

Program: M.COM PART - I Semester: II Program Code: 2120361
Course: RISK MANAGEMENT Course Code: 59371
Duration: 2 Hours Examination Pattern: NEP-Autonomous Max. Marks: 50

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Draw neat diagrams wherever necessary.

Examination:

REGULAR

Q. 1 Analyse the case and answer the questions that follow : [10]

A private equity firm is deciding whether to acquire a company. This type of M&A case is slightly different from the traditional type because private equity firms don't operate like traditional businesses. Private equity firms are investment management companies that use investor money to acquire companies in the hopes of generating a high return on investment. In the field of finance, private equity (PE) is capital stock in a private company that does not offer stock to the general public. Private equity is offered instead to specialized investment funds and limited partnerships that take an active role in the management and structuring of the companies.

Private equity firms generally focus on improving operational efficiency, restructuring management, enhancing profitability and ultimately exiting the investment through sale, merger or public offering. Their investment horizon is usually medium to long term, and the return expectations are comparatively higher due to the risk involved. The acquisition decision therefore requires careful financial evaluation, due diligence and assessment of growth potential.

In the light of above explain:

- (a) How acquisition by a PE firm is different from traditional takeovers. [03]
- (b) Importance of PE [03]
- (c) PE as a means to raise funds [04]

Q. 2 Attempt any ONE of the following: [10]

- (a) An Indian importer has to pay USD 4,00,000 after 4 months.
Current Futures Rate = ₹81.75 per USD
Contract Size = USD 1,000
At maturity, the spot rate becomes ₹82.60 per USD.

Required:

1. Identify the type of risk faced.
2. Suggest appropriate hedging strategy.
3. Calculate number of futures contracts required.
4. Calculate gain or loss on futures.
5. Determine the effective rupee outflow after hedging.

OR

(b) The following data relates to Call and Put Options on shares of ASB Ltd.:

Exercise Price (K) = ₹600

Call Premium = ₹30

Put Premium = ₹25

Market prices at maturity: ₹520, ₹580, ₹600, ₹650, ₹700

Complete the table:

Sr. No.	Type of Option	Market Price	Exercise Price	Premium
1	Call	520	600	30
2	Call	580	600	30
3	Call	600	600	30
4	Call	650	600	30
5	Call	700	600	30
6	Put	520	600	25
7	Put	580	600	25
8	Put	600	600	25
9	Put	650	600	25
10	Put	700	600	25

Required :

1. Net Pay OFF

2. ITM / OTM (option will be exercised or not)

Q. 3 Attempt any ONE of the following:

[10]

(a) The possible returns of a security are:

Return (%)	Probability
6	0.25
10	0.25
18	0.30
24	0.20

Required:

1. Calculate Expected Return.
2. Calculate Variance.
3. Calculate Standard Deviation.
4. Comment on the level of risk.

OR

- (b) An investor writes a Put Option with:

Exercise Price = ₹800

Premium Received = ₹35

Market price at maturity is ₹720, ₹800 and ₹880.

Required:

Calculate payoff in each case.

Compute net profit or loss of the writer.

Explain the risk exposure of the option writer.

- Q. 4 Attempt any ONE of the following:

[10]

- (a) A bond has the following features:

Face Value = ₹1,000

Coupon Rate = 9% per annum

Maturity = 4 years

Yield to Maturity = 7%

Required:

1. Calculate the Present Value of the bond.
2. Calculate Macaulay Duration.
3. Explain how duration measures interest rate risk.

OR

- (b) A commercial bank provides the following information:

Capital Funds:

- Tier I Capital = ₹750 crore
- Tier II Capital = ₹250 crore

On-Balance Sheet Assets:

Asset Type	Amount (₹ crore)	Risk Weight
Cash & Balances with RBI	300	0%
Government Securities	500	0%
Housing Loans	600	50%
Corporate Loans	900	100%
MSME Loans	400	75%

Required:

1. Calculate Risk-Weighted Assets (RWA).
2. Calculate Capital Adequacy Ratio (CAR).
3. If minimum CAR requirement is 9%, comment whether the bank meets the regulatory requirement.

Q. 5 **Attempt any ONE of the following:**

[10]

(a) Explain various kinds of Financial Risk

OR

(b) **Write Short Notes :**

- i) Credit Risk Management
- ii) Exotic Fixed Income Instrument

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