## MOCK TEST PAPER 2

## FINAL (NEW) 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) Perfect Inc., a U.S. based Pharmaceutical Company has received an offer from Aidscure Ltd., a company engaged in manufacturing of drugs to cure Dengue, to set up a manufacturing unit in Baddi (H.P.), India in a joint venture.
As per the Joint Venture agreement, Perfect Inc. will receive $55 \%$ share of revenues plus a royalty @ US $\$ 0.01$ per bottle. The initial investment will be ₹ 200 crores for machinery and factory. The scrap value of machinery and factory is estimated at the end of five (5) year to be ₹ 5 crores. The machinery is depreciable @ $20 \%$ on the value net of salvage value using Straight Line Method. An initial working capital to the tune of ₹ 50 crores shall be required and thereafter ₹ 5 crores each year.
As per GOI directions, it is estimated that the price per bottle will be ₹ 7.50 and production will be 24 crores bottles per year. The price in addition to inflation of respective years shall be increased by ₹ 1 each year. The production cost shall be $40 \%$ of the revenues.
The applicable tax rate in India is $30 \%$ and $35 \%$ in US and there is Double Taxation Avoidance Agreement between India and US. According to the agreement tax credit shall be given in US for the tax paid in India. In both the countries, taxes shall be paid in the following year in which profit have arisen/ remittance received.
The Spot rate of $\$$ is ₹ 57 . The inflation in India is $6 \%$ (expected to decrease by $0.50 \%$ every year) and $5 \%$ in US.
As per the policy of GOI, only $50 \%$ of the share can be remitted in the year in which they are realised and remaining in the following year.

Though WACC of Perfect Inc. is $13 \%$ but due to risky nature of the project it expects a return of 15\%.
Determine whether Perfect Inc. should invest in the project or not (from subsidiary point of view).
(10 Marks)
(b) A textile manufacturer has taken floating interest rate loan of ₹ $4,00,00,000$ on $1^{\text {st }}$ April, 2018. The rate of interest at the inception of loan is $8.5 \%$ p.a. interest is to be paid every year on $31^{\text {st }}$ March, and the duration of loan is four years. In the month of October 2018, the Central bank of the country releases following projections about the interest rates likely to prevail in future.

| On 31 ${ }^{\text {st }}$ March, 2019 | $8.75 \%$ |
| :--- | ---: |
| On 31 ${ }^{\text {st }}$ March, 2020 | $10.00 \%$ |
| On 31 ${ }^{\text {st }}$ March, 2021 | $10.50 \%$ |
| On 31 ${ }^{\text {st }}$ March, 2022 | $7.75 \%$ |

(i) Show how this borrowing can hedge the risk arising out of expected rise in the rate of interest when he wants to peg his interest cost at $8.50 \%$ p.a.
(ii) Assume that the premium negotiated by both the parties is $0.75 \%$ to be paid on 1 st October, 2018 and the actual rate of interest on the respective due dates happens to be as follows:

| On 31 ${ }^{\text {st }}$ March, 2019 | $10.20 \%$ |
| :--- | ---: |
| On 31 ${ }^{\text {st }}$ March, 2020 | $11.50 \%$ |
| On 31 $1^{\text {st }}$ March, 2021 | $9.25 \%$ |
| On 31 ${ }^{\text {st }}$ March, 2022 | $8.25 \%$ |

Show how the settlement will be executed on the perspective interest due dates.
(c) Financial Resources, Financial Tools and Financial Goals are outcomes of Financial Planning. Do you agree with this statement?
(4 Marks)
2. (a) XYZ Ltd. is considering a new sales strategy that will be valid for the next 4 years. Following information relating to the year which has just ended, is available:

| Income Statement | $₹$ |
| :--- | ---: |
| Sales | 40,000 |
| Gross margin (20\%) | 8,000 |
| Administration, Selling \& distribution expense (10\%) | 4,000 |
| PBT | 4,000 |
| Tax (30\%) | 1,200 |
| PAT | 2,800 |
| Balance Sheet Information | 16,000 |
| Fixed Assets | 8,000 |
| Current Assets | 24,000 |
| Equity |  |

