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## K18P 0917

Reg. No. : .....

Name : .....

# Third Semester M.Com. Degree (Reg./Suppl./Imp.) Examination, October 2018 (2017 Admission) COM3C14 : DERIVATIVES AND RISK MANAGEMENT

Time: 3 Hours

Max. Marks : 60

#### SECTION - A

Answer **any four** questions in this Section. **Each** question carries **1** mark for Part (a), **3** marks for Part (b) and **5** marks for Part (c).

- 1. a) What is put option ?
  - b) What are the functions of derivative Market ?
  - c) Write a note on put-call parity.
- 2. a) What do you mean by spot price ?
  - b) Explain about Hedging.
  - c) Explain about the commodity exchanges in India.
- 3. a) What do you mean by speculation ?
  - b) Discuss the expectation approach in futures pricing.
  - c) Write a short notes on :
    - i) Intrinsic value of the option ii) Time value of money.
- 4. a) What do you mean by American option ?
  - b) Consider a six month long forward contract of a non-income paying security. The risk free rate of interest is 6 percent per annum. The stock price is Rs. 30 and the delivery price is Rs. 28. Compute the value of forward contract.
  - c) What are the differences between options and futures ?

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- 5. a) What is initial margin?
  - b) What are the features of forward contract ?
  - c) The stock price of Reliance industries in spot market is Rs. 450 and two-month option contract is of Rs. 450. The price of the option is Rs. 20 per share. At what price the option will be at the money, out-of-money and in the money of the option is both call as well as put option ?
- 6. a) What is Arbitrage ?
  - b) Discuss the cost of carry model in futures pricing.
  - c) What are the importance of commodity exchanges ?

 $(4 \times 9 = 36)$ 

#### SECTION - B

Answer either a) or b) in each of the following. Each question carries 12 marks.

- 7. a) What is option pricing ? What are the factors influencing option prices ?
  - b) Calculate the value of a European call option.

Current market price of a stock : Rs. 92 per share

Exercise price : Rs. 80 per share

Time to expiry : 50 days

Risk free interest rate : 7.12%

Volatality of stock : 3.5%

The above stock does not pay dividends. Use Black-Schold formula.

- a) Discuss the Evolution of derivative markets in India.
  - b) Explain in detail the Black-Schold option pricing model. (2x12=24)

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