FINAL EXAMINATION

June 2026

P–14(SFM)
Syllabus 2022

STRATEGIC FINANCIAL MANAGEMENT

Time Allowed: 3 Hours | Full Marks: 100

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

All sections are compulsory. Each section contains instructions regarding the number of questions to be answered within the section.

All working notes must form part of the answer.

Whenever necessary, candidates may make appropriate assumptions and clearly state them in the respective answer.

No present value factor table or other statistical table will be given in additional to this question paper. Candidates may use the value tabulated at the relevant portions of this question paper.

This paper contains two sections A and B. Section A is compulsory and contains Question 1 of 30 marks.

Section B contains questions 2 to 8 of 14 marks each.

SECTION-A

Answer *all* the questions. Each question carries two marks:

1. Choose the correct answer from the alternatives given: 2×15=30

(i) **ZOBON (P) Ltd.**, expects a uniform Cash inflow of ₹ 12 Crore for 5 years from its Project ZB. The expected rate at which the said cash flow will be reinvested is 15%. The cost of capital for the Company is 12%. If the Modified Net Present Value (MNPV) of the Project ZB is ₹ 5.905 Crore, how much the company will invest (in ₹) in the said Project?

[Given PVIF / FVIFA]

Interest Rate	12 %	14 %	15 %
PVIF (5 Yrs.)	0.5674	0.5194	0.4972
FVIFA (5 Yrs.)	6.353	6.610	6.742

(A) ₹ 30 Crore

(B) ₹ 36 Crore

(C) ₹ 40 Crore

(D) None of the above

(ii) **PRITAM Ltd.,** has provided you the following details of Project Z—

Project Cost	₹ 12,00,000
Project Life	4 Years
Annual cash inflow	₹ 4,50,000
Cost of Capital	14 %

[Given, PVIFA (14 %, 4 Years) = 2.9137; PVIFA (18 %, 4 Years) = 2.6667]

What is the sensitivity of Annual Cash Flow of the Project Z?

(A) 6.38 %

(B) 7.26 %

(C) 8.48 %

(D) None of the above

(iii) The Financial Manager of **YIRO Ltd.** feels that he would rather have a certain inflow of ₹ 15,000 in the second year of a project than an inflow of ₹ 20,000 with probability of 0.75 and ₹ 40,000 with probability of 0.25 respectively.

What will be the certainty equivalent Co-efficient of Cash inflow?

(A) 0.60

(B) 0.50

(C) 0.40

(D) None of the above

(iv) **Omega Bank Ltd.,** plans to securitize its pool of housing loans to improve liquidity. The bank transfers these assets to a separate entity that issues securities to investors and isolates risk from the originator. What is the role of this entity?

(A) Underwriter

(B) Depository Participant

(C) Mutual Fund Trustee

(D) Special Purpose Vehicle (SPV)

(v) The prices of the Stock of **RIBON Ltd.**, in the Market are given below :

Date	Price (₹)
1st April	450
4th April	456
7th April	478
8th April	476
9th April	479
10th April	468

What would be the Relative Strength Index (RSI) of the Stock of **RIBON LTD.**?

(A) 70.41

(B) 60.32

(C) 48.72

(D) None of the above

(vi) **XYZ Ltd.,** issued highly rated bond in the market with face value of ₹ 100 carrying coupon rate of 14% p.a. which matures after five years. Interest is payable semi-annually. If Mr. Xavier, an investor, requires a return of 16 % p.a., what will be the value of Bond if it holds at Maturity?

(A) ₹ 93.27

(B) ₹ 94.39

(C) ₹ 95.57

(D) None of the above

[Given, PVIFA (8 %, 10 Years) = 6.710 and PVIF (8 %, 10 Years) = 0.463]

(vii) A Financial Analyst believes that stock returns are influenced by multiple macroeconomic factors such as inflation, GDP growth, and interest rates than a single market factor. This view is consistent with :

(A) CAPM

(B) Dividend Discount Model

(C) Arbitrage Pricing Theory (APT)

(D) Efficient Market Hypothesis

(viii) A Company has an equity beta of 1.20 and a debt equity ratio of 0.8. If the Tax rate is NIL, what will be the beta of the Asset of the Company?