If it adopts the new strategy, sales will grow at the rate of $20 \%$ per year for three years. From $4^{\text {th }}$ year onward cash flow will be stabilized. The gross margin ratio, Assets turnover ratio, the Capital structure and the income tax rate will remain unchanged.
Depreciation would be at $10 \%$ of net fixed assets at the beginning of the year.
The Company's target rate of return is $15 \%$.
Evaluate the adoption of the strategy.
Note: Round-off calculations upto two decimal points.
(10 Marks)
(b) Ram holding shares of Reliance Industries Ltd. which is currently selling at ₹ 1000 . He is expecting that this price will further fall due to lower than expected level of profits to be announced after one month. As on following option contract are available in Reliance Share.

| Strike Price | Option | Premium (₹) |
| :--- | :--- | ---: |
| 1030 | Call | 40 |
| 1010 | Call | 35 |
| 1000 | Call | 30 |
| 990 | Put | 35 |
| 970 | Put | 20 |
| 950 | Put | 8 |
| 930 | Put | 5 |

Ram is interested in selling his stock holding as he cannot afford to lose more than $5 \%$ of its value.
Recommend a hedging strategy with option and show how his position will be protected.
(6 Marks)
(c) Relative Valuation approach is a significant departure from Intrinsic Value approach. Explain
(4 Marks)
3. (a) Snake Ltd. is taking over Lizard Ltd, both are listed companies. The PE Ratio of Lizard Ltd. has been low as 4 and high as 7 and is currently 5 . Lizard Ltd.'s previous year EPS was ₹ 3.40 and current expected EPS this year to be ₹ 4.00 .
Determine the different range of values of shares using P/E Model.
(6 Marks)
(b) M/s Transindia Ltd. is contemplating calling ₹ 3 crores of 30 years, ₹ 1,000 bond issued 5 years ago with a coupon interest rate of 14 per cent. The bonds have a call price of ₹ 1,140 and had initially collected proceeds of ₹ 2.91 crores due to a discount of ₹ 30 per bond. The initial floating cost was ₹ $3,60,000$. The Company intends to sell ₹ 3 crores of 12 per cent coupon rate, 25 years bonds to raise funds for retiring the old bonds. It proposes to sell the new bonds at their par value of ₹ 1,000 . The estimated floatation cost is ₹ $4,00,000$. The company is paying $40 \%$ tax and its after tax cost of debt is 8 per cent. As the new bonds must first be sold and their proceeds, then used to retire old bonds, the company expects a two months period of overlapping interest during which interest must be paid on both the old and new bonds. Evaluate the feasibility of refunding bonds?
(10 Marks)
(c) Explain the term 'Cyber Risk'.
(4 Marks)
4. (a) X Inc. an American firm is under obligation to pay interests of Can\$ 20,20,000 and Can\$ $14,10,000$ on $31^{\text {st }}$ July and $30^{\text {th }}$ September respectively. Since $X$ Inc. is risk averse and its policy is to hedge the risks involved in all foreign currency transactions. The Finance Manager of the X Inc. is thinking of hedging the risk considering two methods i.e. fixed forward or option contracts.
It is now June 30. Following quotations regarding rates of exchange, US\$ per Can\$, from the firm's bank were obtained:

| Spot | 1 Month Forward | 3 Months Forward |
| :--- | :---: | :---: |
| $0.9284-0.9288$ | 0.9301 | 0.9356 |

Price for a Can\$ /US\$ option on a U.S. stock exchange (cents per Can\$, payable on purchase of the option, contract size Can\$ 50000) are as follows:

| Strike Price | Calls |  | Puts |  |
| :---: | :---: | :---: | :---: | :---: |
| (US\$/Can\$) | July | Sept. | July | Sept. |
| 0.93 | 1.56 | 2.56 | 0.88 | 1.75 |
| 0.94 | 1.02 | NA | NA | NA |
| 0.95 | 0.65 | 1.64 | 1.92 | 2.34 |

According to the suggestion of finance manager if options are to be used, one month option should be bought at a strike price of 94 cents and three-month option at a strike price of 95 cents and for the remainder uncovered by the options the firm would bear the risk itself. For this, it would use forward rate as the best estimate of spot. Transaction costs are ignored.
Recommend, which of the above two methods would be appropriate for the American firm to hedge its foreign exchange risk on the two interest payments?
(8 Marks)
(b) Suppose one of your HNI clients is holding the following portfolio as per his risk appetite:

| Particulars | Securities |
| :--- | ---: |
| Equity Shares: |  |
| G Ltd. | 1000 |
| S Ltd. | 1000 |
| B Ltd. | 500 |
| PSU Bonds | 20,000 |

