Reg. No

Name

M. COM DEGREE END SEMESTER EXAMINATION - MARCH 2020

SEMESTER 4 : COMMERCE

COURSE : 16P4COMT19EL : DERIVATIVES AND RISK MANAGEMENT

(For Regular - 2018 Admission and Supplementary - 2017, 2016 Admissions)

Time : Three Hours

Max. Marks: 75

Section A Answer any 10 (2 marks each)

- 1. Differentiate between Exchange Traded derivatives and Over-the-Counter derivatives.
- 2. Define financial system.
- 3. What are the underlyings for: (a) Commodity derivatives (b) Financial derivatives
- 4. Explain the following concept in the language of financial derivative: (a) Long position (b) Short position
- Calculate forward price from the following information: The current price of the asset (S₀) = Rs. 10,00,000 Risk-free rate of return (r) = 6% p.a. Time to expiration (T) = 1 year.
- 6. What do you mean by value of a forward contract?
- 7. Explain the following terms:
 - a. Strike price
 - b. Expiration date
 - c. Option premium
- 8. What is open interest?
- 9. What is stop order?
- 10. Define the term "option" is the language of finance.
- 11. What is option value?
- 12. What is a stock index?

(2 x 10 = 20)

Section B

Answer any 5 (5 marks each)

- 13. Explain the constituents of financial market.
- 14. Explain the mechanism of book building.
- 15. Explain the relationship between the spot price and the forward price of an investment asset.
- 16. Calculate cash-and-carry arbitrage profit from the following data of a futures contract:

Spot price= Rs. 70,000Cost-of-carry= 12% of spot price for the carry periodContracted future price= Rs. 90,000.

- 17. Explain the meaning of the following terms:
 - a. Basis
 - b. Convergence
 - c. Spreads
 - d. Open interest

- 18. What are the uses of options?
- 19. Describe the uses of currency swaps.
- 20. What is foreign exchange risk?

 $(5 \times 5 = 25)$

Section C Answer any 3 (10 marks each)

- 21. Briefly discuss the various derivative instruments traded in Indian financial and commodity markets.
- 22. What is a financial system? What are the four components? Discuss.
- Calculate forward price from the following information and also construct and illustrate probable investment strategies.
 The current price of the asset = 10, 00,000, Risk free interest rate of return= 6 % p.a., Time to

expiration= 1 year.24. What is an option style? Discuss various styles of an option contract with suitable example.

25. An American call option on Exide Industries has an exercise price of Rs. 150. The current market price of the stock is Rs. 142. The stock volatility is 60% and the risk- free interest rate is 7.65% p.a. Use a binomial tree with bi-monthly intervals to calculate: Possible stock prices after three time intervals

(10 x 3 = 30)