(A) 0.90

(B) 0.80

(C) 0.67

(D) 1.20

(ix) Responses to risk generally fall into :

(A) Risk avoidance

(B) Risk transfer

(C) Risk Measurement

(D) Both (A) and (B)

(x) A Nifty has a Theta of –0.02. If the time to expiration decreases by 1 day, what is the change in the option price, assuming the option price is ₹ 1,000 ?

(A) Decrease by ₹ 20

(B) Increase by ₹ 20

(C) Decrease by ₹ 50

(D) Increase by ₹ 50

(xi) Which of the following Complex derivatives are options on Portfolios of underlying asset?

(A) Warrants

(B) Swaptions

(C) Baskets

(D) LEAPS

(xii) A Multinational Corporation raises short to medium-term funds in international market by issuing unsecured debt instruments denominated in a foreign currency and placed outside the jurisdiction of any single country. What kind of such instruments are referred?

(A) Foreign Bonds

(B) Euro Notes

(C) FCCBS

(D) ADRs

(xiii) A dealer observes spot mid-rates : ₹ / USD = 83.65, ₹ / GBP = 102.40, GBP / USD = 1.2270. He wants to trade USD 10,00,000 : by USD via GBP at the implied cross rate, then immediately selling USD for INR at the Direct ₹ / USD rate. What is the approximate arbitrage profit in INR?

(A) ₹ 1.80 Lakh

(B) ₹ 1.95 Lakh

(C) ₹ 2.00 Lakh

(D) None of the above

(xiv) Interest rate on Indian Rupee and pound sterling are 8% p.a. and 5 % p.a. respectively. If the current exchange rate is ₹ 112 / £, what will be the 6 Month forward rate ?

(A) ₹ 113.64

(B) ₹ 114.10

(C) ₹ 108.34

(D) ₹ 115.50

(xv) Stablecoins are designed to maintain a stable value by

(A) being pegged to a volatile asset like stocks.

(B) backing the coin with a reserve of traditional assets, such as fiat currency.

(C) allowing the coin to fluctuate based on market demand.

(D) tying the coin's value to gold and silver only.

SECTION- B

Answer *any five* questions from *Question No. 2* to *Question No. 8*.

Each question carries 14 marks. 14×5=70

2. (a) **RSE Ltd.,** an existing manufacturing company, is evaluating a proposal to undertake a new project for the manufacture of pocket video games. The project requires an initial capital expenditure of ₹750 lakhs on fixed assets and an additional ₹180 lakhs towards working capital at the commencement of the project. The plant has an installed capacity of 15 lakh units per annum. However, the expected capacity utilisation during the 6-year life of the project will vary, with utilisation at 40% in the first year, 70% in the second year, 90% in the third year, and 100% from the fourth year onwards.

The product is expected to be sold at an average price of ₹220 per unit, yielding a contribution margin of 50%. The annual fixed costs (excluding depreciation) are estimated at ₹300 lakhs in the first year, ₹420 lakhs in the second year, and ₹550 lakhs per annum from the third year onwards.

Depreciation on fixed assets will be charged at 30% on the written down value method for tax purposes. The applicable corporate tax rate is 40%. It is further estimated that an additional investment in working capital of ₹120 lakhs will be required at the end of the third year.

At the end of the project life, the fixed assets are expected to realise a salvage value equivalent to 12% of their original cost, and any funds invested in working capital are assumed to be recouped in full upon completion of the project. For the purpose of this analysis, any balancing charge provisions under the Income Tax Act may be ignored.

The company has a required rate of return of 15%.

Given : PV Factor at 15% :

Year	1	2	3	4	5	6
Present value	0.870	0.756	0.658	0.572	0.497	0.432

***Required*:**

(i) **Assess** the annual operating cash inflows and Net Present Value (NPV).

(ii) **Advise** whether the proposal is viable to the company or not. 7

(b) **RONEX Ltd.** is evaluating lease pricing for a high-end industrial machine. The company provides the following details:

Investment cost: ₹ 2,00,00,000

Lease term: 4 years

Residual value: NIL

Pre-tax required annual return: 16%

RONEX Ltd. is considering two different lease rental structures:

(i) Deferred (P.P) Lease Rentals (No rental in the first year, equal rentals in the last 3 years.)