The other data related to each of these securities is as follows:

| Cost | Dividends/ Interest | Market price | Beta |
| ---: | ---: | ---: | ---: |
| $₹$ | $₹$ | $₹$ |  |
|  |  |  |  |
| 10,000 | 1,725 | 9,800 | 0.6 |
| 15,000 | 1,000 | 16,200 | 0.8 |
| 28,000 | 1400 | 28,300 | 0.6 |
| 1,800 | 180 | 1,725 | 0.10 |

Your client is interested in investing some more funds in Bonds issued by GOI.
(1) Estimate the minimum rate of return that your client would expect from these Bonds keeping in view his risk appetite and assuming Market Return as 15.70\%.
(2) Analyze whether this portfolio has out-performed the market or not assuming Risk Free Rate of Return as $7 \%$.
(c) Who are Angel Investors and how they are different from Venture Capitalists.
5. (a) Following are the details of a portfolio consisting of three shares:

| Share | Portfolio weight | Beta | Expected return in \% | Total variance |
| :---: | :---: | :---: | :---: | :---: |
| D | 0.20 | 0.40 | 14 | 0.015 |
| E | 0.50 | 0.50 | 15 | 0.025 |
| F | 0.30 | 1.10 | 21 | 0.100 |

Standard Deviation of Market Portfolio Returns $=10 \%$
You are given the following additional data:
Covariance (D, E) $=0.030$
Covariance (D, F) $=0.020$
Covariance (E, F) $=0.040$
Calculate the Portfolio variance considering:
(i) Correlation between each pair of securities.
(ii) Co-movement between securities due to change in the market index.
(b) XYZ, an Indian firm, will need to pay JAPANESE YEN (JY) 5,00,000 on $30^{\text {th }}$ June. In order to hedge the risk involved in foreign currency transaction, the firm is considering two alternative methods i.e. forward market cover and currency option contract.
On $1^{\text {st }}$ April, following quotations (JY/INR) are made available:
Spot
3 months forward

> 1.9516/1.9711. 1.9726./1.9923

The prices for forex currency option on purchase are as follows:

Strike Price
Call option (June)
Put option (June)

JY 2.125
JY 0.047
JY 0.098

For excess or balance of JY covered, the firm would use forward rate as future spot rate.
You are required to recommend cheaper hedging alternative for XYZ .
(8 Marks)
(c) "While pricing the securitized instruments, it is important that it should be acceptable to both originators as well as to the investors". Explain.

## OR

Explain alternatives available to offshore investors for making investments in Venture Capital Funds in India.
6. (a) There are two Mutual Funds viz. D Mutual Fund Ltd. and K Mutual Fund Ltd. Each having close ended equity schemes.

NAV as on 31-12-2014 of equity schemes of D Mutual Fund Ltd. is ₹ 70.71 (consisting $99 \%$ equity and remaining cash balance) and that of K Mutual Fund Ltd. is 62.50 (consisting $96 \%$ equity and balance in cash).
Following is the other information:

| Particular | Equity Schemes |  |
| :--- | :---: | :---: |
|  | D Mutual Fund Ltd. | K Mutual Fund Ltd. |
| Sharpe Ratio | 2 | 3.3 |
| Treynor Ratio | 15 | 15 |
| Standard deviation | 11.25 | 5 |

There is no change in portfolios during the next month and annual average cost is ₹ 3 per unit for the schemes of both the Mutual Funds.

If Share Market goes down by $5 \%$ within a month, calculate expected NAV after a month for the schemes of both the Mutual Funds.
For calculation, consider 12 months in a year and ignore number of days for particular month.
(10 Marks)
(b) Z Co. Ltd. issued commercial paper worth ₹ 10 crores as per following details:

| Date of issue : | $16^{\text {th }}$ January, 2019 |
| :--- | ---: |
| Date of maturity: | $17^{\text {th }}$ April, 2019 |
| No. of days : | 91 |
| Interest rate | $12.04 \%$ p.a |

What was the net amount received by the company on issue of CP? (Charges of intermediary may be ignored)
(6 Marks)
(c) All dealings in Foreign Exchange effect the Exchange Position whether delivery has taken place or not, but Cash Position is effected only when actual delivery has taken place. Explain.(4 Marks)

