**Test Series: October 2023**

**MOCK TEST PAPER 2**

**FINAL COURSE: GROUP – I**

**PAPER – 2: STRATEGIC FINANCIAL MANAGEMENT**

*Question No. **1** is compulsory. Attempt any **four** questions from the remaining **five** questions.*

*Working notes should form part of the answer.*

**Time Allowed – 3 Hours** **Maximum Marks – 100**

1. (a) VK Ltd. is an Indian company which is planning to set up a manufacturing plant through its subsidiary in the small country Farland, (where hitherto it was exporting) in view of growing demand for its product and competition from other MNCs. The currency of Farland is the Farroh (Fr.).

An initial investment of Fr. 80 million in plant and machinery would be required. In addition to that the initial investment in working capital of Fr. 6 million would be also required which shall be financed through a loan from a local bank of Farland, at interest rate of 10% p.a. The working capital shall also be subject to inflation. At the end of 5 years, the subsidiary would be taken over by the Govt. of Farland for a price of Fr. 2 million. The part of the proceeds would be used to pay off the bank loan.

It is expected that subsidiary shall produce Net Cash Flows from Operations of Fr. 30 million per year at current price level over the five-year period, before allowing for Farland inflation of 8% per year. Depreciation on Plant and Machinery shall be charged at 20% per year on straight line basis. As a result of setting up the subsidiary, VK Ltd. expects to lose after-tax export income from Farland of INR 8,00,000 per year in current price terms, before allowing for India inflation of 3%. Profits in Farland are taxed at a rate of 20% after allowing deduction for interest and depreciation. All after-tax cash profits are remitted to the India at the end of each year. Indian tax @ 30% is charged on profit earned, but due to tax treaty between Farland and the India the tax paid in Farland is allowed to be set off against any India Tax liability. Taxation is paid in the year in which the liability arises. VK Ltd. requires foreign investments to be discounted at 12%. The current exchange rate is Fr.2.5/INR and the Farroh is expected to depreciate against INR by 5% per year.

Advise should VK Ltd. undertake the investment in Farland or not.

Note:- 1. Present Figures in thousands multiple.

2. Round off all calculations.

3. PVF @12%

| Year | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| PVF | 0.893 | 0.797 | 0.712 | 0.636 | 0.567 |

**(10 Marks)**

(b) Bank A enter into a Repo for 14 days with Bank B in 10% Government of India Bonds 2028 @ 5.65% for ₹ 8 crore. Assume that clean price (the price that does not have accrued interest) be ₹ 99.42 and initial Margin be 2% and days of accrued interest be 262 days. You are required to determine:

(i) Dirty Price

(ii) Repayment at maturity. (consider 360 days in a year) **(6 Marks)**

(c) What do you mean by term "Counter Party Risk". Explain various hints that may provide an indicator of the same risk. **(4 Marks)**

2. (a) AB Ltd., is planning to acquire and absorb the running business of XY Ltd. The valuation is to be based on the recommendation of merchant bankers and the consideration is to be discharged in the form of equity shares to be issued by AB Ltd. As on 31.3.2020, the paid up capital of AB Ltd. consists of 80 lakhs shares of ₹ 10 each. The highest and the lowest market quotation per share during the last 6 months were ₹ 570 and ₹ 430. For the purpose of the exchange, the price per share is to be reckoned as the average of the highest and lowest market price during the last 6 months ended on 31.3.2020.

XY Ltd.'s Balance Sheet as at 31.3.2020 is summarised below:

| | ₹ lakhs |
|---|---|
| Sources | |
| Share Capital | |
| 20 lakhs equity shares of ₹10 each fully paid | 200 |
| 10 lakhs equity shares of ₹10 each, ₹5 paid | 50 |
| Loans | 100 |
| Total | 350 |
| Uses | |
| Fixed Assets (Net) | 150 |
| Net Current Assets | 200 |
| | 350 |

An independent firm of merchant bankers engaged for the negotiation, have produced the following estimates of cash flows from the business of XY Ltd.:

| Year ended | By way of | ₹ lakhs |
|---|---|---|
| 31.3.21 | after tax earnings for equity | 105 |
| 31.3.22 | do | 120 |
| 31.3.23 | Do | 125 |
| 31.3.24 | Do | 120 |
| 31.3.25 | Do | 100 |
| | Terminal Value estimate | 200 |

It is the recommendation of the merchant banker that the business of XY Ltd. may be valued on the basis of the average of (i) Aggregate of discounted cash flows at 8% and (ii) Net assets value. Present value factors at 8% for years

| | | | | | |
|---|---|---|---|---|---|
| 1-5: | 0.93 | 0.86 | 0.79 | 0.74 | 0.68 |

You are required to:

(i) Calculate the total value of the business of XY Ltd.