(ii) Ballooned (P.P) Lease Rentals (fixed ₹20 lakhs in the first 2 years, higher rent in the last 2 years)

(Ignore Depreciation and Income Tax)

Given : PV Factor :

Year	1	2	3	4
PVIF (16%)	0.862	0.743	0.641	0.552

***Required*:**

(i) **Assess** the annual lease rentals for each structure.

(ii) **Advise** which structure is suitable if initial cashflow is uncertain or not fixed. 7

3. (a) **Strato Wear Ltd.,** a company engaged in developing smart wearable technology, is evaluating two mutually exclusive projects—Project X and Project Y. Each project requires an initial investment of ₹30,00,000 and has a life of 3 years.

The cash inflows of both projects are influenced by two independent factors, namely market demand (high or low) and technology performance (efficient or inefficient). The joint probability of high demand with efficient performance is 0.30, high demand with inefficient performance is 0.20, low demand with efficient performance is 0.25, and low demand with inefficient performance is 0.25.

The corresponding annual cash inflows under each combination are as follows:

Market Demand	Technology Performance	Project X (₹)	Project Y (₹)
High	Efficient	18,00,000	22,00,000
High	Inefficient	14,00,000	15,00,000
Low	Efficient	12,00,000	10,00,000
Low	Inefficient	8,00,000	6,00,000

The coefficient of variation (CV) for Project X is 0.28 and for Project Y is 0.40. Based on their risk profiles, the appropriate cost of capital is estimated at 11% for Project X and 14% for Project Y. The present value annuity factors for 3 years are 2.444 at 11% and 2.322 at 14%.

The management is risk-averse and aims to select a project that offers an optimal balance between risk and return.

***Required*:**

(i) **Assess** the Expected Cash Inflow of Projects X and Y.

(ii) **Analyze** the standard deviation of cash inflows using the given coefficient of variation.

(iii) **Assess** the Net Present Value (NPV) of both projects.

(iv) **Recommend** which project Strato Wear Ltd. should be selected based on risk & return. 7

(b) **Zenith Systems Ltd.** has recently paid a dividend of ₹3.60 per share. The company follows a policy of retaining 40% of its earnings and has a return on equity (ROE) of 15%. Due to expansion plans, the company expects dividends to grow at 12% per annum for the next 2 years, after which the growth (S.G) rate will stabilize based on its

retention policy. The required rate of return for equity shareholders is 12%. The current earnings per share (EPS) of the company is ₹6, and shares of comparable companies are trading at an average P/E ratio of 14.

Given : PV Factor :

Year	1	2	3
PVIF (12%)	0.893	0.797	0.712
PVIF (15%)	0.870	0.756	0.658

***Required*:**

(i) **Assess** the intrinsic value of the share using the multi-stage Dividend Growth Model.

(ii) **Analyze** the current market price of the Company's share. 7

4. (a) **Green Volt Power Ltd.** is considering investing in a corporate bond with a face value of ₹1,000 carrying a coupon rate of 9% per annum, payable annually. The bond has a maturity of 6 years with a redemption value of ₹1,060. The investor requires a return of 12% per annum, while the bond's current market yield to maturity is 10% per annum.

Given : PV Factor :

Periods	PV @5%	PVAF @5%	PV @6%	PVAF @6%	PV @10%	PVAF @10%	PV @12%	PVAF @12%
4	0.8227	3.5459	0.7921	3.4651	0.6830	3.1698	0.6355	3.0374
6	0.7462	5.0756	0.7050	4.9174	0.5645	4.3552	0.5066	4.1114
8	0.6768	6.4631	0.6274	6.2099	0.4665	5.3349	0.4039	4.9676
12	0.5568	8.8631	0.4970	8.3840	0.3186	6.8136	0.2567	6.1944

***Required*:**

(i) **Assess** intrinsic value of the bond if it holds at maturity.

(ii) **Assess** current market price of the bond.

