

St. Clare College

Autonomous, Bengaluru

ROLL NO:

DATE:

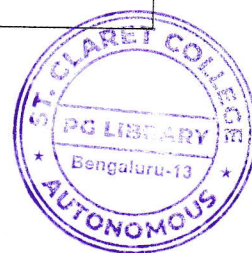
PG END SEMESTER EXAMINATION-JUNE/ JULY 2026

M.Com: II SEMESTER

MCO 2224: RISK MANAGEMENT & DERIVATIVES

TIME: 3 hours.

MAX. MARKS: 70



This paper contains TWO printed pages and FOUR parts

Instructions:

1. Verify and ensure that the question paper is completely printed.
2. Any discrepancies or questions about the exam paper must be reported to the COE within 1 hour after the examination.
3. Students must check the course title and course code before answering the questions.

PART-A

Answer SIX questions out of EIGHT. Each answer carries TWO marks. [8x2 = 16]

1. Define Business Risk.
2. What is Altman's Z Score?
3. State any two features of Credit Risk.
4. What is a Yield Curve?
5. Define Derivatives.
6. Mention any two types of Swaps.
7. Write short note on RAROC.
8. Calculate VaR of an asset, it has a daily standard deviation returns equal to 1.1% and the asset has a current value of Rs.90,45,000 and Z score of 95%.
9. What is Mark-to-Market (MTM)?
10. Define swaps.

PART-B

Answer any FOUR questions out of SIX. Each answer carries FIVE marks. [4x5=20]

11. Explain the classification and sources of business risk.
12. Compare and contrast Futures and Options contracts.
13. Describe the features and participants of the derivatives market.
14. Explain the calculation and applications of VaR models in market risk.

15. The stock is currently priced at Rs.200, in one year it can either go up by 10% or down by 10%. The strike price is Rs.210. The risk-free interest rate is 5% p.a. calculate the value of European call option using one period binomial option model.
16. A trader enters into a futures contract to buy 1,000 shares of a company at ₹250 per share. The daily settlement prices of the contract for the next four days are as follows:

Day	Settlement Price (₹)
Day 0 (Purchase)	250
Day 1	260
Day 2	255
Day 3	270
Day 4	265

- Calculate the daily Mark-to-Market (MTM) gains or losses.
- Prepare a table showing daily MTM and cumulative MTM.
- Determine the total profit or loss at the end of Day 4.
- Briefly explain the concept of Mark-to-Market in futures trading.

PART-C

Answer any TWO questions out of THREE. Each answer carries TEN marks. [2X10=20]

- Explain the steps and objectives of risk management in business.
- From the following information calculate the Z score and interpret the results.

Working capital	Rs.5,00,000
Retained earnings	Rs.10,00,000
EBIT	Rs.7,50,000
Total assets	Rs.50,00,000
Market value of equity	Rs.30,00,000
Total liabilities	Rs.20,00,000
Sales	Rs.40,00,000
- Explain the Black-Scholes Option Pricing Model with relevant assumptions and formula.

PART-D

Answer the following. Answer carries Fourteen Marks. [1X14=14]

- You are a risk manager at a bank. The credit team is evaluating a large loan to a corporate client. Discuss how you would use credit rating models such as Z Score and CIBIL rating. Additionally, explain how you would use derivatives to hedge against potential interest rate risk.
