9. Write short notes on the following : [5×2=10]

(a) Collar Strategy

(b) Protective Put Strategy

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Question Paper Code : 3774

M.B.A. (Semester-IV) Examination, 2018

FINANCIAL ENGINEERING & DERIVATIVES

[SE-422]

Time : Three Hours] **[Maximum Marks : 70**

Note : Answer **five** questions in all. Question **No.1** is **compulsory**. Besides this, attempt one question from each unit.

1. Briefly answer the following questions : [3x10=30]

(a) Explain the intrinsic value of a Call and Put option.

(b) What do you mean by Cost and Carry in Futures?

(c) If the underlying stock price is Rs.150, strike prices for a call option on the stock are Rs.145, Rs.148, Rs.150 and Rs.155. What should be the minimum call premium in each case ?

(d) Explain Contango and Backwardation markets in reference to futures contracts.

(e) When should we write a call ? Also show the pay off curve of a written call ?

(f) Explain the Put-Call parity. What is its utility for a Portfolio manager ?

(g) How does the process of marking to market help in daily settlement ? Explain.

(h) Explain the concept of Hedge portfolio. How do we construct it using calls or puts ?

(i) What do you mean by a Vega neutral portfolio ?

(j) What is meant by implied volatility of an underlying stock ?

UNIT-I

2. Discuss the value of a forward and a Futures contract at the time of initiation, at any time before the expiration and also at the time of expriation. [10]

3. Using the following information construct a Hedge Port Folio and maintain the hedge for two periods using Bimomial option pricing model. S_0,=100, X=100, r_f=70%, U=1.25 and d=0.80 [10]

UNIT-II

4. What do you mean by directional option trading strategies? Briefly explain the Call Bull and Put Bear strategies. [10]

5. Discuss the following volatility trading strategies using options : [5×2=10]

(a) Long Straddle

(b) Long Butterfly

UNIT-III

6. Critically discuss the assumptions underlying Black Scholes Option Pricing model. Is the presence of volatility smile (s) an indication of inefficiency of this model? Explain. [10]

7. Find the fair value of a Put if S_0=100 , X=95, risk-free rate is 5% and T (Time to expiry) in 30 days. [10]

UNIT-IV

8. Discuss in detail the role of Derivatives in a financial system. [10]