**FINAL EXAMINATION**

**PRACTICE TEST PAPER** **TERM – JUNE 2026**

**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)** K Ltd. is considering a new project with an initial outlay of ₹70,000. The project has a lifespan of four years with cash inflows of ₹25,000, ₹30,000, ₹18,000 and ₹16,000 for year 1, 2, 3 and 4 respectively.
If the cost of capital is 10% per annum, the Profitability Index (PI) of the project will be:
(a) 1.0278
(b) 0.9728
(c) 0.7865
(d) 1.2714

**(ii)** Given, expected value of profit without perfect information is ₹2,300 and expected value of perfect information is ₹500, the expected value of profit with perfect information will be _____
(a) ₹1800
(b) ₹2800
(c) ₹2300
(d) None of the above

**(iii)** The following information is available with respect to Project X

| NPV Estimate (₹) | 40,000 | 50,000 | 1,40,000 | 1,50,000 |
|---|---|---|---|---|
| Probability | 0.1 | 0.4 | 0.3 | 0.2 |

The expected NPV of the project will be:
(a) ₹1,00,000
(b) ₹90,000
(c) ₹96,000
(d) ₹1,20,000

**(iv)** Which of the following certificates issued under securitisation has a multiple-maturity structure?
(a) Pass through certificate
(b) Pay through certificate
(c) Preferred stock certificate
(d) Interest only certificate

**(v)** Degree of Financial Leverage (DFL) expresses the relationship between:
(a) EPS and EAIT
(b) EPS and P/E
(c) EPS and EBIT
(d) EPS and Sales

**(vi)** 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. The annual current yield of the bond is:
(a) 3.0%
(b) 2.9%
(c) 6.2%
(d) 5.9%

**(vii)** Which type of risk is substantially reduced by holding a well-diversified portfolio?
(a) Total risk
(b) Systematic risk
(c) Non-systematic risk
(d) None of the above

**(viii)** A firm has a capital structure consisting of 60% equity and 40% debt. The unlevered beta is 1.00 and the corporate tax rate is 25%. The levered beta of the firm will be:
(a) 1.30
(b) 1.40
(c) 1.50
(d) 1.60

**(ix)** Mr. X is long on a forward contract to purchase a non-dividend paying share after 3 months. The current market price of the share is ₹70. The risk-free rate of interest is 6% per annum, continuously compounded. The theoretical forward price of the share is:
(a) ₹ 70.90
(b) ₹ 71.90
(c) ₹ 71.06
(d) ₹ 72.10

**(x)** DY has purchased a ₹400 million cap (call option on interest rates) with a strike rate of 9% at a premium of 0.65% of face value. A ₹400 million floor (put option on interest rates) with a strike rate of 4% is also available at a premium of 0.69% of face value. If the market interest rate rises to 10%, what is the amount received by DY under the cap, and what are the net savings after deducting the premium? (Assume annual settlement.)
(a) Amount received ₹4.00 million; Net savings ₹1.40 million
(b) Amount received ₹3.60 million; Net savings ₹1.00 million
(c) Amount received ₹4.00 million; Net savings ₹0.80 million
(d) Amount received ₹2.60 million; Net savings ₹1.40 million

**(xi)** If you sell a call option on a share with a strike price of ₹375, market price of ₹360, and a premium of ₹21.What is the maximum loss on expiry of this position?
(a) ₹354
(b) Unlimited
(c) ₹396
(d) None of these

**(xii)** Depository Receipts represent_____.
(a) Debentures
(b) Bonds
(c) Equity shares of a company
(d) Government securities

**(xiii)** In foreign exchange markets, the buying rate is also known as the:
(a) Bid rate
(b) Offer rate
(c) Spread
(d) Swap

**(xiv)** The US Dollar is selling in India at ₹45.20. The interest rate for 6-months borrowing in India is 10% p.a. and the corresponding rate in the USA is 4% p.a. Using the Interest Rate Parity Theory, the rate of forward premium / (discount) on the US Dollar will be:

(a) 5.93%
(b) 5.88%
(c) (5.17%)
(d) (5.52%)

**(xv)** In India, the regulation of payment and settlement systems is governed by the:

(a) RBI Act, 1934
(b) Banking Regulation Act, 1949
(c) Payment and Settlement Systems Act, 2007
(d) SBI Act, 1955

## SECTION – B

**(Answer any five questions out of seven questions given. Each question carries 14 marks.)**

**[5 x 14 = 70]**

**2. (a)** Summit Appliances Ltd. is evaluating three potential investment projects:
Project 1: Produce a new line of aluminium skillets.
Project 2: Expand the existing appliance line to include several new sizes.
Project 3: Develop a new, higher-quality line of premium kitchen appliances.
If undertaken individually, the expected investments and present values of future cash flows are as follows:

| Project | Investment required | Present value of Future Cash-Flows |
|---|---|---|
| | ₹ | ₹ |
| 1 | 2,00,000 | 2,90,000 |
| 2 | 1,15,000 | 1,85,000 |
| 3 | 2,70,000 | 4,00,000 |

- If projects 1 and 2 are undertaken together, there are no economies; the total investment and present value are the sum of the individual projects.
- If projects 1 and 3 are undertaken together, economies of investment exist, as one machine can be used for both projects. The total combined investment is ₹4,40,000.
- If projects 2 and 3 are undertaken together, economies exist in marketing and production, but not in investment. The expected present value of cash flows is ₹6,20,000.
- If all three projects are undertaken simultaneously, the above economies still apply, but an additional plant extension of ₹1,30,000 is required.

