Test Series: October 2019

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) Shashi Co. Ltd has projected the following cash flows from a project under evaluation:

Year	0	1	2	3
Rs. (in lakhs)	(72)	30	40	30

The above cash flows have been made at expected prices after recognizing inflation. The firm's cost of capital is 10%. The expected annual rate of inflation is 5%. Show how the viability of the project is to be evaluated. PVF at 10% for 1-3 years are 0.909, 0.826 and 0.751. **(5 Marks)**

(b) Classic Finance, a Leasing Company, has been approached by a prospective customer intending to acquire a machine whose cash down price is Rs. 6 crores. The customer, in order to leverage his tax position, has requested a quote for a three year lease with rentals payable at the end of each year but in a diminishing manner such that they are in the ratio of 3: 2 : 1. Depreciation can be assumed to be on WDV basis at 25% and Classic Finance's marginal tax rate is 35%. The target rate of return for Classic Finance on the transaction is 10%. You are required to calculate the lease rents to be quoted for the lease for three years. **(5 Marks)**

(c) AXY Ltd. is able to issue commercial paper of Rs. 50,00,000 every 4 months at a rate of 12.5% p.a. The cost of placement of commercial paper issue is Rs. 2,500 per issue. AXY Ltd. is required to maintain line of credit Rs. 1,50,000 in bank balance. The applicable income tax rate for AXY Ltd. is 30%. What is the cost of funds (after taxes) to AXY Ltd. for commercial paper issue? The maturity of commercial paper is four months. **(5 Marks)**

(d) Following information is available in respect of dividend, market price and market condition after one year.

Market condition	Probability	Market Price Rs.	Dividend per share Rs.
Good	0.25	115	9
Normal	0.50	107	5
Bad	0.25	97	3

The existing market price of an equity share is Rs. 106 (F.V. Re. 1), which is cum 10% bonus debenture of Rs. 6 each, per share. M/s. X Finance Company Ltd. had offered the buy-back of debentures at face value.

Find out the expected return and variability of returns of the equity shares.

And also advise-Whether to accept buy back offer? **(5 Marks)**

2. (a) You as an investor had purchased a 4 month call option on the equity shares of X Ltd. of Rs.10, of which the current market price is Rs.132 and the exercise price Rs.150. You expect the price to range between Rs.120 to Rs.190. The expected share price of X Ltd. and related probability is given below:

Expected Price (Rs.)	120	140	160	180	190
Probability	.05	.20	.50	.10	.15

Compute the following:

(1) Expected Share price at the end of 4 months.

(2) Value of Call Option at the end of 4 months, if the exercise price prevails.

(3) In case the option is held to its maturity, what will be the expected value of the call option?

(8 Marks)

(b) Longitude Limited is in the process of acquiring Latitude Limited on a share exchange basis. Following relevant data are available:

		Longitude Limited	Latitude Limited
Profit after Tax (PAT)	Rs. in Lakhs	120	80
Number of Shares	Lakhs	15	16
Earning per Share (EPS)	Rs.	8	5
Price Earnings Ratio (P/E Ratio)		15	10
(Ignore Synergy)			

You are required to determine:

(i) Pre-merger Market Value per Share, and

(ii) The maximum exchange ratio Longitude Limited can offer without the dilution of

(1) EPS and

(2) Market Value per Share

Calculate Ratio/s up to four decimal points and amounts and number of shares up to two decimal points. **(8 Marks)**

3. (a) X Ltd. is a Shoes manufacturing company. It is all equity financed and has a paid-tip Capital of Rs. 10,00,000 (Rs. 10 per share). X Ltd. has hired Swastika consultants to analyze the future earnings. The report of Swastika consultants states as follows:

(i) The earnings and dividend will grow at 25% for the next two years.

(ii) Earnings are likely to grow at the rate of 10% from 3rd year and onwards.

(iii) Further, if there is reduction in earnings growth, dividend payout ratio will increase to 50%.

The other data related to the company are as follows:

Year	EPS (Rs.)	Net Dividend per share (Rs.)	Share Price (Rs.)
2010	6.30	2.52	63.00
2011	7.00	2.80	46.00
2012	7.70	3.08	63.75
2013	8.40	3.36	68.75
2014	9.60	3.84	93.00

You may assume that the tax rate is 30% (not expected to change in future) and post-tax cost of capital is 15%.

