

Reg. No

Name

19P4043

M. COM DEGREE END SEMESTER EXAMINATION - MARCH/APRIL 2019

SEMESTER 4 : COMMERCE

COURSE : 16P4COMT19EL : DERIVATIVES AND RISK MANAGEMENT

(For Regular - 2017 Admission and Supplementary - 2016 Admission)

Time : Three Hours

Max. Marks: 75

Section A

Answer any 10 (2 marks each)

1. What is standardised contract?
2. What is price band?
3. What do you mean by "underlyings" ?
4. Explain the following terms: (a) Forward contract (b) Futures (c) Option (d) Swaps
5. Calculate forward price from the following information: The current price of the asset (S_0) = Rs. 10,00,000 Risk-free rate of return (r) = 6% p.a.
Time to expiration (T) = 1 year.
6. How a forward contract differs from a spot contract?
7. What do you mean by forward price?
8. What is off-setting?
9. What is MIT?
10. What is a swap?
11. What in Black-Scholes formula for put option?
12. What is Dow Jones Industrial Average?

(2 x 10 = 20)

Section B

Answer any 5 (5 marks each)

13. What are the defects of Indian money market?
14. Write short notes:
 - Global-local openness
 - Technology support to derivatives
 - Risk management tools
 - Innovations in derivatives
15. How do forward contracts work? Discuss.
16. Briefly discuss the following risk aversion method of futures pricing: (a) The Normal Backwardation Method (b) The CAPM

17. A six month gold future of contract of 100 gm. Assume that the Spot price is Rs. 2,500 per gram and that it cost Rs. 10 per gram for the six month period and the cost is incurred at the end of the period. If the risk less interest rate is 12% p.a. compounded continuously. Calculate the future price.
18. What are the advantages of Binomial Option Pricing Model?
19. Distinguish between European style options and American style option.
20. "Speculating in the futures market is more risky." Discuss.

(5 x 5 = 25)

Section C

Answer any 3 (10 marks each)

21. What are the different types of financial derivatives? Explain their features in brief.
22. 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.
23. Discuss various types of Interest Rate Swaps with suitable examples.
24. Briefly discuss the methodology of Binomial option pricing model for: (a) European Options (b) American Options.
25. Call option on Reliance Industries, expiring after 3 months from now, has exercise price of Rs. 900. The current market price of the share is Rs. 870. An interim dividend of Rs. 8 per share is expected from the company after 5 months. The variance of share prices is measured as 132%. The risk-free interest rate is 6.75% p.a. Calculate the call option price using Black-Scholes pricing formula. What would be the price of a put option with same expiry and exercise price?

(10 x 3 = 30)