D4ACM2201	(2 Pages)	Name
		Reg No

# FOURTH SEMESTER M.Com DEGREE EXAMINATION, APRIL 2024

(Regular/Improvement/Supplementary)

### COMMERCE FMCM4C14 - FINANCIAL DERIVATIVES AND RISK MANAGEMENT

Time: 3 Hours Maximum Weightage: 30

#### Part A: Answer any four questions. Each carries two weightage.

- 1. What does marked-to-market mean?
- 2. Differentiate between call option and put option.
- 3. What is meant by put call parity relationship?
- 4. Explain the trading mechanism of interest rate swap contracts.
- 5. Define value at risk. What is its significance?
- 6. What is credit default swap?
- 7. Suppose the yield on a two-year zero coupon Government of India bond is 4.322% and that on a three-year Government of India zero coupon security is 4.544%. What is the implied forward rate?

 $(4 \times 2 = 8 \text{ weightage})$ 

## Part B: Answer any four questions. Each carries three weightage

- 8. What are currency futures? Discuss its features.
- 9. Explain the reasons for the growth of swap markets.
- 10. What are the advantages and disadvantages of OTC derivative instruments?
- 11. Differentiate between speculation and hedging.
- 12. Explain the characteristics of a forward contract.
- 13. A corporate is planning to issue 3-month commercial paper (CP) worth Rs. 15 Cr. in two months from now and the current CP spot rate is 7.40%. However, it is concerned about the possibility of rise in interest rates in the intervening period. Can it make use of FRA?
- 14. You are contemplating to buy futures (with a 3-month maturity) contract on a stock that is currently trading at Rs. 135. If the stock does not pay any dividends, how much will you pay for it if the T-bill yield is 6%?

 $(4 \times 3 = 12 \text{ weightage})$ 

# Part C: Answer any two questions. Each carries five weightage

- 15. Derivatives are financial products for management of exchange risk. Comment.
- 16. Discuss the various strategies of hedging with stock index futures.
- 17. Current market price of a share is Rs. 50, annual volatility 30%, risk free interest rate 10%. Find the value of 3 month put option if exercise price is Rs. 40 by applying Black and Scholes Model.
- 18. What is the price of a European call that expires in 180 days' time with a strike price of Rs.45 when the underlying is traded at Rs. 50? It is also given that the stock will pay a dividend of Rs. 2 in 45 days' time and the interest rate is 10%. Assume a flat yield curve and the volatility of the stock as 25% p.a.

 $(2 \times 5 = 10 \text{ weightage})$