Test Series: April, 2019

MOCK TEST PAPER –2

FINAL (OLD) COURSE: GROUP – I

PAPER – 2 : STRATEGIC FINANCIAL MANAGEMENT

*Question No. **1** is compulsory. Attempt any **five** questions from the remaining **six** questions. Working notes should form part of the answer.*

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

1. (a) Calculate the price of 3 months PQR futures, if PQR (FV Rs. 10) quotes Rs. 220 on NSE and the three months future price quotes at Rs. 230 and the one month borrowing rate is given as 15 percent and the expected annual dividend is 25 percent per annum payable before expiry. Also examine arbitrage opportunities. **(5 Marks)**

(b) Calculate the value of share from the following information:

Profit after tax of the company	Rs. 290 crores
Equity capital of company	Rs. 1,300 crores
Par value of share	Rs. 40 each
Debt ratio of company (Debt/ Debt + Equity)	27%
Long run growth rate of the company	8%
Beta 0.1; risk free interest rate	8.7%
Market returns	10.3%
Capital expenditure per share	Rs. 47
Depreciation per share	Rs. 39
Change in Working capital	Rs. 3.45 per share

(5 Marks)

(c) On 30th June 2015, PNB Bank proposes to borrow a sum of Rs. 400 crore from CB Bank via Repo @ 11.65% using 10.00% GOI Securities 2025 (face value Rs. 10,000) for a period of 14 days with a 3.00% haircut.

The current price of the securities is Rs. 9,872. The coupon dates are 30 April and 30 September. You are required to determine:

(i) Nominal Amount as well as No. of Securities to be delivered in the beginning of the Repo.

(ii) The cash amount to be repaid at the end of the Repo. **(5 Marks)**

(d) In December 2011 AB Co.'s share was sold for Rs. 146 per share. A long-term earnings growth rate of 7.5% is anticipated. AB Co. is expected to pay dividend of Rs. 3.36 per share.

(i) What rate of return an investor can expect to earn assuming that dividends are expected to grow along with earnings at 7.5% per year in perpetuity?

(ii) It is expected that AB Co. will earn about 10% on book Equity and shall retain 60% of earnings. In this case, whether, there would be any change in growth rate and cost of Equity? **(5 Marks)**

2. (a) A company has an old machine having book value zero – which can be sold for Rs. 50,000. The company is thinking to choose one from following two alternatives:

(i) To incur additional cost of Rs. 10,00,000 to upgrade the old existing machine.

(ii) To replace old machine with a new machine costing Rs. 20,00,000 plus installation cost Rs. 50,000.

Both above proposals envisage useful life to be five years with salvage value to be nil.

The expected after tax profits for the above three alternatives are as under:

Year	Old existing Machine (Rs.)	Upgraded Machine (Rs.)	New Machine (Rs.)
1	5,00,000	5,50,000	6,00,000
2	5,40,000	5,90,000	6,40,000
3	5,80,000	6,10,000	6,90,000
4	6,20,000	6,50,000	7,40,000
5	6,60,000	7,00,000	8,00,000

The tax rate is 40 per cent.

The company follows straight line method of depreciation. Assume cost of capital to be 15 per cent.

P.V.F. of 15%, 5 = 0.870, 0.756, 0.658, 0.572 and 0.497. You are required to advise the company as to which alternative is to be adopted. **(8 Marks)**

(b) Electraspace is consumer electronics wholesaler. The business of the firm is highly seasonal in nature. In 6 months of a year, firm has a huge cash deposits and especially near Christmas time and other 6 months firm cash crunch, leading to borrowing of money to cover up its exposures for running the business.

It is expected that firm shall borrow a sum of €50 million for the entire period of slack season in about 3 months.

A Bank has given the following quotations:

Spot 5.50% - 5.75%

3 × 6 FRA 5.59% - 5.82%

3 × 9 FRA 5.64% - 5.94%

3-month €50,000 future contract maturing in a period of 3 months is quoted at 94.15 (5.85%).

You are required to determine:

(a) How a FRA, shall be useful if the actual interest rate after 3 months turnout to be:

(i) 4.5% (ii) 6.5%

(b) How 3 months Future contract shall be useful for company if interest rate turns out as mentioned in part (a) above. **(8 Marks)**

3. (a) Sundaram Ltd. discounts its cash flows at 16% and is in the tax bracket of 35%. For the acquisition of a machinery worth Rs.10,00,000, it has two options – either to acquire the asset by taking a bank loan @ 15% p.a. repayable in 5 yearly installments of Rs.2,00,000 each plus interest or to lease the asset at yearly rentals of Rs.3,34,000 for five (5) years. In both the cases, the instalment is payable at the end of the year. Depreciation is to be applied at the rate of 15% using 'written down value' (WDV) method. You are required to advise which of the financing options is to be exercised and why.

Year	1	2	3	4	5
P.V factor @16%	0.862	0.743	0.641	0.552	0.476

(8 Marks)

(b) The following information is given for 3 companies that are identical except for their capital structure:

	Orange	Grape	Apple
Total invested capital	1,00,000	1,00,000	1,00,000
Debt/assets ratio	0.8	0.5	0.2
Shares outstanding	6,100	8,300	10,000
Pre tax cost of debt	16%	13%	15%
Cost of equity	26%	22%	20%
Operating Income (EBIT)	25,000	25,000	25,000
Net Income	8,970	12,350	14,950

The tax rate is uniform 35% in all cases.

(i) Compute the Weighted average cost of capital for each company.

(ii) Compute the Economic Valued Added (EVA) for each company.

