## **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) The equity share of VCC Ltd. is quoted at Rs. 210. A 3-month call option is available at a premium of Rs. 6 per share and a 3-month put option is available at a premium of Rs. 5 per share. Calculate the net payoffs to the option holder of a call option and a put option.
  - (i) the strike price in both cases is Rs. 220; and
  - (ii) the share price on the exercise day is Rs. 200,210,220,230,240.

Also recommend the price range at which the call and the put options may be gainfully exercised.

(7 Marks)

(b) X Limited, just declared a dividend of Rs. 14.00 per share. Mr. B is planning to purchase the share of X Limited, anticipating increase in growth rate from 8% to 9%, which will continue for three years. He also expects the market price of this share to be Rs. 360.00 after three years.

You are required to calculate:

- the maximum amount Mr. B should pay for shares, if he requires a rate of return of 13% per annum.
- (ii) the maximum price Mr. B will be willing to pay for share, if he is of the opinion that the 9% growth can be maintained indefinitely and require 13% rate of return per annum.
- (iii) the price of share at the end of three years, if 9% growth rate is achieved and assuming other conditions remaining same as in (ii) above.

Calculate rupee amount up to two decimal points.

	Year-1	Year-2	Year-3
FVIF @9%	1.090	1.188	1.295
FVIF @ 13%	1.130	1.277	1.443
PVIF @ 13%	0.885	0.783	0.693

(7 Marks)

- (c) Compare and contrast start-ups and entrepreneurship. Describe the priorities and challenges which start-ups in India are facing. (6 Marks)
- (a) NP and Co. has imported goods for US \$ 7,00,000. The amount is payable after three months. The company has also exported goods for US \$ 4,50,000 and this amount is receivable in two months. For receivable amount a forward contract is already taken at Rs. 48.90.

The market rates for Rupee and Dollar are as under:

Spot	Rs. 48.50/70
Twomonths	Rs. 48.25/30
Three months	Rs. 48.40/45

The company wants to cover the risk and it has two options as under:

- (A) To cover payables in the forward market and
- (B) To lag the receivables by one month and cover the risk only for the net amount. No interest for delaying the receivables is earned. Evaluate both the options if the cost of Rupee Funds is 12%. Which option is preferable? (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.
- (c) Describe the problems faced in the growth of Securitization of instruments especially in Indian context. (4 Marks)
- 3. (a) During the audit of the Weak Bank (W), RBI has suggested that the Bank should either merge with another bank or may close down. Strong Bank (S) has submitted a proposal of merger of Weak Bank with itself. The relevant information and Balance Sheets of both the companies are as under:

Particulars	Weak Bank (W)	Strong Bank (S)	Assigned Weights (%)
Gross NPA (%)	40	5	30
Capital Adequacy Ratio (CAR) Total Capital/ Risk Weight Asset	5	16	28
Market price per Share (MPS)	12	96	32
Book value			10
Trading on Stock Exchange	Irregular	Frequent	

## Balance Sheet (Rs. in Lakhs)

Particulars	Weak Bank (W)	Strong Bank (S)
Paid up Share Capital (Rs. 10 per share)	150	500
Reserves & Surplus	80	5,500
Deposits	4,000	44,000
Other Liabilities	<u>890</u>	<u>2,500</u>
Total Liabilities	<u>5,120</u>	<u>52,500</u>

## (8 Marks)

Cash in Hand & with RBI	400	2,500
Balance with Other Banks	-	2,000
Investments	1,100	19,000
Advances	3,500	27,000
Other Assets	70	2,000
Preliminary Expenses	<u>50</u>	<u> </u>
Total Assets	<u>5,120</u>	<u>52,500</u>

You are required to

- (i) Calculate Swap ratio based on the above weights:
- (ii) Ascertain the number of Shares to be issued to Weak Bank;
- (iii) Prepare Balance Sheet after merger; and
- (iv) Calculate CAR and Gross NPA of Strong Bank after merger. (8 Marks)
- (b) Mercy 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 Mercy 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) (4 Marks)

- (c) Mention the various techniques used in economic analysis.
- 4. (a) An investor purchased 300 units of a Mutual Fund at Rs. 12.25 per unit on 31<sup>st</sup> December, 2009. As on 31<sup>st</sup> December, 2010 he has received Rs. 1.25 as dividend and Rs. 1.00 as capital gains distribution per unit.

Required:

- (i) The return on the investment if the NAV as on 31<sup>st</sup> December, 2010 is Rs. 13.00.
- (ii) The return on the investment as on 31<sup>st</sup> December, 2010 if all dividends and capital gains distributions are reinvested into additional units of the fund at Rs. 12.50 per unit. (8 Marks)
- (b) 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  $\pounds$ . It should be part of working notes. (8 Marks)

- (c) Discuss briefly the key decisions falling within the scope of financial strategy. (4 Marks)
- 5. (a) 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%
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 capitalisation for each of the Companies. (8 Marks)

**Note:** Round off EPS and Share Prices upto 4 and 2 Decimal places respectively.

(b) Details about portfolio of shares of an investor is as below:

Shares	No. of shares (lakh)	Price per share	Beta
A Ltd.	3.00	Rs. 500	1.40
B Ltd.	4.00	Rs. 750	1.20
C Ltd.	2.00	Rs. 250	1.60

The investor thinks that the risk of portfolio is very high and wants to reduce the portfolio beta to 0.91. He is considering two below mentioned alternative strategies:

- (i) Dispose off a part of his existing portfolio to acquire risk free securities, or
- (ii) Take appropriate position on Nifty Futures which are currently traded at Rs. 8125 and each Nifty points is worth Rs.200.

You are required to determine:

- (1) portfolio beta,
- (2) the value of risk free securities to be acquired,
- (3) the number of shares of each company to be disposed off,
- (4) the number of Nifty contracts to be bought/sold; and
- (5) the value of portfolio beta for 2% rise in Nifty.

(8 Marks) (4 Marks)

- (c) Briefly explain how Angel Investors finance the Startups.
- 6. (a) A Ltd. has issued convertible bonds, which carries a coupon rate of 14%. Each bond is convertible into 20 equity shares of the company A Ltd. The prevailing interest rate for similar credit rating bond is 8%. The convertible bond has 5 years maturity. It is redeemable at par at

Rs. 100. The relevant present value table is as follows.

Presentvalues	t <sub>1</sub>	t <sub>2</sub>	t <sub>3</sub>	t4	t <sub>5</sub>
PVIF <sub>0.14, t</sub>	0.877	0.769	0.675	0.592	0.519
<b>PVIF</b> <sub>0.08, t</sub>	0.926	0.857	0.794	0.735	0.681

You are required to estimate:

(Calculations be made upto 3 decimal places)

- (i) current market price of the bond, assuming it being equal to its fundamental value,
- (ii) minimum market price of equity share at which bond holder should exercise conversion option; and

(8 Marks)

- (iii) duration of the bond.
- (b) Your forex dealer had entered into a cross currency deal and had sold US \$ 10,00,000 against EURO at US \$ 1 = EURO 1.4400 for spot delivery.

However, later during the day, the market became volatile and the dealer in compliance with his management's guidelines had to square – up the position when the quotations were:

What will be the gain or loss in the transaction?	(8 Mar	ks)
2 months forward	1.4460/4530	
1 month forward	1.4425/4490	
Spot US \$ 1	EURO 1.4400/4450	
2 months margin	45/35	
1 month margin	25/20	
Spot US \$ 1	INR 31.4300/4500	

(c) Briefly explain Counter Party Risk and the various techniques to manage this risk.

OR

Explain some of the parameters to identify the currency risk. (4 Marks)

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