

Test Series: February, 2013

MOCK TEST PAPER – 1

FINAL 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) A Mutual Fund is holding the following assets in ₹ Crores :

Investments in diversified equity shares	90.00
Cash and Bank Balances	<u>10.00</u>
	<u>100.00</u>

The Beta of the portfolio is 1.1. The index future is selling at 4300 level. The Fund Manager apprehends that the index will fall at the most by 10%. How many index futures he should short for perfect hedging so that the portfolio beta is reduced to 1.00? One index future consists of 50 units.

Substantiate your answer assuming the Fund Manager's apprehension will materialize. (5 Marks)

- (b) The United States Dollar is selling in India at ₹ 45.50. If the interest rate for a 6-months borrowing in India is 8% per annum and the corresponding rate in USA is 2%.

(i) Do you expect United States Dollar to be at a premium or at discount in the Indian forward market?

(ii) What is the expected 6-months forward rate for United States Dollar in India; and

(iii) What is the rate of forward premium or discount? (5 Marks)

- (c) ABC Company is considering acquisition of XYZ Ltd. which has 1.5 crores shares outstanding and issued. The market price per share is ₹ 400 at present. ABC's average cost of capital is 12%. Available information from XYZ indicates its expected cash accruals for the next 3 years as follows:

Year	₹ Cr.
1	250

2	300
3	400

Calculate the range of valuation that ABC has to consider. (PV factors at 12% for years 1 to 3 respectively: 0.893, 0.797 and 0.712). (5 Marks)

(d) Calculate Market Price of:

- (i) 10% Government of India security currently quoted at ₹ 110, but interest rate is expected to go up by 1%.
- (ii) A bond with 7.5% coupon interest, Face Value ₹ 10,000 & term to maturity of 2 years, presently yielding 6%. Interest is payable half yearly. (5 Marks)

2. (a) Your company is considering acquiring an additional computer to supplement its time-share computer services to its clients. It has two options:

- (i) To purchase the computer for ₹ 22 lakhs.
- (ii) To lease the computer for three years from a leasing company for ₹ 5 lakhs as annual lease rent plus 10% of gross time-share service revenue. The agreement also requires an additional payment of ₹ 6 lakhs at the end of the third year. Lease rents are payable at the year-end, and the computer reverts to the lessor after the contract period.

The company estimates that the computer under review will be worth ₹ 10 lakhs at the end of third year.

Forecast Revenues are:

Year	1	2	3
Amount (₹ in lakhs)	22.5	25	27.5

Annual operating costs excluding depreciation/lease rent of computer are estimated at ₹ 9 lakhs with an additional ₹ 1 lakh for start up and training costs at the beginning of the first year. These costs are to be borne by the lessee. Your company will borrow at 16% interest to finance the acquisition of the computer. Repayments are to be made according to the following schedule:

Year end	1	2	3
Principal (₹'000)	500	850	850
Interest (₹'000)	352	272	136

The company uses straight line method (SLM) to depreciate its assets and pays 50% tax on its income. The management approaches you to advice. Which alternative would be recommended and why?

Note: The PV factor at 8% and 16% rates of discount are:

Year	1	2	3
8%	0.926	0.857	0.794
16%	0.862	0.743	0.641

(10 Marks)

(b) Following is the data regarding six securities:

	A	B	C	D	E	F
Return (%)	8	8	12	4	9	8
Risk (Standard deviation)	4	5	12	4	5	6

(i) Assuming three will have to be selected, state which ones will be picked.

(ii) Assuming perfect correlation, show whether it is preferable to invest 75% in A and 25% in C or to invest 100% in E. (6 Marks)

3. (a) Columbus Surgicals Inc. is based in US, has recently imported surgical raw materials from the UK and has been invoiced for £ 480,000, payable in 3 months. It has also exported surgical goods to India and France.

The Indian customer has been invoiced for £ 138,000, payable in 3 months, and the French customer has been invoiced for € 590,000, payable in 4 months.

Current spot and forward rates are as follows:

£ / US\$

Spot: 0.9830 – 0.9850

Three months forward: 0.9520 – 0.9545

US\$ / €

Spot: 1.8890 – 1.8920

Four months forward: 1.9510 – 1.9540

Current money market rates are as follows:

UK: 10.0% – 12.0% p.a.

France: 14.0% – 16.0% p.a.

USA: 11.5% – 13.0% p.a.

