FI[illegible] EXAM
PAPER - 2
Advanced Financial Management

# LMN2

0 4 MAY 2025

Roll No. ...............................

Total No. of Questions – **6**

Total No. of Printed Pages – **12**

Maximum Marks – **70**

## GENERAL INSTRUCTIONS TO CANDIDATES

1. The question paper comprises two parts, Part I and Part II.
2. Part I comprises Multiple Choice Questions (MCQs).
3. Part II comprises questions which require descriptive answers.
4. Ensure that you receive the question paper relating to both the parts. If you have not received both, bring it to the notice of the invigilator.
5. Answers to MCQs in Part I are to be marked on the OMR answer sheet as given on the cover page of descriptive answer book only. Answers to questions in Part II are to be written in the same descriptive answer book. Answers to MCQs, if written inside the descriptive answer book will not be evaluated.
6. OMR answer sheet given on the cover page of descriptive answer book will be in English only for all candidates, including for Hindi medium candidates.
7. **The bar coded sticker provided in the attendance register, is to be affixed only on the descriptive answer book.**
8. You will be allowed to leave the examination hall only after the conclusion of the exam. If you have completed the paper before time, remain in your seat till the conclusion of the exam.
9. Duration of the examination is 3 hours. You will be required to submit the descriptive answer books with OMR cover page to the invigilator before leaving the exam hall, after the conclusion of the exam.
10. The invigilator will give you acknowledgement on Page 2 of the admit card, upon receipt of the descriptive answer book.
11. Candidate found copying or receiving or giving any help or defying instructions of the invigilators or having / using mobile phone or smart watch will be expelled from the examination and will also be liable for further punitive action.

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## PART – II

**70 Marks**

1. Question paper comprises **6** questions. Answer Question No. **1** which is compulsory and any **4** out of the remaining **5** questions.
2. Working notes should form part of the answer.
3. Answers to the questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate has not opted for Hindi Medium, his/her answers in Hindi will not be evaluated.

## PART – II

1. (a) Following details are available for PQR Ltd. : **6**

Current Dividend = ₹ 3.50

Cost of Equity = 12.50%

Growth Rate = 2%

You required to –

(i) Calculate Price of Share of PQR Ltd.

(ii) Is PQR Ltd.'s Share over-valued if the Share Price = ₹ 45, ROE = 8% and EPS = ₹ 2.75 ?

Show your calculations using both the P/E Multiple Approach and Earnings Growth Model.

(b) With the help of the following information of PND Ltd., compute the Economic Value Added : **4**

Equity Share Capital ₹ 100 Lakhs

Reserves and Surplus ₹ 200 Lakhs

8% Debentures ₹ 300 Lakhs

Cost of Equity = 15%

Financial Leverage = 1.5 times

Income Tax Rate = 25%

(c) Mr. PK imports raw materials from China, processes them in India and manufactures finished goods which are then sold in the American market. In this transaction what types of risk faced by Mr. PK ? 4

2. (a) 6

| Security | Standard Deviation (σ) | Weights (w) |
|---|---|---|
| R | 20% | 0.8 |
| S | 50% | 0.2 |

Calculation upto two decimal place.

From the information given above, you are required to calculate Portfolio Standard Deviations, if-

(i) Securities returns are independent.

(ii) Securities returns are perfectly negatively correlated.

(iii) Securities returns are perfectly positively correlated.

(b) Mr. X gets the following 2-way quotes in the foreign exchange market : 4

| | Spot | 2-months Forward |
|---|---|---|
| ₹/US$ | ₹ 86.00/₹86.20 | ₹ 88.00/88.40 |

Calculation upto two decimal place.

You are required to calculate –

(i) How many US Dollars should Mr. X sell to get ₹ 40,00,000 after 2 months ?

(ii) How many Rupees Mr. X is required to pay to obtain US$ 3,00,000 in the spot market ?

(iii) Assume that Mr. X has US$ 75,000 in current account earning no interest. Return on Investment (ROI) on rupee investment is 12% per annum. Should Mr. X convert the US$ now or 2 months later ?

