 days deposit rate	5%	5.75%
180 days borrowing rate	7%	7.50%

A call option on £ that expires in 180 days has an exercise price of $ 3.97 and a premium of $ 0.04. MGM Company has forecasted the spot rates 180 days hence as below :

Future rate	Probability
$ 3.91	25%
$ 3.95	60%
$ 4.05	15%

Which of the following strategies would be most preferable to MGM Company ?

(a) A forward contract

(b) A money market hedge

(c) An option contract

(d) No hedging

12. Write short notes on **any two** of the following :

(a) Swap contracts

(b) Covered interest arbitrage

(c) Caps, Floors and Collars

- o 0 o -