

## IV Semester M.Com. Examination, September/October 2020 (CBCS Scheme) COMMERCE

FB 4.2: Forex Management

Time: 3 Hours

Max. Marks: 70

**Instruction**: Log table  $A_1$  and  $A_2$  to be provided to students for question no. 8.

## SECTION - A

Answer any seven questions. Each question carries 2 marks.

 $(7 \times 2 = 14)$ 

- a) Distinguish spot and forward transactions.
- b) Distinguish covered and uncovered options.
- c) What are the assumptions under Black and Scholes model of valuation of options?
- d) Bring out the difference between covered interest and uncovered interest arbitrage.
- e) What is forward rate agreement?
- f) What is marking to market?
- g) Find the forward rate differential from the following particulars. Spot rate – Rs. 69.60/USD one month forward rate Rs. 69.85/\$.
- h) Distinguish caps and floors.
- i) Define swap transactions. Mention the types of swaps.
- j) Determine Bid and ASIC rate between Canadian Dollars and Indian Rupee. Rs. 69.60 – 69.85/ USD, 1.36 CAD – 1.37 CAD/USD.

## SECTION - B

Answer any four questions. Each question carries 5 marks.

 $(4 \times 5 = 20)$ 

- 2. Explain briefly the types of exposures in forex market.
- 3. A call option with an exercise price of Rs. 82 due to expire in 10 days is selling at Rs. 2.25. The underlying share is selling in the market at Rs. 86. How can an arbitrageur benefit from the transaction?

  P.T.O.



- 4. Explain put-call parity principle of option contracts.
- Using the following information determine whether there is arbitrage opportunity. Determine the profit assuming an investment of USD 1,00,000, spot rate – Rs. 69.75/USD.

180 days forward rate - Rs. 69.95/USD

Annualised 6 month interest rates 7% 5%

- 6. Explain the concept of netting and its advantages.
- 7. Explain the features of interest cap and floor.

SECTION - C

Answer any 3 questions. Each carries 12 marks.

 $(3 \times 12 = 36)$ 

Find the following particulars, find call and put option values (premium) using Black and Scholes model.

Current stock price - Rs. 486

Exercise price - Rs. 500

Time to expiration - 65 days

Standard deviation - 0.54

Risk free rate of interest – 10%

- 9. Explain the theories of exchange rate determination.
- 10. An Indian importer imports goods worth US\$ 2,00,000 from USA. The terms of payment is 3 months credit. The following information is available to the importer.
  - a) Spot rate Rs. 69.70/USD
  - b) 90 days forward rate Rs. 69.25/USD

		India	USA
c)	Interest rates on borrowings	7%	5%
	Interest rate on deposits	6%	4%



- d) A 90 day call option is having a strike price of Rs. 69.35/\$ with a premium of Rs. 0.05 per USD.
- e) Spot rate on the due date Rs. 69.55/USD

Examine which of the following will be favourable to the importer?

- a) No hedge
- b) Forward contract
- c) Option hedge
- d) Money market hedge.
- 11. Explain natural hedging techniques and contractual hedging techniques.
- 12. Write short notes on the following:
  - 1) Currency swaps
  - 2) Futures contract
  - 3) Forward rate agreement.