FINAL EXAMINATION **SET - 2**

MODEL QUESTION PAPER **TERM – DECEMBER 2024**

PAPER – 14 **SYLLABUS 2022**

STRATEGIC FINANCIAL MANAGEMENT

Time Allowed: 3 Hours **Full Marks: 100**

The figures in the margin on the right side indicate full marks.

SECTION – A (Compulsory)

1. Choose the correct option: **[15 x 2 = 30]**

(i) The Profitability Index of a Project is 1.28 and its cost of Investment ₹2,50,000. The NPV of the project is_____.

(a) ₹75,000
(b) ₹80,000
(c) ₹70,000
(d) ₹65,000

(ii) If expected NPV = ₹1,20,000 and S.D = ₹30,000, then coefficient of variation will be _____.

(a) 25%
(b) 20%
(c) 30%
(d) 40%

(iii) Which of the following techniques is the most suitable, when NPV and IRR lead to inconsistent ranking due to life disparity between two or more projects?

(a) Modified Net Present Value
(b) Modified Internal Rate of Return
(c) Uniform Annual Equivalent Cost / Benefit
(d) Discounted Payback Period.

(iv) The value of beta of a security does not depend on _____.

(a) Standard deviation of the security
(b) Standard deviation of the market
(c) Correlation between the security and the market
(d) Risk free rate

(v) The Chartist believes that charts

(a) Spot current trend for buying and selling
(b) Indicate the future action to be taken
(c) Shows historical movements
(d) All of the above.

(vi) A company has an ROE of 0.24 and book value of ₹25.38, the EPS for the company is _____.

(a) 6.09
(b) 7.25
(c) 6.94
(d) 6.13

(vii) A bond with a par value of ₹1,000 has a 6% annual coupon rate. Interest is paid semi-annually and the price of the bond is ₹1,025, what is the current yield?

(a) 3.0%
(b) 2.9%
(c) 6.2%
(d) 5.9%

(viii) A certain mutual fund has a return of 17% with standard deviation of 3.5% and the sharpe ratio is 4. The risk free rate is

(a) 12.5%
(b) 4 %
(c) 3%
(d) 7.5%

(ix) Rate of inflation = 5.1%, β=0.85, Risk premium = 2.295%, Market return =12%. The real rate of return will be:

(a) 4.2%
(b) 11.70%
(c) 6%
(d) 5.95%

(x) Which of the following types of risk is most likely avoided by forming a diversified portfolio?

(a) Total risk
(b) Systematic risk
(c) Non-systematic risk
(d) None

(xi) An investor buys 100 shares of a sugar mill at ₹210 per share and at the same time writes a September 250 call at a premium of ₹20 per share. If expiration date price is ₹280, calculate the net gain/loss.

(a) ₹20
(b) ₹40
(c) ₹60
(d) None of the above.

(xii) _____ are underwritten and have a maturity of up to one year.

(a) Note issuance facilities
(b) Medium term notes
(c) Commercial paper
(d) ADRs

(xiii) The 6-month forward rate for US dollar against Rupee is quoted as ₹49.50 as opposed to a spot price of ₹48.85. The forward premium on US dollar is:

(a) 1.50%
(b) 3.08%
(c) 3.05%
(d) None of the above.

(xiv) NFT stands for _____.
(a) Non-fungible token
(b) Non-fuel token
(c) Non-fractional token
(d) Non-fundamental token

(xv) An Indian company's cost of production is ₹20/unit while its export price is $1/ unit. If the $ appreciates by 10% and the spot rate today is ₹40 per $, what is the impact of transaction exposure?
(a) Increase in profit by ₹4 per unit.
(b) Decrease in profit by ₹4 per unit.
(c) No change in profit.
(d) Insufficient data.

SECTION – B

(Answer any 5 questions out of 7 questions given. Each question carries 14 marks.)

[5 x 14 = 70]

2. (a) S Ltd. has ₹10,00,000 allocated for capital budgeting purposes. The following proposals and associated profitability indexes have been determined as follows:

Project	Amount (₹)	Profitability Index
1	3,00,000	1.22
2	1,50,000	0.95
3	3,50,000	1.20
4	4,50,000	1.18
5	2,00,000	1.20
6	4,00,000	1.05

Recommend which of the above investments should be undertaken. Assume that projects are indivisible and there is no alternative use of the money allocated for capital budgeting. **[7]**

(b) ABC leasing Ltd. is in the process of making out a proposal to lease certain equipment. The cost of the equipment is ₹10,00,000 and the period of lease is 10 years. The following additional information is available. You are required to determine the equated annual rent to be charged for the proposal.

I. The machine can be depreciated fully over the 10 years on straight-line basis
II. The current effective tax rate is 40% and expects to go down to 30% from the beginning of the 6th year of the lease.
III. It is the normal objective to make a 10% post-tax return in its lease pricing

IV. Lease management fee of 1% of the value of the assets is usually collected from the lessees upon signing of the contract of lease, to cover the overhead costs related to processing of the proposal.

