



ST. FRANCIS DE SALES COLLEGE

A FRANSALIAN INSTITUTE OF HIGHER EDUCATION **AUTONOMOUS**

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END SEMESTER EXAMINATION – AUGUST 2025

COOMMERCE -II SEMESTER M.COM

24MCO22 – RISK MANAGEMENT AND DERIVATIVES

Time: 3 Hours

Max. Marks: 70

Instruction: Answer should be written completely in English

SECTION – A

1. Answer any **SEVEN** questions. **Each** question carries **TWO** marks. **(7X2=14)**

- Define risk.
- Give any four examples of an emerging risk.
- Expand 'KMV' in the KMV Model.
- State any two sources of credit risk.
- Define a yield curve.
- Define Operational Risk.
- Who are the participants in the derivatives market?
- What are Green Derivatives?
- What is a futures contract?
- What are crypto futures?

SECTION – B

Answer any **FOUR** questions. **Each** question carries **FIVE** marks. **(4X5=20)**

- State the various objectives of risk management.
- What is Altman's Z score management model? Measure financial fitness of ABC private bank using Altman's Z score model from the following information:

Particular	Amount (₹)
Share Capital	1,00,000
Market Value of Equity (MVE)	44,000
Total Book Value of Assets (TBA)	2,33,500
Total Book Value of Liabilities (TBL)	83,500
Current Year Profit (Retained Earnings)	27,500



Sales of the Year	4,00,000
Earnings after Interest & Tax	13,000
Tax @30%	5,571.43
Interest	15,000
Reserves & Surplus	33,000
Creditors	13800
Working Capital (WC)	24,000

4. Calculate the credit score of XYZ Ltd from the following data by using Altman's Z-Score Model.

Particulars	Amount (₹)
Total Assets	4,50,000
Total Liabilities	4,30,000
Sales	9,00,000
Earnings After Interest & Tax	5,00,000
Interest	50,000
Tax Rate	30%
Retained Earnings	2,00,000
Market Value of Equity	4,50,000
Debtors	50,000
Stock	40,000
Cash	90,000
Creditors	30,000
Bills Payable	10,000
Outstanding Expenses	15,000

5. Explain the steps involved in the Operational Risk Management process
 6. Explain the economic benefits of derivatives with examples.
 7. Mr. John took a long position in a 3-month futures contract for 1,000 Euros at a contract price of Rs 76.75/€. The broker wanted: 10% Initial Margin, Maintenance Margin = 90% of Initial Margin. The futures prices in the market for the first 12 days are as follows:

Day	Futures Price (Rs/€)
Day 1	76.84
Day 2	76.98
Day 3	76.12
Day 4	76.25
Day 5	77.21
Day 6	77.24
Day 7	77.28
Day 8	77.25



Day 9	77.12
Day 10	76.90
Day 11	77.05
Day 12	77.00

Prepare a Margin Account Statement in the books of the broker assuming that any margin calls are honoured immediately.

SECTION – C

Answer any **TWO** questions. Each question carries **TWELVE** marks. **(2X12=24)**

8. Analyse the impact of emerging risks such as cyber security threats and environmental risks.
9. Discuss different types of derivatives and their uses.
10. Analyse the features and uses of options contracts.
11. Describe risk management techniques.

SECTION – D

12. **Compulsory** skill-based question on case study. **(1x12=12)**

Axis Bank is one of India's largest private sector banks. In October 2021, the bank's Unified Payments Interface (UPI) system crashed during the Diwali festival rush, affecting millions of users. Customers were unable to perform digital transactions for nearly 14 hours. Transactions failed, balances showed incorrectly, and in some cases, users were debited twice. The crash was linked to a server capacity issue following a recent system upgrade that hadn't been stress-tested. Social media was flooded with complaints. Merchants who relied on UPI payments were especially hit. Axis Bank's customer support was overwhelmed, and the RBI sought an explanation.

Questions:

1. What caused the UPI failure at Axis Bank?
2. Discuss how inadequate system testing contributes to operational risk.
3. How can banks prepare for high-traffic digital events?
4. What business continuity measures should be implemented?
5. How does social media amplify operational risk incidents?