(c) Identify the role of CFOs in addition to traditional role in post pandemic time. 4

3. (a) BC Ltd. is contemplating on buying a new machine at ₹ 70,00,000 with an additional working capital requirement of ₹ 10,00,000. The machine is expected to have an economic useful life of 5 years, with no salvage value. The company follows the straight line method of depreciation and same is accepted for tax purposes. The machine is expected to generate an incremental increase in the before tax cash operating income of ₹ 25,00,000 (in real terms) per year for a period of 5 years. The relevant tax rate is 35%. Inflation is expected to be 6% per year and the firms cost of capital in real term is 10% per year. Assuming that the working capital requirement will remain unchanged throughout the period, in spite of inflation. 6

Advise the company whether the machine should be purchased or not. Show your NPV calculation in real term.

Calculation upto two decimal place.

PV Factor at 10% & 6% are as under -

| PV factor | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| At 10% | 0.909 | 0.826 | 0.751 | 0.683 | 0.621 |
| At 6% | 0.943 | 0.890 | 0.840 | 0.792 | 0.747 |

(b) Mr. X has excess cash of ₹ 50 lakhs which he wants to invest in short-term marketable securities. 4

Expenditure relating to this investment will be ₹ 1,25,000 and the securities invested will have an annual yield of 9%.

Mr. X seeks your advice –

(i) as to the period of investment so as to earn a pre-tax income of 5%.

(ii) as to the minimum period to break-even his investment expenditure.

(c) Mr. J believes that 'the market has demonstrated a weak type of efficiency. Explain the various types of tests that can be used to prove the weak form of efficient market theory. 4

4. (a) Peacock Inc., a US based company, is planning to set up a software development unit in India. The unit will remain in existence in India for one year and the software is expected to get developed within this time frame. Software developed will be bought back by the US parent at a transfer price of USD 4 Million. The software developed will be sold in the US for USD 6 Million. Other estimates are as under : 6

(i) Rent for fully furnished unit with necessary hardware in India is ₹ 25,00,000.

(ii) Manpower Cost - 120 software professionals will be working for 10 hours @ ₹ 275 per man-hour each day for 350 effective days in the year.

(iii) Administrative and Other Costs is ₹ 50,00,000

(iv) The rupee-dollar rate is ₹ 84 per USD.

Peacock Inc. will enjoy the following privileges in India:

(A) All profits can be repatriated.

(B) No withholding taxes.

(C) Corporate taxes @ 20 percent on earnings.

Assume 365 days in year.

Advise Peacock Inc. on the financial viability of the project.

(b) GL Ltd. is having a Price Earnings Ratio (P/E Ratio) of 16 times and Earnings per Share (EPS) of ₹ 5. The total numbers of outstanding shares are 2,80,000. 4

FL Ltd. another company is also in the same industry. The GL Ltd. is in negotiation for acquisition of the FL Ltd. by issuing shares in the ratio of 4:5, i.e., for 5 shares of FL Ltd., 4 shares of GL Ltd. will be issued. The outstanding shares of FL Ltd. are 50,000. The EPS of the merged entity will be ₹ 5.4.

You are required to calculate-

(i) Pre-merger EPS of FL Ltd.

(ii) Number of shares of GL Ltd. to be issued to FL Ltd. if pre-merger EPS of GL Ltd. is to be maintained.

(c) "Tokenization is some extent resembles the process of securitization." In the reference of this statement, discuss similarities of tokenization and securitization. 4

OR

A venture capital fund manager provides funding at various stages of business growth, taking into consideration factors such as the investment horizon, risk perception, and the specific activities to be financed. You are required to complete the risk matrix provided below :

| Financial stage | Locking Period | Risk Perception | Activity to be Financed |
|---|---|---|---|
| Seed money | | | |
| Start up | | | |
| Second stage | | | |
| Fourth stage | | | |

5. (a) On 1st April, an open-ended scheme of Progressive Mutual Fund had 800 Lakh units outstanding with Net Asset Value (NAV) of ₹ 44.30 per unit. At the end of April, it issued 16 Lakh units at opening NAV plus 2% load, adjusted for dividend equalization. At the end of May, 8 Lakh units were repurchased at opening NAV less 2% exit load adjusted for dividend equalization. At the end of June, 60% of its available income was distributed as dividend. 7

In respect of April-June quarter, the following additional information is available :

| Particulars | ₹ in Lakh |
|---|---|
| Portfolio Value Appreciation | 965.280 |
| Income of April | 49.440 |
| Income for May | 75.070 |
| Income for June | 93.710 |

Calculation upto 4 decimal place.

