III Semester M.Com. (F.A.)/MFA Examination, December 2016 (CBCS)

Paper - 3.3 : FOREX AND DERIVATIVES

Time: 3 Hours Max. Marks: 70

Instruction: Answer all Sections.

SECTION - A

Answer any seven sub-questions out of ten. Each sub-question carries two marks.

(7×2=14)

- a) What are the instruments of foreign exchange market?
 - b) What is synthetic quote?
 - c) What is merchant quote?
 - d) What is meant by translation exposure?
 - e) What is leading and lagging ?
 - f) What is the difference between FERA and FEMA?
 - g) What is meant by money market hedge?
 - h) What do you mean by credit derivatives ?
 - i) What are the components of option premium?
 - j) What is Forward Rate Agreement?

SECTION - B

Answer any four questions out of six. Each question carries five marks. (4x5=20)

- 2. What are the features of foreign exchange future contracts?
- 3. Explain in brief put-call parity principle of option contracts.
- 4. What are the differences between interest rate caps and floors?

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Using the following information, determine the theoretical forward rate and also explain whether there exists a provision for arbitrage:

Spot rate $1 \pm = 2.00

180 days forward rate of £ as of today = \$ 1.96

Interest rates are as follows:

U.K. U.S.

180 days deposit rate 4.5%, 5.00%.

- 6. Interest rate in Euroland and in India at 3.50% and 6% p.a. respectively. If the spot Rupee/Euro rate is 51.75, what is your estimate of future spot rate if the interest rate parity theory holds good ? If the forward rate is 52, what action would follow? If the forward rate is 54, will there be a change in action?
- Mr. Albert buys a starting June IRF at 94. The future prices can move to 93.30
 or it may shift to 94.70. Explain the implications and compute the gain or loss on
 the contract.

SECTION - C

Answer any three questions. Each question carries 12 marks:

(3×12=36)

- What are the types of foreign exchange quotes? Explain those with examples.
- Exporter is a UK based company. Invoice amount \$ 3,50,000. Credit period three months. Exchange rates in London:

\$/£ spot 1.5865 -- 1.5905

3 months forward 1.6100 — 1.6140

Money market rates:

	Deposit	Loan
\$	7%	9%
£	5%	8%

Compute and show how a money-market hedge can be put in place.

- 10. Assume you are the CFO of a company in UK. In 3 months time (say November), your company needs to borrow GBP 5 million. Your company can currently borrow at 9% p.a. You expect that interest rates may rise before November. The 3-months starting interest rate futures for December is currently trading at 93.34. Required:
 - i) Demonstrate how a future hedge can be set up
 - ii) Also illustrate the result of the hedge if by November, if the interest rate by 1% and future price falls by 1.00 or if the interest rate falls by 1% and future price moves up by 0.48. Assume contract size is 5,00,000 GBP.
- From the following information find call and put option values (premium) using Black – Scholes model;

Spot rate – ₹ 100.50/£;

Strike Rate (₹) – 102.50/£;

Maturity period – 6 months;

CCRFI – 10% p.a.

Standard deviation – 0.54,