

A

(Printed Pages 3)

Roll. No. _____

MS-3136

M.B.A.(MS) IV Semester (F.E.)

Examination, 2015

Applied Financial Engineering

MS(A)-042

Time Allowed : Three Hours] [Maximum Marks : 70

Note : Attempt **five** questions in all. Question **No.1** is **compulsory**. Attempt **four** more questions selecting **one** question from each unit.

1. Answer briefly the following questions :

3 × 10 = 30

- (a) Currency-swaps
- (b) Players of derivative market
- (c) Types of bonds
- (d) FRA's
- (e) Securitization process
- (f) Forward contracts

P.T.O.

(2)

- (g) Mechanism of futures contract
- (h) Phases of Portfolio Management
- (i) Risk in derivative trading
- (j) Benefits of currency swaps.

UNIT-I

- 2. Discuss the concept and evolution of financial engineering. What is its importance in current economics scenario? 10
- 3. Define an 'Investment Bank'. Describe its structure and the core activities of such banks. 10

Unit-II

- 4. State the assumptions of Black-Scholes model. How is the value of call option derived as per the Black-Scholes model? 4+6=10
- 5. The share of 'B' Ltd. is selling for ₹ 1,000. The risk-free interest rate is 1% p.m. Suppose 3-months futures price is ₹ 1035. What will be your arbitrage strategy?
Assume that 'B' Ltd. will not pay any dividend in next 6 months. 10

(3)

Unit-III

- 6. Derive the payoffs of a call option and a put option from view point of : 5+5=10
 - (a) Option holder
 - (b) Option writer
- 7. What will be the theoretical price of a futures contract for : 5+5=10
 - (a) Storable commodity
 - (b) Perishable commodity

Unit-IV

- 8. Define a futures contract. What are the basic differences between forwards and future currency contracts? 2+8=10
- 9. What are interest-rate swaps? How do swaps work? 10