Test Series: April 2021

## **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

 (a) GKL Ltd. is considering installment sale of LCD TV as a sales promotion strategy. In a deal of LCD TV, with selling price of Rs. 50,000, a customer can purchase it for cash down payment of Rs. 10,000 and balance amount by adopting any of the following options:

Tenure of Monthly installments	Equated Monthly installment		
12	Rs. 3800		
24	Rs. 2140		

#### Required:

Estimate the flat and effective rate of interest for each alternative.

PVIFA<sub>2.05%, 12</sub> =10.5429 PVIFA<sub>2.10%, 12</sub> =10.5107 PVIFA<sub>2.10%, 24</sub> =18.7014 PVIFA<sub>2.12%, 24</sub> =18.6593

(5 Marks)

- (b) ABC Ltd. has 50,000 outstanding shares. The current market price per share is Rs. 100 each. It hopes to make a net income of Rs. 5,00,000 at the end of current year. The Company's Board is considering a dividend of Rs. 5 per share at the end of current financial year. The company needs to raise Rs. 10,00,000 for an approved investment expenditure. The company belongs to a risk class for which the capitalization rate is 10%. Show, how the M-M approach affects the value of firm if the dividends are paid or not paid. (5 Marks)
- (c) Bank A enter into a Repo for 14 days with Bank B in 10% Government of India Bonds 2018 @ 5.65% for Rs. 8 crore. Assuming that clean price 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)

(d) ABC Company is considering acquisition of XYZ Ltd. which has 1.5 crores shares outstanding and issued. The market price per share is Rs. 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	Rs. 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)

2. (a) On 1 October 2019 Mr. X an exporter enters into a forward contract with a BNP Bank to sell US\$ 1,00,000 on 31 December 2019 at Rs. 70.40/\$ and bank simultaneously entered into a cover deal at Rs. 70.60/\$. However, due to the request of the importer, Mr. X received amount on 28 November 2019. Mr. X requested the bank the take delivery of the remittance on 30 November 2019 i.e. before due date. The inter-banking rates on 28 November 2019 were as follows:

Spot Rs. 70.22/70.27

One Month Swap Points 15/10

If bank agrees to take early delivery, then determine the net inflow to Mr. X assuming that the prevailing prime lending rate is 10% and deposit rate is 5%.

**Note:** (i) While exchange rates to be considered upto two decimal points the amount to be rounded off to Rupees i.e. no paisa shall be involved in computation of any amount.

(ii) Assume 365 days a year.

(8 Marks)

(b) ABC Ltd. wants to issue 9% Bonds redeemable in 5 years at its face value of Rs. 1,000 each. The annual spot yield curve for similar risk class of Bond is as follows:

Year	Interest Rate				
1	12%				
2	11.62%				
3	11.33%				
4	11.06%				
5	10.80%				

- (i) Evaluate the expected market price of the Bond if it has a Beta value of 1.10 due to its popularity because of lesser risk.
- (ii) Interpret the nature of the above yield curve and reasons for the same.

Note: Use PV Factors upto 4 decimal points and value in Rs. upto 2 decimal points. (8 Marks)

3. (a) C Ltd. and P Ltd. both companies operating in the same industry decided to merge and form a new entity S Ltd. The relevant financial details of the two companies prior to merger announcement are as follows:

	C Ltd.	P Ltd.
Annual Earnings after Tax (Rs. lakh)	10000	5800
No. Shares Outstanding (lakh)	4000	1000
PE Ratio (No. of Times)	8	10

The merger will be affected by means of stock swap (exchange) of 3 shares of C Ltd. for 1 share of P Ltd.

After the merger it is expected that due to synergy effects, Annual Earnings (Post Tax) are expected to be 8% higher than sum of the earnings of the two companies individually. Further, it is expected that P/E Ratio of S Ltd. shall be average of P/E Ratios of two companies before the merger.

You are required to determine the extent to which shareholders of P Ltd. will be benefitted per share from the proposed merger. (8 Marks)

(b) Cinderella Mutual Fund has the following assets in Scheme Rudolf at the close of business on 31stMarch, 2019.

Company	No. of Shares	Market Price Per Share
Nairobi Ltd.	25000	Rs. 20
Dakar Ltd.	35000	Rs. 300
Senegal Ltd.	29000	Rs. 380
Cairo Ltd.	40000	Rs. 500

The total number of units of Scheme Rudol fare 10 lacs. The Scheme Rudolf has accrued expenses of Rs. 2,50,000 and other liabilities of Rs. 2,00,000. Calculate the NAV per unit of the Scheme Rudolf. (8 Marks)

- 4. (a) Mr. Dayal is interested in purchasing equity shares of ABC Ltd. which are currently selling at Rs. 600 each. He expects that price of share may go upto Rs. 780 or may go down to Rs. 480 in three months. The chances of occurring such variations are 60% and 40% respectively. A call option on the shares of ABC Ltd. can be exercised at the end of three months with a strike price of Rs. 630.
  - (i) What combination of share and option should Mr. Dayal select if he wants a perfect hedge?
  - (ii) What should be the value of option today (the risk free rate is 10% p.a.)?
  - (iii) What is the expected rate of return on the option?