By using the Dividend Valuation Model, calculate

(i) Expected Market Price per share

(ii) P/E Ratio. **(8 Marks)**

(b) Mr. A will need Rs. 1,00,000 after two years for which he wants to make one time necessary investment now. He has a choice of two types of bonds. Their details are as below:

	Bond X	Bond Y
Face value	Rs. 1,000	Rs. 1,000
Coupon	7% payable annually	8% payable annually
Years to maturity	1	4
Current price	Rs. 972.73	Rs. 936.52
Current yield	10%	10%

Advice Mr. A whether he should invest all his money in one type of bond or he should buy both the bonds and, if so, in which quantity? Assume that there will not be any call risk or default risk.

(8 Marks)

4. (a) Merry is a Forex Dealer with XYZ Bank. She notices following information relating to Canadian Dollar (CAD) and German Deutschmark (DEM):

Exchange rate – CAD 0.775 per DEM (spot)

CAD 0.780 per DEM (3 months)

Interest rates – DEM 7% p.a.

CAD 9% p.a.

(i) Assuming that there is no transaction cost, determine does the Interest Rate Parity holds in above quotations.

(ii) If yes, then explain the steps that would be required to make an arbitrage profit if Merry is authorized to work with CAD 1 Million for the same purpose. Also determine the profit that would be made in CAD.

Note: Ignore the decimal points in the amounts. **(8 Marks)**

(b) AC Co. Ltd. has a turnover of Rs. 1600 Lakhs and is expecting growth of 17.90% for the next year. Average credit period is 100 days. The Bad Debt losses are about 1.50% on sales. The administrative cost for collecting receivables is Rs. 8,00,000. The AC Co. Ltd. decides to make use of Factoring Services by FS Ltd. on terms as under:

(i) that the factor will charge commission of 1.75%.

(ii) 15% Risk with recourse and

(iii) Pay an advance on receivables to AC Co. Ltd. at 14% p.a. interest after withholding 10% as reserve.

You are required to calculate the effective cost of factoring to AC Co. Ltd. for the year.

Show amount in Lakhs of Rs. with two decimal points. Assume 360 days in a year. **(8 Marks)**

5. (a) Five portfolios experienced the following results during a 7- year period:

Portfolio	Average Annual Return (R_p) (%)	Standard Deviation (S_p)	Correlation with the market returns (r)
A	19.0	2.5	0.840
B	15.0	2.0	0.540
C	15.0	0.8	0.975
D	17.5	2.0	0.750
E	17.1	1.8	0.600
Market Risk (σm)		1.2	
Market rate of Return (R_m)	14.0		
Risk-free Rate (R_f)	9.0		

Rank the portfolios using (a) Sharpe's method, (b) Treynor's method and (c) Jensen's Alpha

(8 Marks)

(b) XYZ, an Indian firm, will need to pay JAPANESE YEN (JY) 5,00,000 on 30th 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 1st 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	JY 2.125
Call option (June)	JY 0.047
Put option (June)	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)**

6. (a) On January 1, 2013 an investor has a portfolio of 5 shares as given below:

Security	Price	No. of Shares	Beta
A	349.30	5,000	1.15
B	480.50	7,000	0.40
C	593.52	8,000	0.90
D	734.70	10,000	0.95
E	824.85	2,000	0.85

The cost of capital to the investor is 10.5% per annum.

You are required to calculate:

(i) The beta of his portfolio.

(ii) The theoretical value of the NIFTY futures for February 2013.

(iii) The number of contracts of NIFTY the investor needs to sell to get a full hedge until February for his portfolio if the current value of NIFTY is 5900 and NIFTY futures have a minimum trade lot requirement of 200 units. Assume that the futures are trading at their fair value.

(iv) The number of future contracts the investor should trade if he desires to reduce the beta of his portfolios to 0.6.

No. of days in a year be treated as 365.

Given: ln (1.105) = 0.0998 and $e^{(0.015858)} = 1.01598$ **(8 Marks)**

(b) A valuation done of an established company by a well-known analyst has estimated a value of Rs. 500 lakhs, based on the expected free cash flow for next year of Rs. 20 lakhs and an expected growth rate of 5%.

While going through the valuation procedure, you found that the analyst has made the mistake of using the book values of debt and equity in his calculation. While you do not know the book value weights he used, you have been provided with the following information:

(i) Company has a cost of equity of 12%,

(ii) After tax cost of debt is 6%,

(iii) The market value of equity is three times the book value of equity, while the market value of debt is equal to the book value of debt.

You are required to estimate the correct value of the company. **(8 Marks)**

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

(a) Various techniques used in economic analysis.

(b) Debt Securitization

(c) Various processes of strategic decision making.

(d) Cross Border Leasing

(e) Synergy in the context of Mergers and Acquisitions **(4 x 4 = 16 Marks)**