You as Treasury Manager are required to show how the company can hedge its foreign exchange exposure using Forward markets and Money markets hedge and suggest which the best hedging technique is. (10 Marks)

- (b) An investor purchased 300 units of a Mutual Fund at ₹ 12.25 per unit on 31st December, 2011. As on 31st December, 2012 he has received ₹ 1.25 as dividend and ₹ 1.00 as capital gains distribution per unit.

Required :

- (i) The return on the investment if the NAV as on 31st December, 2012 is ₹ 13.00.
 - (ii) The return on the investment as on 31st December, 2012 if all dividends and capital gains distributions are reinvested into additional units of the fund at ₹ 12.50 per unit. (6 Marks)
4. (a) M Ltd. has to make a payment on 30th January, 2013 of Rs. 80 lakhs. It has surplus cash today, i.e. 31st October, 2012; and has decided to invest sufficient cash in a bank's Certificate of Deposit scheme offering an yield of 8% p.a. on simple interest basis. What is the amount to be invested now? (8 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:

- (i) The Betas of the two stocks.
 - (ii) Expected return of each stock, if the market return is equally likely to be 7% or 25%.
 - (iii) The Security Market Line (SML), if the risk free rate is 7.5% and market return is equally likely to be 7% or 25%.
 - (iv) The Alphas of the two stocks. (8 Marks)
5. (a) Hanky Ltd. and Shanky Ltd. operate in the same field, manufacturing just born babies's clothes. Although Shanky Ltd. also has interests in communication equipments, Hanky Ltd. is planning to take over Shanky Ltd. and the shareholders of Shanky Ltd. do not regard it as a hostile bid.

The following information is available about the two companies.

	Hanky Ltd.	Shanky Ltd.
Current earnings	₹ 6,50,00,000	₹ 2,40,00,000
Number of shares	50,00,000	15,00,000
Percentage earnings retained	20%	80%
Return on new investment	15%	15%
Return required by equity shareholders	21%	24%

Dividends have just been paid and the retained earnings have already been reinvested in new projects. Hanky Ltd. plans to adopt a policy of retaining 35% of

earnings after the takeover and expects to achieve a 17% return on new investment.

Saving due to economies of scale are expected to be ₹ 85,00,000 per annum.

Required return to equity shareholders will fall to 20% due to portfolio effects.

Requirements

- (i) Calculate the existing share prices of Hanky Ltd. and Shanky Ltd.
- (ii) Find the value of Hanky Ltd. after the takeover
- (iii) Advise Hanky Ltd. on the maximum amount it should pay for Shanky Ltd.

(10 Marks)

- (b) Jumble Consultancy Group has determined relative utilities of cash flows of two forthcoming projects of its client company as follows :

Cash Flow in ₹	-15000	-10000	-4000	0	15000	10000	5000	1000
Utilities	-100	-60	-3	0	40	30	20	10

The distribution of cash flows of project A and Project B are as follows :

Project A					
Cash Flow (₹)	-15000	- 10000	15000	10000	5000
Probability	0.10	0.20	0.40	0.20	0.10
Project B					
Cash Flow (₹)	- 10000	- 4000	15000	5000	10000
Probability	0.10	0.15	0.40	0.25	0.10

Which project should be selected and why ?

(6 Marks)

6. (a) The following information is supplied to you:

	₹
Total Earnings	2,00,000
No. of equity shares (of ₹100 each)	20,000
Dividend paid	1,50,000
Price/Earning ratio	12.5

- (i) Ascertain whether the company is the following an optimal dividend policy.
- (ii) Find out what should be the P/E ratio at which the dividend policy will have no effect on the value of the share.
- (iii) Will your decision change, if the P/E ratio is 8 instead of 12.5?

(8 Marks)

- (b) Abhishek Ltd. has a surplus cash of ₹90 lakhs and wants to distribute 30% of it to the shareholders. The Company decides to buyback shares. The Finance Manager of the Company estimates that its share price after re-purchase is likely to be 10% above the buyback price; if the buyback route is taken. The number of shares outstanding at present is 10 lakhs and the current EPS is ₹3.

You are required to determine:

- (i) The price at which the shares can be repurchased, if the market capitalization of the company should be ₹ 200 lakhs after buyback.
- (ii) The number of shares that can be re-purchased.
- (iii) The impact of share re-purchase on the EPS, assuming the net income is same. (8 Marks)

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

- (a) Non Banking Financial Companies
- (b) Commercial Paper
- (c) Global Depository Receipts
- (d) Takeover by Reverse Bid
- (e) Different level of Strategies

(4 × 4 = 16 Marks)