(iii) **Analyze** the intrinsic value with the market price to determine whether the bond is undervalued or overvalued from the investor's perspective. 7

(b) **MS. KINTU**, a high-net-worth investor, has invested in two mutual fund schemes—Growth Fund and Dynamic Fund. While reviewing his portfolio, he observed that both funds have shown significant changes in their Net Asset Values (NAVs) over the past year. However, he is concerned about evaluating their performance on a risk-adjusted basis rather than relying only on absolute returns.

Growth Fund follows a conservative investment strategy with lower volatility, whereas Dynamic Fund adopts an aggressive strategy with higher exposure to market risk. The prevailing **Treasury Bill (T-Bill) rate is 6% per annum.**

The following information is available:

Particulars	Growth Fund	Dynamic Fund
NAV at beginning (₹)	50	40
NAV at end (₹)	58	52
Dividend per unit (₹)	2	3
Standard Deviation (%)	8%	14%
Beta	0.85	1.6

***Required*:**

(i) **Assess** the return generated by each fund.

(ii) **Analyze** the performance of each fund using the Sharpe Ratio.

(iii) **Analyze** the performance of each fund using the Treynor Ratio.

(iv) **Advise** which fund should be preferred based on Sharpe & Treynor Ratio. 7

5. (a) **Mr. Rohan,** a portfolio manager, is evaluating two investment opportunities—Stock A and Stock B—to assess their performance relative to market risk. He wants to determine whether these securities are fairly priced based on their risk-return characteristics.

The following data has been collected:

Particulars	Stock A	Stock B
Covariance with market	0.020	0.028
Variance of market	0.016	0.016
Expected Return (%)	19%	20%

The NIFTY has yielded as return of 15%. Additionally, a Treasury Bill (T-Bill) of face value ₹100 carries a coupon rate of 6.75% per annum and is currently trading at ₹108.

***Required*:**

(i) **Analyze** Beta of each stock.

(ii) **Assess** expected return using CAPM for each stock.

(iii) **Analyze** whether each stock is overvalued or undervalued. 7

(b) On 1st April 2024, Zeta Capital Ltd. invested in equity shares of the following two companies:

Company Name	No. of Shares	Purchase Cost (₹)
Alpha Motors Ltd. (₹10 each)	800 shares	₹32,000
Beta Warehousing Ltd. (₹5 each)	1200 shares	₹60,000

During the financial year 2024-25, **Alpha Motors Ltd.** declared a 30% dividend in August 2024, while **Beta Warehousing Ltd.** declared a 40% dividend in October 2024.

As of 31st March 2025, the market prices of the shares stood at ₹43 for Alpha Motors and ₹58 for Beta Warehousing. On 1st April 2025, investment analysts projected that for the FY 2025-26, Alpha Motors Ltd. is expected to declare a dividend of 80%, while Beta Warehousing Ltd. is expected to declare a dividend of 100%, based on their respective face values. The expected market prices on 31st March 2026 and their associated probabilities are:

Probability	Price per share–Alpha Motors	Price per share–Beta Warehousing
0.3	₹44	₹58
0.4	₹48	₹60
0.3	₹50	₹63

The systematic risk values were reported as 1.5 for Alpha Motors Ltd. and 0.5 for Beta Warehousing Ltd. The current risk-free rate is 8%, and the expected market return is 13%.

***Required*:**

(i) **Analyze** the average return from the portfolio for FY 2024-25.

(ii) **Assess** the expected average return from the portfolio for FY 2025-26.

(iii) **Assess** the risk-adjusted performance of each stock by calculating the Treynor Ratio, and advise Zeta Capital Ltd. which stock is offering better return per unit of systematic risk. 7

6. (a) **GENZ Capital Ltd.** holds a diversified equity portfolio worth ₹ 250 Crore, with a beta of 1.35 relative to the Nifty 50 index. The portfolio has a correlation of 0.50 with the Nifty 50 index, and the company expects high-beta stocks to increase the overall

beta to 1.50 during the hedge period. The company plans to hedge 100% of its market exposure using Nifty futures over the next six months. The current Nifty 50 index value is 19,300, and the six-month Nifty futures price is 19,250 points with a contract size of 200 units. The company anticipates a market decline of 4.0% over the next six months.