You are required to calculate-

(i) Income available after distribution of dividend.

(ii) Issue price at the end of April.

(iii) Repurchased price at the end of May.

(iv) Net Asset Value (NAV) per unit as on 30th June.

(b) ZIO is a small-to-medium-sized privately held company specializing in electrical equipment manufacturing and is seeking additional investors. Below are key financial indicators to assist in evaluating the investment potential : 7

- Break-even Achieved: The Company has reached its break-even point this year.
- EBITDA: ₹ 110 Lakh, including an extraordinary gain of ₹ 16 Lakh.
- Pending Adjustments: ₹ 38 Lakh in preliminary sales promotion costs are yet to be written off.

- Unlevered Beta: 1.5 (based on the industry benchmark).
- Capital Structure: Debt-to-Equity Ratio of 30:70
- Risk-Free Rate: 6% (based on liquid bonds).
- Market Rate of Return: 12% (internal industry assessment).
- Equity Value (EV): The EV is to be taken at a multiple of 8 on EBITDA.
- The pre-tax cost of debt is 12.45% and assume a tax regime of 30%

The Future Cash Flows (FCFs) for the next three years are as follows

| | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| Future cash flows (₹ in Lakh) | 150 | 200 | 220 |

Future cash flows are discounted at Weighted Average Cost of Capital (WACC)

PV Factor at 15% & 14% are as under-

| | 1 | 2 | 3 |
|---|---|---|---|
| PV Factor at 15% | 0.870 | 0.756 | 0.658 |
| PV Factor at 14% | 0.877 | 0.769 | 0.675 |

Calculation upto 2 decimal places.

You are required to calculate potential value to be placed on ZIO Company.

6. (a) On 31st December, 2024, Mr. RS has taken a long position of 2 lots of Nifty Futures at price 25,400. One lot of Nifty Future is 50 units. **7**

Margins :

(i) Initial margin required is 10% of contract value.

(ii) Maintenance margin required is 80% of initial margin.

The closing prices of Nifty Future for 5 days are given below :

| Date | Closing price of Nifty Future |
|---|---|
| 01 January, 2025 | 25,520 |
| 02 January, 2025 | 25,390 |
| 03 January, 2025 | 25,250 |
| 04 January, 2025 | 24,800 |
| 05 January, 2025 | 25,100 |

Evaluate the following :

(i) Daily balances in margin account and payment on margin calls, if any.

(ii) If contract squared off on 5th January 2025, gain or loss to Mr. RS

(iii) If Mr. RS taken the short position, gain or loss to Mr. RS.

(b) DEF Ltd. has implemented a strategy to manage its exposure to fluctuating interest rates by engaging in both interest rate caps and floors. 7

The company has purchased \$ 50,00,000 ( i.e. call options on interest rates) cap of 8% at a premium of 0.75% of the face value to protects against rising interest rates. \$ 50,00,000 (i.e. put options on interest rates) floor of 5% is also available at a premium of 0.85% of face value.

You are required to analyze the following situation:

(i) If Interest rate rise to 10 percent, what is the amount received by DEF Ltd. ? What are the net savings from the cap ?

(ii) If DEF Ltd. also purchases a floor, what are net savings if interest rate rises to 10% ?

(iii) Calculate net savings if interest rates fall to 4 percent considering cap & floor both purchase.

(iv) If DEF Limited has purchases the cap and sell the floor and there is price rise is 11%, what will be net saving to the company ?

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