NEW

2015

MBA 3rd Semester Examination

FINANCIAL ENGINEERING

(Specialisation : Financial Management)

PAPER—F-304

Full Marks : 100

Time : 3 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Question Nos. *1* & *2* are compulsory.
Answer any other *four* from the rest.

1. Answer any *four* questions : 5×4

(a) Explain the terms : Repo and Reverse Repo Rates, Perpetual Debt and Convertible Bond.

(b) Identify the roles of Financial Engineering in Financial Product Development.

(c) What is the importance of Liquidity Management in Banks ? How could you analyse the liquidity position ?

(d) From the following data find out the arbitrage possibilities for various periods :

	Exchange Rate	$ Interest Rate	£ Interest Rate
Spot	$ 1.5753 / £	—	—
1-month Forward	$ 1.5653 / £	4% p.a.	9% p.a
6-months Forward	$ 1.5536 / £	4.5% p.a.	8.0% p.a.

(e) What is the difference between Financial Analysis and Financial Engineering.

(f) Write a short note on Junk Bonds.

2. Answer any *four* questions : 5×4

(a) State the scopes and importance of Financial Engineering.

(b) What is a Swap ? What are the different kinds of Swap ? How is a Swap different from an 'Outright Forward' Contract ?

(c) Define the terms At the money, In the Money and Out of the Money with an illustration of Currency Put Option (USD INR).

(d) What are the components of a Bank balance sheet ? Give an idea of Liability Management of a Bank.

(e) What is Hedging ? Mention the steps involved in the hedging process.

(f) Explain the Pay-off Profiles of a seller and the buyer on a Forward Contract.

3. Describe in brief a model for the steps to be followed for new financial product development. 10

4. (a) A trader buys a Swiss franc futures contract (contract size is SFr 1,25,000) at a price of $ 0.83. If the spot rate for the Swiss franc at the date of settlement is SFr 1 = $ 0.8250. What is the trader's gain or loss on this contract ?

(b) Mr. Ford buys a French franc put option (contract size is FF 2,50,000) at a premium of $ 0.015 per franc. If the exercise price is $ 0.21, compute Ford's profit or loss on the put option when the spot price of franc at the date of expiration is :

(x) $ 0.216, (y) $ 0.209. 4+(3+3)

5. Write a note on the factors that have contributed to the growth of Financial Engineering. 10

6. Write a note on the Asset Liability Management practices applicable to the Banking Industry in India. 10

7. (a) Prove that in the absence of transaction costs in currency exchanges, the forward exchange rates equal the market's expected future spot rates.

   (b) With the help of an example draw the Pay-off Profile on a Forward Contract to buy $ 1,00,000 at Rs. 64.80 / $. 5+5

8. (a) What is a Futures Contract ? Identify its basic features.

   (b) 'A Futures Contract is a series of Forward Contracts each with one-day maturity'. Explain the statement. 5+5

[Internal Assessment : 20]