## MOCK TEST PAPER 1

## 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) XYZ Limited borrows $£ 15$ Million of six months LIBOR $+10.00 \%$ for a period of 24 months. The company anticipates a rise in LIBOR, hence it proposes to buy a Cap Option from its Bankers at the strike rate of $8.00 \%$. The lump sum premium is $1.00 \%$ for the entire reset periods and the fixed rate of interest is $7.00 \%$ per annum. The actual position of LIBOR during the forthcoming reset period is as under:

| Reset Period | LIBOR |
| :---: | :--- |
| 1 | $9.00 \%$ |
| 2 | $9.50 \%$ |
| 3 | $10.00 \%$ |

You are required to show how far interest rate risk is hedged through Cap Option.
For calculation, work out figures at each stage up to four decimal points and amount nearest to £.
(7 Marks)
(b) Expected returns on two stocks for particular market returns are given in the following table:

| Market Return | Aggressive | Defensive |
| :---: | :---: | :---: |
| $7 \%$ | $4 \%$ | $9 \%$ |
| $25 \%$ | $40 \%$ | $18 \%$ |

You are required to calculate:
(a) The Betas of the two stocks.
(b) Expected return of each stock, if the market return is equally likely to be $7 \%$ or $25 \%$.
(c) The Security Market Line (SML), if the risk free rate is $7.5 \%$ and market return is equally likely to be $7 \%$ or $25 \%$.
(d) The Alphas of the two stocks.
(c) Explain the basic documents that are required to make up Financial Presentations during Pitch Presentation.
2. (a) The Treasury desk of a global bank incorporated in UK wants to invest GBP 200 million on $1^{\text {st }}$ January, 2019 for a period of 6 months and has the following options:
(1) The Equity Trading desk in Japan wants to invest the entire GBP 200 million in high dividend yielding Japanese securities that would earn a dividend income of JPY 1,182 million. The dividends are declared and paid on 29th June. Post dividend, the securities are expected to quote at a $2 \%$ discount. The desk also plans to earn JPY 10 million on a stock borrow lending activity because of this investment. The securities are to be sold on June 29 with a $\mathrm{T}+1$ settlement and the amount remitted back to the Treasury in London.
(2) The Fixed Income desk of US proposed to invest the amount in 6 month G-Secs that provides a return of $5 \%$ p.a.
The exchange rates are as follows:

| Currency Pair | 1 Jan 2019 (Spot) | 30 Jun 2019 (Forward) |
| :--- | :---: | :---: |
| GBP - JPY | 148.0002 | 150.0000 |
| GBP- USD | 1.28000 | 1.30331 |

As a treasurer, advise the bank on the best investment option. What would be your decision from a risk perspective? You may ignore taxation.
(8 Marks)
(b) ABC Ltd. issued $9 \%, 5$ year bonds of Rs. 1,000/- each having a maturity of 3 years. The present rate of interest is $12 \%$ for one year tenure. It is expected that Forward rate of interest for one year tenure is going to fall by 75 basis points and further by 50 basis points for every next year in further for the same tenure. This bond has a beta value of 1.02 and is more popular in the market due to less credit risk.
Calculate
(i) Intrinsic value of bond
(ii) Expected price of bond in the market
(c) Describe the problems faced in the growth of Securitization of instruments especially in Indian context.
(4 Marks)
3. (a) $X$ Ltd. is studying the possible acquisition of $Y$ Ltd. by way of merger. The following data are available in respect of both the companies.

| Particulars | X Ltd. | Y Ltd. |
| :--- | ---: | ---: |
| Market Capitalization (Rs.) | $75,00,000$ | $90,00,000$ |
| Gross Profit Ratio | $20 \%$ | $20 \%$ |
| Inventory Turnover Ratio | 5 times | 4 times |
| Debtor Turnover Ratio | 3 times | 5 times |
| 12\% Debenture (Rs.) | $10,00,000$ | - |
| 10\% Debenture (Rs.) | - | $14,40,000$ |
| No. of Equity Shares | $1,00,000$ | 60,000 |
| Operating Expenses | $86 \%$ | $78 \%$ |
| Corporate Tax Rate | $30 \%$ | $30 \%$ |
| Closing Stock (Rs.) | $15,00,000$ | $5,00,0000$ |
| Debtors (Rs.) | $10,00,000$ | $8,00,000$ |

You are required to calculate:
(i) Swap ratio based on EPS \& MPS respectively as weightage of $40 \%$ and $60 \%$.
(ii) Post Merger EPS
(iii) Post Merger market price assuming same PE Ratio of X Ltd.
(iv) Post Merger gain or loss in EPS.
(b) Gibralater Limited has imported 5000 bottles of shampoo at landed cost in Mumbai, of US $\$ 20$ each. The company has the choice for paying for the goods immediately or in 3 months' time. It has a clean overdraft limited where $14 \%$ p.a. rate of interest is charged.
Calculate which of the following method would be cheaper to Gibralter Limited.
(i) Pay in 3 months' time with interest @ 10\% and cover risk forward for 3 months.
(ii) Settle now at a current spot rate and pay interest of the overdraft for 3 months.

The rates are as follows:

| Mumbai Rs. $/ \$$ spot | $:$ | $60.25-60.55$ |
| :--- | :--- | :--- |
| 3 months swap | $:$ | $35 / 25$ |

(c) Mention the various challenges to the Efficient Market Theory.
4. (a) A mutual fund raised Rs. 150 lakhs on April 1, 2018 by issue of 15 lakh units at Rs. 10 per unit. The fund invested in several capital market instruments to build a portfolio of Rs. 140 lakhs, Initial expenses amounted to Rs. 8 lakhs. During the month of April, the fund sold certain instruments costing Rs. 44.75 lakhs for Rs. 47 lakhs and used the proceeds to purchase certain other securities for Rs. 41.6 lakhs. The fund management expenses for the month amounted to Rs. 6 lakhs of which Rs. 50,000 was in arrears. The fund earned dividends amounting to Rs. 1.5 lakhs and it distributed $80 \%$ of the realized earnings. The market value of the portfolio on $30^{\text {th }}$ April, 2018 was Rs. 147.85 lakhs.