***Required*:**

(i) **Assess** the number of Nifty futures contracts needed to hedge the portfolio.

(ii) **Analyze** the expected profit/loss by hedging.

(iii) If Nifty 50 index increases to 19,350 points over the same period, and the adjusted beta (with correlation of 1.0) is 1.50, the number of contracts will be same as calculated in part (i). **Assess** the expected profit/loss by hedging. 7

(b) **XEB Ltd.,** and **YON Ltd.,** want to raise US $ 50 Million each. They have been offered the following rates per annum :

Company	Fixed (%)	Floating
XEB Ltd.	7.5	LIBOR + 25 bps
YON Ltd.	8.45	LIBOR + 37 bps

Bank B, on a commission of 0.2 % (fully borne by YON) is arranging an interest rate swap between XEB and YON. XEB wants a floating rate and YON wants a fixed rate.

***Required* :**

(i) **Design** and **Assess** the payables and receivables on the Swap (in %) given that the benefits (after Commission) are shared between XEB Ltd. and YON Ltd. in the ratio 60 : 40.

(ii) **Assess** what will be the effective rate of Interest payable by XEB Ltd. and YON Ltd. and their respective gains (in %) due to the Swap.

(iii) **Assess** how many dollar does each save per annum due to the Swap. 7

7. (a) **Apex Global Ltd.,** an Indian multinational company, is reviewing foreign exchange market quotations to optimise its currency conversion decisions. Mr. Karan, CFO of the company, analyses the prevailing two-way spot exchange rates:

USD/INR : $ 1 = ₹ 85.20 – 85.50

EUR/USD : € 1 = $ 1.1400 – 1.1450

EUR/INR : € 1 = ₹ 95.20 – 95.90

The company has a Euro receivable of € 1,000,000.

***Required*:**

(i) **Assess** the cross exchange rate EUR/INR (bid–ask).

(ii) **Analyze** the arbitrage profit or loss, if any, arising from converting the Euro receivable into INR.

(iii) Assume that after 3 months, the following forward rates prevail:

USD/INR : $ 1 = ₹ 86.10 – 86.60

EUR/INR : € 1 = ₹ 96.00 – 96.60

(iv) **Analyze** whether INR has appreciated or depreciated against USD and EUR and compute the percentage change. 7

(b) **Orion Techno Exports Ltd.,** an Indian multinational company engaged in importing precision components from Japan and exporting finished goods to the United States, is exposed to foreign exchange risk due to its international operations. The company is required to make a payment of ¥ 600 million to its Japanese supplier and is also expecting to receive $ 12 million from its US customer, both payable and receivable respectively after a period of three months.

In order to evaluate suitable hedging strategies, the Chief Financial Officer, Mr. Niten, has gathered the following information from the foreign exchange market. The current spot exchange rates are quoted at ₹ 89.20 / 89.60 per US Dollar and ₹ 0.5800 / 0.5850 per Japanese Yen, while the three-month forward rates are quoted at ₹ 90.20 / 90.80 per US Dollar and ₹ 0.5950 / 0.6000 per Japanese Yen.

Further, the company has access to international money markets where the borrowing and lending interest rates (per annum) are as follows: for Indian Rupee, the rate of interest is 8% for lending and current Indian borrowing rate is 9%; for US Dollar, the borrowing and lending rates are 6.5% and 5.5% respectively; and for Japanese Yen, the borrowing and lending rates are 0.6% and 0.5% respectively.

***Required*:**

(i) **Analyze** Forward Market Hedge or Money Market Hedge for the Yen Payable and advise which one is recommended.

(ii) **Analyze** Forward Market Hedge or Money Market Hedge for the Dollar Receivable and advise which one is recommended. 7

8. (a) "The Digital Finance Cube captures various technology-enabled financial activities through its business function dimension." – **In this context, explain** the constituents of digital finance business functions. 5

(b) "ADRs act as a bridge between foreign companies and U.S. investors." – **In this context, append** the concept of ADR and discuss its advantages. 5

(c) "Securitization involves multiple participants working together to convert financial assets into tradable securities." – **In this context, allign** the parties involved in a securitization process. **(Any Four)** 4