MOCK TEST PAPER 1

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) SS Company is considering the replacement of its existing machine with a new machine. The Purchase price of the New machine is Rs. 26 Lakhs and its expected Life is 8 years. The company follows straight-line method of depreciation on the original investment (scrap value is not considered for the purpose of depreciation). The other expenses to be incurred for the New Machine are as under:

   (i) Installation Charges Rs. 9,000

   (ii) Fees paid to the consultant for his advice to buy New Machine Rs. 6,000.

   (iii) Additional Working Capital required Rs. 17,000. (will be released after 8 years)

   The written down value of the existing machine is Rs. 76,000, and its Cash Salvage Value is Rs. 12,500. The dismantling of this machine would cost Rs. 4,500. The Annual Earnings (before tax but after depreciation) from the New Machine would amount to Rs. 3,15,000. Income tax rate is 35%. The Company's required Rate of Return is 13%.

   You are required to advise on the viability of the proposal.

   PVIF (13%, 8) = 0.376 PVIFA (13%, 8) = 4.80 **(5 Marks)**

   (b) A future contract is available on R Ltd. that pays an annual dividend of Rs. 4 and whose stock is currently priced at Rs. 125. Each future contract calls for delivery of 1,000 shares to stock in one year, daily marking to market. The corporate treasury bill rate is 8%.

   Required:

   (i) Given the above information, what should the price of one future contract be?

   (ii) If the company stock price decreases by 6%, what will be the price of one futures contract?

   (iii) As a result of the company stock price decrease, will an investor that has a long position in one futures contract of R Ltd. realizes a gain or loss? What will be the amount of his gain or loss?

   (Ignore margin and taxation, if any) **(5 Marks)**

   (c) 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 P/E ratio. **(5 Marks)**

   (d) Bank A enter into a Repo for 14 days with Bank B in 10% Government of India Bonds 2028 @ 5.65% for Rs. 8 crore. Assuming that clean price (the price that does not have accrued interest) be Rs. 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) **(5 Marks)**

2. (a) An Indian company obtains the following quotes (Rs./$)

Spot: 35.90/36.10

3 - Months forward rate: 36.00/36.25

6 - Months forward rate: 36.10/36.40

The company needs $ funds for six months. Determine whether the company should borrow in $ or Rs. Interest rates are :

3 - Months interest rate : Rs. : 12%, $: 6%

6 - Months interest rate : Rs. : 11.50%, $: 5.5%

Also determine what should be the rate of interest after 3-months to make the company indifferent between 3-months borrowing and 6-months borrowing in the case of:

(i) Rupee borrowing

(ii) Dollar borrowing

Note: For the purpose of calculation you can take the units of dollar and rupee as 100 each.

(8 Marks)

(b) M/s Shanti Lal Ltd. is in the business of manufacturing products. Company decided to install a Machine under considering buying (or) leasing option. The machine is subjected to Straight-Line method of depreciation. M/s Shanti Lal Ltd. can raise a debt at 16% payable in 4 Equal Annual Installments of Rs. 1,68,589 each, at the beginning of the year. In case of leasing, the Company would require to pay an annual Rent at the end of the year @ 30% of Cost of Machine for 4 years. The company is in 45% Tax bracket. The salvage value is estimated at Rs. 12,412 at the end of the 4 years.

Advise which of the Financing options Shanti Lal Ltd. should exercise and why ?

n	1	2	3	4
PVIF (8.8,n)	0.919	0.845	0.776	0.714
PVIF (16,n)	0.862	0.743	0.640	0.552

(8 Marks)

3. (a) C Ltd. & D Ltd. are contemplating a merger deal in which C Ltd. will acquire D Ltd. The relevant information about the firms are given as follows:

	C Ltd.	D Ltd.
Total Earnings (E) (in millions)	Rs. 96	Rs. 30
Number of outstanding shares (S) (in millions)	20	14
Earnings per share (EPS) (Rs.)	4.8	2.143
Price earnings ratio (P/E)	8	7
Market Price per share (P)(Rs.)	38.4	15

(i) What is the maximum exchange ratio acceptable to the shareholders of C Ltd., if the P/E ratio of the combined firm is 7?