An investor subscribed to 1000 units on April 1 and disposed it off at closing NAV on $30^{\text {th }}$ April. Determine his annual rate of earnings.
(8 Marks)
(b) From the following data for certain stock, find the value of a call option:

| Price of stock now | $=R s .80$ |
| :--- | :--- |
| Exercise price | $=R s .75$ |
| Standard deviation of continuously compounded annual return | $=0.40$ |
| Maturity period | $=6$ months |
| Annual interest rate | $=12 \%$ |

Given

| Number of S.D. from Mean, $(z)$ | Cumulative Area |
| :---: | :---: |
| 0.25 | 0.5987 |
| 0.30 | 0.6179 |
| 0.55 | 0.7088 |
| 0.60 | 0.7257 |

$e^{0.12 \times 0.5} \quad=1.062$
$\ln 1.0667=0.0646$
(c) Explain how Financial Risk can be viewed from different viewpoints.
5. (a) Equity of KGF Ltd. (KGFL) is Rs. 410 Crores, its debt, is worth Rs. 170 Crores. Printer Division segments value is attributable to $74 \%$, which has an Asset Beta $\left(\beta_{p}\right)$ of 1.45 , balance value is applied on Spares and Consumables Division, which has an Asset Beta ( $\beta_{\mathrm{sc}}$ ) of 1.20 KGFL Debt beta $\left(\beta_{\mathrm{D}}\right)$ is 0.24 .
You are required to calculate:
(i) Equity Beta $\left(\beta_{\mathrm{E}}\right)$,
(ii) Ascertain Equity Beta ( $\beta_{E}$ ), if KGF Ltd. decides to change its Debt Equity position by raising further debt and buying back of equity to have its Debt Equity Ratio at 1.90 . Assume that the present Debt Beta ( $\beta_{01}$ ) is 0.35 and any further funds raised by way of Debt will have a Beta ( $\beta_{\mathrm{D}_{2}}$ ) of 0.40 .
Whether the new Equity Beta $\left(\beta_{\mathrm{E}}\right)$ justifies increase in the value of equity on account of leverage?
(12 Marks)
(b) Ms. Preeti, a school teacher, after retirement has built up a portfolio of Rs. 1,20,000 which is as follow:

| Stock | No. of shares | Market price per share (₹) | Beta |
| :--- | :---: | :---: | :---: |
| ABC Ltd. | 1000 | 50 | 0.9 |
| DEF Ltd. | 500 | 20 | 1.0 |
| GHI Ltd. | 800 | 25 | 1.5 |
| JKL Ltd. | 200 | 200 | 1.2 |

Her portfolio consultant Sri Vijay has advised her to bring down the, beta to 0.8 . You are required to compute:
(i) Present portfolio beta
(ii) How much risk free investment should be bought in, to reduce the beta to 0.8 ?
(c) Explain advantages of bringing Venture Capital in the company.
6. (a) A company has an EPS of Rs. 2.5 for the last year and the DPS of Rs. 1. The earnings is expected to grow at $2 \%$ a year in long run. Currently it is trading at 7 times its earnings. If the required rate of return is $14 \%$, compute the following:
(i) An estimate of the $P / E$ ratio using Gordon growth model.
(ii) The Long-term growth rate implied by the current $\mathrm{P} / \mathrm{E}$ ratio.
(b) A multinational company is planning to set up a subsidiary company in India (where hitherto it was exporting) in view of growing demand for its product and competition from other MNCs. The initial project cost (consisting of Plant and Machinery including installation) is estimated to be US $\$ 500$ million. The net working capital requirements are estimated at US\$ 50 million. The company follows straight line method of depreciation. Presently, the company is exporting two million units every year at a unit price of US\$ 80, its variable cost per unit being US\$ 40 .

The Chief Financial Officer has estimated the following operating cost and other data in respect of proposed project:
(i) Variable operating cost will be US $\$ 20$ per unit of production;
(ii) Additional cash fixed cost will be US $\$ 30$ million p.a. and project's share of allocated fixed cost will be US $\$ 3$ million p.a. based on principle of ability to share;
(iii) Production capacity of the proposed project in India will be 5 million units;
(iv) Expected useful life of the proposed plant is five years with no salvage value;
(v) Existing working capital investment for production \& sale of two million units through exports was US $\$ 15$ million;
(vi) Export of the product in the coming year will decrease to 1.5 million units in case the company does not open subsidiary company in India, in view of the presence of competing MNCs that are in the process of setting up their subsidiaries in India;
(vii) Applicable Corporate Income Tax rate is $35 \%$, and
(viii) Required rate of return for such project is $12 \%$.

Assuming that there will be no variation in the exchange rate of two currencies and all profits will be repatriated, as there will be no withholding tax, estimate Net Present Value (NPV) of the proposed project in India.
Present Value Interest Factors (PVIF) @ 12\% for five years are as below:

| Year | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| PVIF | 0.8929 | 0.7972 | 0.7118 | 0.6355 | 0.5674 |

(10 Marks)
(c) What do you mean by the term 'Cheapest to Deliver' in context of Interest Rate Futures?

OR
Explain complexities involved in International Capital Budgeting.