(iii) Based on the EVA, which company would be considered for best investment? Give reasons.

(iv) If the industry PE ratio is 11x, estimate the price for the share of each company.

(v) Calculate the estimated market capitalization for each of the Companies. **(8 Marks)**

4. (a) X Co., Ltd., invested on 1.4.2009 in certain equity shares as below:

Name of Co.	No. of shares	Cost (Rs.)
M Ltd.	1,000 (Rs. 100 each)	2,00,000
N Ltd.	500 (Rs. 10 each)	1,50,000

In September, 2009, 10% dividend was paid out by M Ltd. and in October, 2009, 30% dividend paid out by N Ltd. On 31.3.2010 market quotations showed a value of Rs. 220 and Rs. 290 per share for M Ltd. and N Ltd. respectively.

On 1.4.2010, investment advisors indicate (a) that the dividends from M Ltd. and N Ltd. for the year ending 31.3.2011 are likely to be 20% and 35%, respectively and (b) that the probabilities of market quotations on 31.3.2011 are as below:

Probability factor	Price/share of M Ltd.	Price/share of N Ltd.
0.2	220	290
0.5	250	310
0.3	280	330

You are required to:

(i) Calculate the average return from the portfolio for the year ended 31.3.2010;

(ii) Calculate the expected average return from the portfolio for the year 2010-11; and

(iii) Advise X Co. Ltd., of the comparative risk in the two investments by calculating the standard deviation in each case. **(8 Marks)**

(b) The credit sales and receivables of M/s M Ltd. at the end of the year are estimated at Rs. 3,74,00,000 and Rs. 46,00,000 respectively.

The average variable overdraft interest rate is 5%. M Ltd. is considering a proposal for factoring its debts on a non-recourse basis at an annual fee of 3% on credit sales. As a result, M Ltd. will save Rs. 1,00,000 per year in administrative cost and Rs. 3,50,000 as bad debts. The factor will maintain a receivables collection period of 30 days and advance 80% of the face value thereof at an annual interest rate of 7%. Evaluate the viability of the proposal.

Note: 365 days are to be taken in a year for the purpose of calculation of receivables. **(8 Marks)**

5. (a) Mr. Y has invested in the three mutual funds (MF) as per the following details:

Particulars	MF 'X'	MF 'Y'	MF 'Z'
Amount of Investment (Rs.)	2,00,000	4,00,000	2,00,000
Net Assets Value (NAV) at the time of purchase (Rs.)	10.30	10.10	10
Dividend Received up to 31.03.2018 (Rs.)	6,000	0	5,000
NAV as on 31.03.2018 (Rs.)	10.25	10	10.20
Effective Yield per annum as on 31.03.2018 (percent)	9.66	-11.66	24.15

Assume 1 Year =365 days

Mr. Y has misplaced the documents of his investment. Help him in finding the date of his original investment after ascertaining the following:

(i) Number of units in each scheme;

(ii) Total NAV;

(iii) Total Yield; and

(iv) Number of days investment held. **(8 Marks)**

(b) A hypothetical company ABC Ltd. issued a 10% Debenture (Face Value of Rs. 1000) of the duration of 10 years is currently trading at Rs. 850 per debenture. The bond is convertible into 50 equity shares being currently quoted at Rs. 17 per share.

If yield on equivalent comparable bond is 11.80%, then determine the spread of yield of the above bond from this comparable bond.

The relevant present value table is as follows.

Present Values	t_1	t_2	t_3	t_4	t_5	t_6	t_7	t_8	t_9	t_{10}
$PVIF_{0.11,\ t}$	0.901	0.812	0.731	0.659	0.593	0.535	0.482	0.434	0.391	0.352
$PVIF_{0.13,\ t}$	0.885	0.783	0.693	0.613	0.543	0.480	0.425	0.376	0.333	0.295

(8 Marks)

6. (a) With relaxation of norms in India for investment in international market upto $ 2,50,000, Mr. X to hedge himself against the risk of declining Indian economy and weakening of Indian Rupee during last few years, decided to diversify in the International Market.

Accordingly, Mr. X invested a sum of Rs. 1.58 crore on 1.1.20x1 in Standard & Poor Index. On 1.1.20x2 Mr. X sold his investment. The other relevant data is given below:

	1.1.20x1	1.1.20x2
Index of Stock Market in India	7395	?
Standard & Poor Index	2028	1919
Exchange Rate (Rs./$)	62.00/62.25	67.25/67.50

You are required to Calculate:

(i) The return for a US investor.

(ii) Holding Period Return to Mr. X.

(iii) The value of Index of Stock Market in India as on 1.1.20x2 at which Mr. X would be indifferent between investment in Standard & Poor Index and India Stock Market. **(8 Marks)**

(b) ABC Co. have taken a 6-month loan from their foreign collaborators for US Dollars 2 million. Interest payable on maturity is at LIBOR plus 1.0%. Current 6-month LIBOR is 2%.

Enquiries regarding exchange rates with their bank elicits the following information:

Spot USD 1	Rs. 48.5275
6 months forward	Rs. 48.4575

(i) What would be their total commitment in Rupees, if they enter into a forward contract?

(ii) Will you advise them to do so? Explain giving reasons. **(8 Marks)**

7. Write short notes on the following **(any four)**:

(a) Meaning and reasons for Reverse Stock Split up

(b) Interface of financial policy and strategic management

(c) Marking to market

(d) Debt route for foreign exchange funds

(e) Real Estate Investment Trust **(4 Marks each)**