V. Annual lease rents are collected at the beginning of every year. **[7]**

3. (a) Cyber Company is considering two mutually exclusive projects. Investment outlay of both the projects is ₹5,00,000 and each is expected to have a life of 5 years. Under three possible situations their annual cash flows and probabilities are as under:

		Cash Flow	
Situation	Probabilities	Project A	Project B
Good	0.3	6,00,000	5,00,000
Normal	0.4	4,00,000	4,00,000
Worse	0.3	2,00,000	3,00,000

The cost of capital is 9 per cent, recommend which project should be accepted. Justify with workings. **[7]**

(b) From the balance sheet of India Trading Company Limited as at 31st March, 2024, the following figures have been extracted:

Share Capital	₹
9% Preference Share capital (₹100)	3,00,000
10,000 Equity Shares of ₹10 Each fully paid	1,00,000
10,000 Equity Shares of ₹10 Each ₹5 paid	50,000
10,000 Equity Shares of ₹10 Each ₹2.50 paid	25,000
	4,75,000
Reserve and Surplus:	
General Reserve	2,00,000
Profit and Loss account	50,000
	7,25,000

On a revaluation of assets on 31st March, 2024, it was found that they had appreciated by ₹75,000 over their book value in the aggregate.

The articles of association of the company provide that in case of liquidation, preference shareholders would have a further claim to 10 per cent of the surplus assets, if any.

Evaluate the value of the business through the values of preference shares and equity shares assuming that a liquidation of the company has to take place on 31st March, 2024, and that the expenses of winding up are nil. **[7]**

4. (a) A financial institution issues two types of bonds with one year and another three years' maturity respectively. The first, which pays ₹10,000 a year hence, is now selling for ₹8,929. The second which pays ₹100 next years, ₹100 after two years and ₹1,100 at the end of third year is now offered at ₹997.18. Calculate the implied rates of these two bonds. **[7]**

(b) Orange purchased 200 units of Oxygen Mutual fund at ₹45 per unit of 31st December 2022. In 2023, he received ₹1.00 as dividend per unit and a capital gains distribution of ₹2 per unit. Required:
(i) Calculate the return for the period of one year assuming that the NAV as on 31st December 2023 was ₹48 per unit
(ii) Calculate the return for the period of one year assuming that the NAV as on 31st December 2023 was ₹48 per unit and all dividends and capital gains distributions have been reinvested at an average price of ₹46.00 per unit.
Ignore Taxation. **[7]**

5. (a) Mr. Shiva has estimated probable returns under different macroeconomic conditions for the following three stocks.

Name of the stocks	Current market price (₹)	Rates of return under different macroeconomic scenarios (%)		
		Recession	Moderate growth	Boom
X	10	-12	15	35
Y	30	20	12	-5
Z	80	18	20	15

Mr. Shiva is exploring if it is possible to make any arbitrage profits from the above information. Using the above information recommend an arbitrage portfolio and suggest the payoffs under different economic scenarios. **[7]**

(b) Based on the data provided below, compare the performance of the portfolios using the Jensen model of the differential return.

Portfolio	Realized Return on Portfolio (%)	Portfolio (β)
1	14.5	1.2
2	9.5	0.8
3	18.0	1.4

Return on market portfolio, Rm = 12% Risk-free rate of interest = 6%. **[7]**

6. (a) Shares of Sandeep Ltd. are being quoted at ₹600. 3-Months Futures Contract Rate is ₹636 per share for a lot size of 500 shares. If the Sandeep Ltd. Is not expected to distribute any dividend in the interim, risk free rate of return is 9%, recommend course of action for a trader in shares.
If the 3-Months Futures Contract Rate is ₹600, suggest the course of action.
[Value of $e^{0.0225}$ =1.022755] **[7]**

(b) Given the following:

	Amount (₹)
Strike price	200
Current stock price	185
Risk free rate of interest	5% p.a.

(i) Calculate the theoretical minimum price of a European put option after 6 months.

(ii) If European put option price is ₹5, then assess an arbitrageur profit.

[Value of $e^{0.05\times0.5}$ =1.02532] **[7]**

7. (a) Following are the details of cash inflows and outflows in foreign currency denominations of M Co., an Indian export firm, which have no foreign subsidiaries —

Currency	Inflow	Outflow	Spot rate	Forward rate
US $	4,00,00,000	2,00,00,000	48.01	48.82
French Franc (F Fr)	2,00,00,000	80,00,000	7.45	8.12
UK £	3,00,00,000	2,00,00,000	75.57	75.98
Japanese Yen	1,50,00,000	2,50,00,000	3.20	2.40

(i) Determine the net exposure of each foreign currency in terms of Rupees.

(ii) Suggest any of the exposure positions off-setting to some extent. **[7]**

(b) Evaluation of Forward Premium – Encashing Foreign Currency Deposits – The following 2 – way quotes appear in the foreign exchange market –

	Spot Rate	2-Months Forward
₹/ US $	₹46.00/ ₹46.25	₹47.00/ ₹47.50

Required –

(i) Evaluate how many US Dollars should a firm sell to get ₹25 Lakhs after two months?

(ii) Evaluate how many Rupees is the firm required to pay to obtain US $2,00,000 in the spot market?

(iii) Assume the firm has US $ 69,000 current account's earning interest. ROI on Rupee Investment is 10% p.a. Examine whether the firm encash the US $ now, 2 months later. **[7]**

8. Short notes on:

(a) Discuss the advantages of Digital Finance. **[5]**

(b) Develop the concept of Euro Notes. **[5]**

(c) Analyze the problems of Securitization. **[4]**