(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)	26,600	25,500	26,000
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. Also give your observation on using same PE Ratio to estimate the price for the shares of these three companies.
- (v) Calculate the estimated market capitalisation for each of the Companies. (8 Marks)
- 5. (a) ABC Ltd. is contemplating to have machine for production of toy guns. The company can either acquire it for stipulated period for a period of 3 years through an operating leasing arrangement or requisite amount can be borrowed to buy the machine. In case of leasing, the company received a proposal to pay front end yearly lease rent of Rs. 27,50,000 for a period of 3 years.

In case of purchase (which costs Rs. 80 lakh) the company would have a 8%, 3 years loan to be repaid in equated installment becoming due in the beginning of each year. It is estimated that the machine can be sold for Rs. 20,00,000 at the end of the 3<sup>rd</sup> year. To operate the machine ABC Ltd incurs maintenance expenses of Rs. 4,00,000 per year, payable at the end of the year.

### Required:

- (i) Assuming that the machine shall be used for 3 years, advise whether machine should be bought or taken on lease. Use discounting rate of 8% for analysis.
- (ii) With the upgraded maintenance of Rs. 6,00,000 the same machine could be operated for a period of 4 years. In such a situation its residual value falls to Rs. 5,50,000. Using a discounting rate of 10%, decide whether company should opt for upgraded maintenance or not.

#### Given

PVF	Year 0	Year 1	Year 2	Year 3
@8%	1	0.926	0.857	0.794
@10%	1	0.909	0.826	0.751

**Note:** Ignore taxation for analysis in both cases.

(12 Marks)

- (b) Odessa Limited has proposed to expand its operations for which it requires funds of \$ 15 million, net of issue expenses which amount to 2% of the issue size. It proposed to raise the funds though a GDR issue. It considers the following factors in pricing the issue:
  - (i) The expected domestic market price of the share is Rs. 300.
  - (ii) 3 shares (face value of Rs. 10 per share) underly each GDR.
  - (iii) Underlying shares are priced at 10% discount to the market price.
  - (iv) Expected exchange rate is Rs. 60/\$.

You are required to compute the number of GDR's to be issued and cost of GDR to Odessa Limited, if 20% dividend is expected to be paid with a growth rate of 20%. (4 Marks)

6. (a) On 1st February 2020, XYZ Ltd. a laptop manufacturer imported a particular type of Memory Chips from SKH Semiconductor of South Korea. The payment is due in one month from the date of Invoice, amounting to 1190 Million South Korean Won (SKW). Following Spot Exchange Rates (1st February) are quoted in two different markets:

USD/ INR 75.00/ 75.50 in Mumbai
USD/ SKW 1190.00/ 1190.75 in New York

Since hedging of Foreign Exchange Risk was part of company's strategic policy and no contract for hedging in SKW was available at any in-shore market, it approached an off-shore Non-Deliverable Forward (NDF) Market for hedging the same risk.

In NDF Market a dealer quoted one-month USD/ SKW at 1190.00/1190.50 for notional amount of USD 100,000 to be settled at reference rate declared by Bank of Korea.

After 1 month (1st March 2020) the dealer agreed for SKW 1185/ USD as rate for settlement and on the same day the Spot Rates in the above markets were as follows:

USD/ INR 75.50/ 75.75 in Mumbai USD/ SKW 1188.00/ 1188.50 in New York

Analyze the position of company under each of the following cases, comparing with Spot Position of 1st February:

- (i) Do Nothing.
- (ii) Opting for NDF Contract.

Note: Both Rs./ SKW Rate and final payment (to be computed in Rs. Lakh) to be rounded off upto 4 decimal points. (10 Marks)

(b) Following is the data regarding six securities:

	Α	В	С	D	Е	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)
- 7. Write short notes on any four of following
  - (a) The idea of Quant Fund is stock-picking free from human intervention. (4 Marks)
  - (b) Key decisions falling within the scope of Financial Strategy (4 Marks)
  - (c) Buy-Outs (4 Marks)
  - (d) Reinvestment risk & default risk (4 Marks)
  - (e) Social Cost Benefit analysis (4 Marks)