(ii) What is the minimum exchange ratio acceptable to the shareholders of D Ltd., if the P/E ratio of the combined firm is 9? **(12 Marks)**

(b) A dealer quotes 'All-in-cost' for a generic swap at 6% against six month LIBOR flat. If the notional principal amount of swap is Rs. 8,00,000:

(i) Calculate semi-annual fixed payment.

(ii) Find the first floating rate payment for (i) above if the six month period from the effective date of swap to the settlement date comprises 181 days and that the corresponding LIBOR was 5% on the effective date of swap.

(iii) In (ii) above, if the settlement is on 'Net' basis, how much the fixed rate payer would pay to the floating rate payer? Generic swap is based on 30/360 days basis. **(4 Marks)**

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 30th April, 2018 was Rs. 147.85 lakhs.

An investor subscribed to 1000 units on April 1 and disposed it off at closing NAV on 30th April. Determine his annual rate of earnings. **(8 Marks)**

(b) XL Ltd., who is dealing in computer software, is having credit sales of Rs. 2,10,00,000 with average receivables of Rs. 35,00,000. Bad debts are 0.9% on sales. With an eye to save time on collection of receivables XL Ltd. is considering a proposal to appoint a Factor. The following information is available:

Particulars	Recourse	Non - Recourse
Average reduction in collection of receivables (Days)	30	30
Reduction in Bad Debts by	0.30%	0.30%
Saving in Administration cost Rs.	40,000	40,000
Advance	80%	80%
Interest on advance	2 % p.a. higher that current OD interest of 7 % p.a.	
Factor fee	0.60%	1.25%

Assume 360 days in a year.

You are required to evaluate the proposal. **(8 Marks)**

5. (a) The following data are available for three bonds A, B and C. These bonds are used by a bond portfolio manager to fund an outflow scheduled in 6 years. Current yield is 9%. All bonds have face value of Rs.100 each and will be redeemed at par. Interest is payable annually.

Bond	Maturity (Years)	Coupon rate
A	10	10%
B	8	11%
C	5	9%

(i) Calculate the duration of each bond.

(ii) The bond portfolio manager has been asked to keep 45% of the portfolio money in Bond A.

Calculate the percentage amount to be invested in bonds B and C that need to be purchased to immunise the portfolio.

(iii) After the portfolio has been formulated, an interest rate change occurs, increasing the yield to 11%. The new duration of these bonds are: Bond A = 7.15 Years, Bond B = 6.03 Years and Bond C = 4.27 years.

Is the portfolio still immunized? Why or why not?

(iv) Determine the new percentage of B and C bonds that are needed to immunize the portfolio. Bond A remaining at 45% of the portfolio.

Present values be used as follows :

Present Values	t_1	t_2	t_3	t_4	t_5
$PVIF_{0.09,t}$	0.917	0.842	0.772	0.708	0.650

Present Values	t_6	t_7	t_8	T_9	t_{10}
$PVIF_{0.09,t}$	0.596	0.547	0.502	0.460	0.4224

(12 Marks)

(b) Eager Ltd. has a market capitalization of Rs. 1,500 crores and the current market price of its share is Rs. 1,500. It made a PAT of 200 crores and the Board is considering a proposal to buy back 20% of the shares at a premium of 10% to the current market price. It plans to fund this through a 16% bank loan. You are required to calculate the post buy back Earnings Per Share (EPS). The company's corporate tax rate is 30%. **(4 Marks)**

6. (a) The Treasury desk of a global bank incorporated in UK wants to invest GBP 200 million on 1st 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 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. **(10 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 (Rs.)	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?

(6 Marks)

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

(a) Steps required to make an organization sustainable **(4 Marks)**

(b) Carve out and its difference from Spin off **(4 Marks)**

(c) Money Market and its features **(4 Marks)**

(d) Assumption of Modigliani & Miller Hypothesis **(4 Marks)**

(e) Demerger or Division of Family managed business **(4 Marks)**