Calculate the Net Present Value (NPV) of each project combination and recommended which project(s) the company should undertake.

**[7]**

**(b)** P Ltd has taken a plant on lease, valued at ₹40 crore. The lease arrangement is in the form of a leveraged lease. K Ltd. is the equity participant and the H Ltd. is the loan participant. They invested fund in the ratio of 1:4. The loan from H Ltd. carries a fixed rate of interest of 15 percent, payable in 6 equated annual instalments. The lease term is 6 years, with lease rental payable annually in arrears.

Required:

(i) Compute the equated annual instalment from the point of view of H Ltd.

(ii) If the lease rate is unknown, and H Ltd.'s pre-tax yield is 20 percent, calculate the minimum lease rent per year that must be quoted by P Ltd. **[7]**

**3. (a)**

SSK Ltd. is considering undertaking one of two mutually exclusive projects, namely Project BB and Project KK. Both projects have the same economic life and require an equal initial investment of ₹80 lakh each. They are expected to generate almost the same average yield. Since the company is new to this line of business, the future cash flows of the projects cannot be estimated with certainty. Therefore, probability analysis based on cash flow patterns observed from similar projects during the first year of operations has been carried out. It is expected that this pattern will continue throughout the life of the projects. The results of the probability analysis are as follows:

| Project BB | | Project KK | |
|---|---|---|---|
| Cash Flow (in ₹) | Probability | Cash Flow (in ₹) | Probability |
| 11 | 0.10 | 9 | 0.10 |
| 13 | 0.20 | 13 | 0.25 |
| 15 | 0.40 | 17 | 0.30 |
| 17 | 0.20 | 21 | 0.25 |
| 19 | 0.10 | 25 | 0.10 |

Required:

(i) Calculate variance, standard deviation and co-efficient of variance for both the projects.

(ii) Assess which project is riskier and justify your answer.

**[7]**

**(b)** An investor is considering to purchase equity shares of DELTA Ltd. whose current market price is ₹172.45 per share. The company is proposing a dividend of ₹6 for the year ending 31st March, 2025. Delta Ltd. is expected to grow at 20% per annum for the next four years. Thereafter, the growth, over the next three years, will decline linearly by 1% per annum. Thereafter, it will stabilize at a certain growth rate per annum infinitely.

The required rate of return for the investor is 20%.

(Dividend value is to be taken to two decimal points only.)

Given: PVIF @ 20%

| Period | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| $PVIF_{(20\%,n)}$ | 0.8333 | 0.6944 | 0.5787 | 0.4823 | 0.4019 | 0.3349 | 0.2791 |

Required:

(i) Assess the stable growth rate of DELTA Ltd. after the end of 7 years.
(ii) Advise whether it is worth purchasing the share at this price if the investor has a stable target growth rate of 15% p.a.

**[7]**

**4.** **(a)** ASTERA UTILITIES Ltd., a leading energy infrastructure company, has issued a 25-year zero-coupon bond to raise capital for a large-scale hydroelectric power project. The bond does not offer any interim interest payments and will be redeemed at face value upon maturity. However, it comes with embedded options designed to mitigate interest rate risks for both the issuer and the investor.

The bond has a face value of ₹1,00,000 and follows annual compounding. The investor's required yield to maturity is structured in a tiered manner:

- 8% per annum for the first 10 years
- 9% per annum for the next 10 years
- 10% per annum for the final 5 years

In addition to its maturity value, the bond includes two embedded options:

Option 1: A call option, allowing Astera Utilities Ltd. to redeem the bond early at the end of Year 15 for ₹1,01,000.

Option 2: A put option, enabling investors to sell the bond back to the company at the end of Year 18 for ₹80,000, if market conditions warrant.

Given: PV Factor

| Year | 5 | 8 | 10 |
|---|---|---|---|
| PVIF (8%) | 0.6806 | 0.5403 | 0.4632 |
| PVIF (9%) | 0.6499 | 0.5019 | 0.4224 |
| PVIF (10%) | 0.6209 | 0.4665 | 0.3855 |

Required

(i) Analyze value of the bond today if the issuer holds at maturity.
(ii) Assess value of the bond if the issuer exercises the call option at the end of Year 15.
(iii) Assess value of the bond if the investor exercises the put option at the end of Year 18.
(iv) Advise on which option is best from the investor's point of view.