(ii) The number of shares to be issued by AB Ltd.; and

(iii) The basis of allocation of the shares among the shareholders of XY Ltd. **(8 Marks)**

(b) On January 1, 2013 an investor has a portfolio of 5 shares as given below:

| Security | Price | No. of Shares | Beta |
|---|---|---|---|
| A | 349.30 | 5,000 | 1.15 |
| B | 480.50 | 7,000 | 0.40 |
| C | 593.52 | 8,000 | 0.90 |
| D | 734.70 | 10,000 | 0.95 |
| E | 824.85 | 2,000 | 0.85 |

The cost of capital to the investor is 10.5% per annum.

You are required to calculate:

(i) The beta of his portfolio.

(ii) The theoretical value of the NIFTY futures for February 2013.

(iii) The number of contracts of NIFTY the investor needs to sell to get a full hedge until February for his portfolio if the current value of NIFTY is 5900 and NIFTY futures have a minimum trade lot requirement of 200 units. Assume that the futures are trading at their fair value.

(iv) The number of future contracts the investor should trade if he desires to reduce the beta of his portfolios to 0.6.

No. of days in a year be treated as 365.

Given: In (1.105) = 0.0998 and $e^{(0.015858)}$ = 1.01598 **(8 Marks)**

(c) Beside the primary participants other parties are too involved in the process of securitization. Explain them briefly. **(4 Marks)**

**OR**

Explain the advantages and Limitation of Capital Asset Pricing Model (CAPM). **(4 Marks)**

3. (a) M/s. Strong an AMC has floated a dividend bonus plan on 1st April, 2016 at a certain net asset value (NAV). The fund has a robust growth and has declared a bonus of 1:5 (1 bonus unit for 5 right units held) on 30th September, 2017 and a second bonus of 1:4 (1 bonus unit for 4 right units held) on 30th September 2019. The fund, as on 31st March 2021, has generated an average yield of 17.5%.

Mr. Optimistic has made an investment of ₹ 16 lakhs in the plan before the declaration of the first bonus and remain invested thereafter.

The following information is also available :

| Date | 01.04.2016 | 30.09.2017 | 30.09.2019 | 31.03.2021 |
|---|---|---|---|---|
| NAV (₹) | ? | 85 | 92 | 100 |

You are required to advise to Mr. Optimistic the opening NAV, which is required by him to calculate the capital appreciation. **(8 Marks)**

(b) Hari is holding 100 equity shares of VCC Ltd. which is being quoted at ₹210 per share. He is interested in hedging downside risk of his holding as he is going to sell them after 2 month. A 2-month Call option is available at a premium of ₹ 6 per share and a 2- month put option is available at a premium of ₹ 5 per share. The strike price in both cases is ₹ 220.You are required to:

(i) Suggest the position Hari should take in the option market to hedge his holding in the VCC Ltd.

(ii) Calculate his final position after 2 months if after 2 months i.e. on the day of exercise the actual market price of per share of VCC Ltd. happens to be ₹ 200, ₹ 210, ₹ 220, ₹ 230 and ₹ 240. **(8 marks)**

(c) What makes an organization sustainable as well as financially sustainable? **(4 Marks)**

4. (a) Following information is related to the Convertible Bond of A Ltd. which is currently priced at ₹ 1060 per Bond:

(1) Conversion Parity Price - ₹ 53

(2) Conversion Premium – 10.41667%

(3) Percentage of Downside Risk with respect to Straight Value of Bond – 12.766%

Calculate:

(i) No. of shares on Conversion.

(ii) Current Market Price Per Share of A Ltd.

(iii) Straight Value of Bond **(6 Marks)**

(b) XP Pharma Ltd., has acquired an export order for ₹ 10 million for formulations to a European company. The Company has also planned to import bulk drugs worth ₹ 5 million from a company in UK. The proceeds of exports will be realized in 3 months from now and the payments for imports will be due after 6 months from now. The invoicing of these exports and imports can be done in any currency i.e. Dollar, Euro or Pounds sterling at company's choice. The following market quotes are available.

| | **Spot Rate** | **Annualised Premium** |
|---|---|---|
| ₹/$ | 67.10/67.20 | $ - 7% |
| ₹ /Euro | 63.15/63.20 | Euro - 6% |
| ₹ /Pound | 88.65/88.75 | Pound - 5% |

Advice XP Pharma Ltd. about invoicing in which currency.

(Calculation should be upto three decimal places). **(10 Marks)**

(c) Explain briefly the various factors that affects the value of option. **(4 Marks)**

5. (a) Indira has a fund of ₹ 3 lacs which she wants to invest in share market with rebalancing target after every 10 days to start with for a period of one month from now. She has 3 close friends who have advised following different strategies:

(i) Buy and Hold strategy

(ii) Constant Ratio

(iii) CPPI

Suppose she immediately starts with investment in Bonds (non-fluctuating) and Equity and decides to rebalance her portfolio after each 10 days and to invest in Nifty as equity component changes in tandem with that of Nifty. Further, Bond has no Beta.

