



CA Final

MANAGEMENT ACCOUNTING AND FINANCIAL ANALYSIS

**Total No. of Questions : 6**

**Max Marks : 100**

**No. of Pages : 3**

**Time Allowed : 3 Hours**

Question No. 1 is compulsory. Answer any four questions from the rest. Working notes should form part of the answer.

**Question 1.**

(a) Shivam Ltd. is considering two mutually exclusive projects A and B. Project A costs Rs.36,000 and project B Rs.30,000. You have been given below the net present value probability distribution for each project.

<b>Project A</b>		<b>Project B</b>	
NPV estimates (Rs.)	Probability	NPV estimates (Rs.)	Probability
15,000	0.2	15,000	0.1
12,000	0.3	12,000	0.4
6,000	0.3	6,000	0.4
3,000	0.2	3,000	0.1

- Compute the expected net present values of projects A and B.
- Compute the risk attached to each project i.e. standard deviation of each probability distribution.
- Compute the profitability index of each project.
- Which project do you recommend? State with reasons.

**(16 marks)**

(b) A firm has sales of Rs.6 crores, Variable cost Rs.3.5 crores and fixed cost of Rs.0.65 crores. The firm has debt and equity resources worth of Rs.7 crores and 10 crores respectively. With the data given show:

- The firm's ROI.
- EBIT if sales decline to Rs.4 crores.
- If the industry's assets turnover is 4 times, does the firm have high or low asset turnover? The cost of debt is 10%, ignore taxation.

**(4 marks)**

**Question 2**

(a) The following information is provided relating to the acquiring company Efficient Ltd. and the target Company Healthy Ltd.

	Efficient Ltd.	Healthy Ltd.
No. of shares (F.V. Rs. 10 each)	10.00 lakhs	7.5 lakhs
Market capitalization	500.00 lakhs	750.00 lakhs
P/E ratio (times)	10.00	5.00
Reserves and Surplus	300.00 lakhs	165.00 lakhs
Promoter's Holding (No. of shares)	4.75 lakhs	5.00 lakhs

Board of Directors of both the Companies have decided to give a fair deal to the shareholders and accordingly for swap ratio the weights are decided as 40%, 25% and 35% respectively for Earning, Book Value and Market Price of share of each company:

- Calculate the swap ratio and also calculate Promoter's holding % after acquisition.
- What is the EPS of Efficient Ltd. after acquisition of Healthy Ltd?
- What is the expected market price per share and market capitalization of Efficient Ltd. after acquisition, assuming P/E ratio of Firm Efficient Ltd. remains unchanged.
- Calculate free float market capitalization of the merged firm.

**(10 marks)**



(b) X Ltd. reported a profit of Rs.65 lakhs after 35% tax for the financial year 2007-08. An analysis of the accounts revealed that the income included extraordinary items Rs.10 lakhs and an extraordinary loss Rs.3 lakhs. The existing operations, except for the extraordinary items, are expected to continue in the future; in addition, the results of the launch of a new product are expected to be as follows:

	Rs. lakhs
Sales	60
Material costs	15
Labour Costs	10
Fixed costs	8

You are required to:

- (a) Compute the value of the business, given that the capitalization rate is 15%.
- (b) Determine the market price per equity share, with X Ltd.'s share capital being comprised of 1,00,000 11% preference shares of Rs. 100 each and 40,00,000 equity shares of Rs. 10 each and the P/E ratio being 8 times.

*(10 marks)*

### Question 3

(a) The management proposes to upgrade the technical features of the product to face the challenge from the competitors. One machine of cost Rs .3.0 lakh is required to take care of the same.

(i) With the improvement in the product features net cash flow with adjustment of tax and depreciation is expected as given below ( Rs in lakhs) :

Probability	Year 1	Year 2	Year 3	Year 4	Year 5	Salvage Value
p =0.3	2.0	2.6	2.8	2.6	1.8	0.7
p =0.5	2.4	3.0	3.5	2.7	1.6	0.8
p =0.2	1.9	2.8	2.8	2.2	1.4	0.9

(ii) Required rate of return is 12%

(iii) If the CV > 0.90, expected rate of return is to be increased by 1% for each 2% variation in CV.

Suggest the management with detailed calculation whether the project to be accepted.

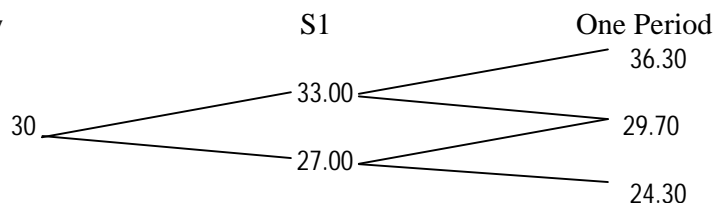
*(14 marks)*

(b) Write short note on 'Stack hedging' and 'Strip hedging'.

*(6 marks)*

### Question 4

a) Following is a two-period tree for a share of stock in CAB Ltd.:



Using the Binomial model, calculate the current fair value of a regular call option on CAB Stock with the following characteristics: X = Rs. 28, Risk Free Rate = 5 percent (per sub period). You should also indicate the composition of the implied riskless hedge portfolio at the valuation date.

*(10 marks)*

(b) A mutual fund that had a net asset value of Rs.16 at the beginning of a month, made income and capital gain distribution of Rs.0.04 and Rs.0.03 respectively per unit during the month, and then ended the month with a net asset value of Rs.16.08. Calculate



monthly and annual rate of return.

*(5 marks)*

(c) Explain the term “Balance Transfer”.

*(5 marks)*

### **Question 5**

(a) Sun Ltd. in planning to import an equipment from Japan at a cost of 3,400 lakh yen. The company may avail loans at 18 percent per annum with quarterly rests with which it can import the equipment. The company has also an offer from Osaka branch of an India based bank extending credit of 180 days at 2 percent per annum against opening of an irrecoverable letter of credit.

Additional information :

Present exchange rate                      Rs.100 = 340 yen

180 day's forward rate                      Rs.100 = 345 yen

Commission charges for letter of credit at 2 per cent per 12 months.

Advise the company whether the offer from the foreign branch should be accepted.

*(6 marks)*

(b). ABC Ltd. is considering a project in US, which will involve an initial investment of US \$ 1,10,00,000. The project will have 5 years of life. Current spot exchange rate is Rs.48 per US \$. The risk free rate in US is 8% and the same in India is 12%. Cash inflow from the project are as follows:

<b>Year</b>	<b>Cash inflow</b>
1	US \$ 20,00,000
2	US \$ 25,00,000
3	US \$ 30,00,000
4	US \$ 40,00,000
5	US \$ 50,00,000

Calculate the NPV of the project using foreign currency approach. Required rate of return on this project is 14%.

*(10 marks)*

(c) According to the position taken by Miller and Modigliani, dividend decision does not influence value. Please state briefly any two reasons, why companies should declare dividend and not ignore it.

*(4 marks)*

### **Question 6.**

(a) 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 does the M-M approach affect the value of firm if the dividends are paid or not paid.

*(5 marks)*

(b) Enumerate the basic differences between cash and derivatives market.

*(5 marks)*

(c) Risk appetite, risk aversion and risk premium are sometimes used interchangeably. Explain this statement. How investor's expectation vary with the variation in the level of risk appetite.

*(6 marks)*

(d) What is a Repo and a Reverse Repo?

*(4 marks)*