**[7]**

**(b)** Four friends S, T, U, and V have invested equivalent amount of money in four different funds in tune with their attitude to risk, S prefers to play aggressive and is keen on equity-funds, T is moderately aggressive with a desire to invest upto 50% of his funds in Equity, whereas U does not invest anything beyond 20% in Equity. V, however, relies more on movement of market, and prefers any fund which replicates the market portfolio. Their investment particulars, returns therefrom and Beta of the fund are given below —

| Fund Invested | Return for the year | Beta Factor |
|---|---|---|

| | | |
|---|---|---|
| Money Multiplier Fund (100% Equity) | 23.50% | 1.80 |
| Balanced Growth Fund (50% Equity - 50% Debt) | 16.50% | 1.25 |
| Safe Money Fund (20% Equity and 80% Debt Funds) | 12.50% | 0.60 |

If the Market Return was 16% and the Risk-Free Return is measured at 7%, evaluate which of the four friends was rewarded better per unit of risk taken.

**[7]**

**5. (a)** Subho has invested in four securities M, N, O and P, the particulars of which are as follows —

| Security | M | N | O | P |
|---|---|---|---|---|
| Amount Invested (₹) | 1,25,000 | 1,50,000 | 80,000 | 1,45,000 |
| Beta (β) | 0.60 | 1.50 | 0.90 | 1.30 |

Calculate the expected return on a portfolio if RBI Bonds carries an interest rate of 8% and NIFTY yields 14%. If investment in Security O is replaced by investment in RBI Bonds, calculate the corresponding change in Portfolio Beta and expected return.

**[7]**

**(b)** A mutual fund starts the year with ₹ 50 million. By 1st year it has appreciated to ₹ 60 million, at which point it receives cash amounting to ₹ 20. In the second year, the fund appreciates by another 50%.

(i) Calculate the annual Money-Weighted Rate of Return (MWROR).

(ii) Calculate the annual Time-Weighted Rate of Return (TWROR).

(iii) Examine whether the Time-Weighted Rate of Return (TWROR) would increase or decrease if the fund had a cash outflow of ₹20 million at the end of the first year instead of a cash inflow.

**[7]**

**6. (a)** Given the following information

| | |
|---|---|
| BSE Index | 50,000 |
| Value of Portfolio | ₹1,01,00,000 |
| Risk Free Interest Rate | 9% p.a. |
| Dividend Yield on Index | 6% p.a. |
| Beta of Portfolio | 2.0 |

We assume that a futures contract on the BSE index with 4 months maturity is used to hedge the value of portfolio over next 3 months. One future contract is for delivery of 50 times the index. Based on the information, Calculate:

(i) Price of future contract,

(ii) The gain on short futures position if index turns out to be 45,000 in 3 months.

**[7]**

**(b)** Sundar Ramalingam had entered into 5 Put Options and 5 Call Options in different securities, the particulars of which are given below, along with their exercise price and actual market price on the date of exercise-

| Call Options | | | Put Options | | |
|---|---|---|---|---|---|
| Security | Exercise Price (₹) | Actual Market Price (₹) | Security | Exercise Price (₹) | Actual Market Price (₹) |
| P | 370 | 376 | A | 118 | 122 |
| Q | 450 | 444 | B | 758 | 758 |
| R | 1790 | 1700 | C | 350 | 340 |
| S | 135 | 140 | D | 65 | 69 |
| T | 953 | 953 | E | 230 | 220 |

Examine his position on the date of exercise and suggest the action he would take.

**[7]**

**7. (a)** On 25th March 2025, a customer requested his bank to remit DG 12,50,000 to Netherlands in payment of import of diamonds under an irrevocable LC. However, due to bank strikes, the bank could affect the remittance only on 2nd April 2025. The inter-bank market rates were as follows:

| Date | 25.03.2025 | 02.04.2025 |
|---|---|---|
| Bombay [$ / ₹100] | 2.2873 - 2.2962 | 2.3063 - 2.3159 |
| London [US$/Pound] | 1.9120 -1.9135 | 1.9050 - 1.9070 |
| DG /Pound | 4.1125 - 4.1140 | 4.0120 - 4.0130 |

The bank wishes to retain an exchange margin of 0.25%. Calculate how much the customer stands to gain or lose due to the delay.

**[7]**

**(b)** An importer requests his bank to extend the forward contract for US$ 20,000 which is due for maturity on 30th October, 2025, for a further period of 3 months. He agrees to pay the required margin money for such extension of the contract.
Contracted Rate – US$ 1= ₹ 82.32
The US Dollar quoted on 30-10-2025: -
Spot – 81.5000/81.5200
3 months' Premium - 0.87% /0.93%
Margin money for buying and selling rate is 0.075% and 0.20% respectively.
Calculate:
(i) The cost to the importer in respect of the extension of the forward contract, and
(ii) The rate of new forward contract.

**[7]**

**8. Short Notes on:**

**(a)** Explain the key components that constitute digital infrastructure. **[5]**

**(b)** Discuss the important features of warrants. **[5]**

**(c)** Discuss the objectives and significance of cross-border leasing. **[4]**