As on date (i.e. beginning of month) Nifty is 5326 and minimum Nifty within a month can be most be 4793.40. If she chooses CPPI she will use "2" as the multiplier. If she chooses Constant Ratio plan she will maintain the ratio of 60:40 in Equity and Bonds respectively. Further, portfolio will be rebalanced each time Nifty is changed by 5% as compared to the previous Nifty.

You are required to evaluate Portfolio Position of Indira under each of the Strategies suggested by her friends and highlight the course of action to be taken if in the coming month after a gap of 10 days Nifty happened:

(1) 10 days later-being the 1st day of rebalancing if NIFTY falls to 5122.96.

(2) 10 days further from the above date if the NIFTY touches 5539.04. **(10 Marks)**

(b) A bank enters into a forward purchase TT covering an export bill for Swiss Francs 1,00,000 at ₹ 32.4000 due 25th April and covered itself for same delivery in the local inter bank market at ₹ 32.4200. However, on 25th March, exporter sought for cancellation of the contract as the tenor of the bill is changed.

In Singapore market, Swiss Francs were quoted against dollars as under:

| | | |
|---|---|---|
| Spot | USD 1 = Sw. Fcs. | 1.5076/1.5120 |
| One month forward | | 1.5150/ 1.5160 |
| Two months forward | | 1.5250 / 1.5270 |
| Three months forward | | 1.5415/ 1.5445 |

and in the interbank market US dollars were quoted as under:

| | | |
|---|---|---|
| Spot | USD 1 = ₹ | 49.4302/4455 |
| Spot / April | | 4100/4200 |
| Spot/May | | 4300/4400 |
| Spot/June | | 4500/4600 |

Calculate the cancellation charges, payable by the customer if exchange margin required by the bank is 0.10% on buying and selling. **(6 Marks)**

(c) How Peer to Peer funding different from Crowd Funding ? **(4 Marks)**

6. (a) H Ltd. agrees to buy over the business of B Ltd. effective 1st April, 2012.The summarized Balance Sheets of H Ltd. and B Ltd. as on 31st March 2012 are as follows:

**Balance sheet as at 31st March, 2012 (In Crores of Rupees)**

| | H. Ltd | B. Ltd. |
|---|---:|---:|
| **Liabilities:** | | |
| Paid up Share Capital | | |
| - Equity Shares of ₹100 each | 350.00 | |
| - Equity Shares of ₹10 each | | 6.50 |
| Reserve & Surplus | 950.00 | 25.00 |
| **Total** | **1,300.00** | **31.50** |
| **Assets:** | | |
| Net Fixed Assets | 220.00 | 0.50 |
| Net Current Assets | 1,020.00 | 29.00 |
| Deferred Tax Assets | 60.00 | 2.00 |
| **Total** | **1,300.00** | **31.50** |

H Ltd. proposes to buy out B Ltd. and the following information is provided to you as part of the scheme of buying:

(1) The weighted average post tax maintainable profits of H Ltd. and B Ltd. for the last 4 years are ₹ 300 crores and ₹ 10 crores respectively.

(2) Both the companies envisage a capitalization rate of 8%.

(3) H Ltd. has a contingent liability of ₹ 300 crores as on 31st March, 2012.

(4) H Ltd. to issue shares of ₹ 100 each to the shareholders of B Ltd. in terms of the exchange ratio as arrived on a Fair Value basis. (Please consider weights of 1 and 3 for the value of shares arrived on Net Asset basis and Earnings capitalization method respectively for both H Ltd. and B Ltd.)

You are required to arrive at the value of the shares of both H Ltd. and B Ltd. under:

(i) Net Asset Value Method

(ii) Earnings Capitalisation Method

(iii) Exchange ratio of shares of H Ltd. to be issued to the shareholders of B Ltd. on a Fair value basis (taking into consideration the assumption mentioned in point 4 above.) **(8 Marks)**

(b) Derivative Bank entered into a plain vanilla swap through on OIS (Overnight Index Swap) on a principal of ₹ 10 crores and agreed to receive MIBOR overnight floating rate for a fixed payment on the principal. The swap was entered into on Monday, 2nd August, 2010 and was to commence on 3rd August, 2010 and run for a period of 7 days.

Respective MIBOR rates for Tuesday to Monday were:

7.75%, 8.15%, 8.12%, 7.95%, 7.98%, 8.15%.

If Derivative Bank received ₹ 317 net on settlement, calculate Fixed rate and interest under both legs.

Notes:

(i) Sunday is Holiday.

(ii) Work in rounded rupees and avoid decimal working. **(8 Marks)**

(c) State the characteristics of Venture Capital financing. **(4 Marks)**