



F 7156

**QP CODE: F 7156**

**Reg No** : .....

**Name** : .....

**M COM DEGREE (CSS) EXAMINATION, JANUARY 2022**

**Fourth Semester**

Faculty of Commerce

M.Com Finance and Taxation

**Elective - CM800401 - DERIVATIVES AND RISK MANAGEMENT**

2019 ADMISSION (Private- Regular)

EC49BE97

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight **1** each.*

1. An amount of Rs.1,20,000 is invested for 2 years at 11.5% annual interest. Calculate the terminal value of the investment at the end of two years, when interest is compounded continuously.
2. How do you classify individuals based on their risk perception?
3. What are currency forwards?
4. What do you mean by covering operations of banks in currency forwards?
5. What is the role of clearing house in futures trading?
6. What do you know about Expectations Model of futures pricing?
7. How currency futures different from currency forwards?
8. Distinguish between naked call and naked put options.
9. Distinguish between Straddle and Strangle.
10. What do you mean by 'notional principal' in Swaps?

(8×1=8 weightage)

**Part B (Short Essay/Problems)**

*Answer any **six** questions.*

*Weight **2** each.*

11. Discuss functions of derivatives market.





12. Explain Value at Risk and Monte Carlo Simulation method used for estimation of Value at Risk
13. Determine the forward price of the bond from the following information. The price of a bond with face value of Rs.500, with a coupon rate of 10 % per annum, payable semi annually is Rs.495. The interest on the bond is expected after 3 and 9 months respectively. The investor buys a forward on the bond with 10 months maturity. The rate of government securities is 6%.
14. The market price of Titan Ltd on September was Rs.3114. The stock futures price of Titan Ltd expiring on October was Rs. 3132.50. The annual interest of borrowing and lending is assumed to be 12% and the transaction cost for share trading averages to 0.5% of the transaction amount. Examine whether there was any arbitrage opportunity. If so, outline the procedures of arbitrage activity.
15. Explain the features of index futures along with its benefits. How the monetary value of index futures is calculated?
16. Explain how a foreign currency payable can be hedged with options.
17. Explain and illustrate the binomial tree of future stock prices.
18. Discuss the advantages and disadvantages of swaps.

(6×2=12 weightage)

### **Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Trace the origin of derivatives trading in the world as well as in India.
20. Discuss the use of currency forwards for speculation and hedging with numerical examples.
21. Define futures contract. Discuss the important features of futures contracts.
22. From the data given, determine put option price; Current stock price = Rs.1260; Strike price = Rs.1280; Time to expiration = 3 months; Volatility = 30% p. a.; Annual risk-free rate = 12%. Use Black-Scholes model.

(2×5=10 weightage)

