

Note: All questions are compulsory.

Question 1 (8 Marks)

ABC Co. is considering a new sales strategy that will be valid for the next 4 years. They want to know the value of the new strategy. Following information relating to the year which has just ended, is available:

Income Statement	
Sales	20,000
Gross margin (20%)	4,000
Administration, Selling & distribution expense (10%)	2,000
PBT	2,000
Tax (30%)	600
PAT	1,400
Balance Sheet Information	
Fixed Assets	8,000
Current Assets	4,000
Equity	12,000

If it adopts the new strategy, sales will grow at the rate of 20% per year for three years. The gross margin ratio, Assets turnover ratio, the Capital structure and the income tax rate will remain unchanged.

Depreciation would be at 10% of net fixed assets at the beginning of the year. The Company's target rate of return is 15%.

Determine the incremental value due to adoption of the strategy.

Question 2(8 Marks)

The following information relating to the acquiring Company Abhiman Ltd. and the target Company Abhishek Ltd. are available. Both the Companies are promoted by Multinational Company, Trident Ltd. The promoter's holding is 50% and 60% respectively in Abhiman Ltd. and Abhishek Ltd.:

	Abhiman Ltd.	Abhishek Ltd.
Share Capital (Rs.)	200 lakh	100 lakh
Free Reserve and Surplus (Rs.)	800 lakh	500 lakh
Paid up Value per share (Rs.)	100	10
Free float Market Capitalisation (Rs.)	400 lakh	128 lakh
P/E Ratio (times)	10	4

Trident Ltd. is interested to do justice to the shareholders of both the Companies. For the swap ratio weights are assigned to different parameters by the Board of Directors as follows:

Book Value	25%
EPS (Earning per share)	50%
Market Price	25%

(a) What is the swap ratio based on above weights?

- (b) What is the Book Value, EPS and expected Market price of Abhiman Ltd. after acquisition of Abhishek Ltd. (assuming P.E. ratio of Abhiman Ltd. remains unchanged and all assets and liabilities of Abhishek Ltd. are taken over at book value).
- (c) Calculate:
- Promoter's revised holding in the Abhiman Ltd.
 - Free float market capitalization.
 - Also calculate No. of Shares, Earning per Share (EPS) and Book Value (B.V.), if after acquisition of Abhishek Ltd., Abhiman Ltd. decided to :
 - Issue Bonus shares in the ratio of 1 : 2; and
 - Split the stock (share) as Rs. 5 each fully paid.

Question 3(6 Marks)

Jumble Consultancy Group has determined relative utilities of cash flows of two forthcoming projects of its client company as follows :

Cash Flow in `	-15000	-10000	-4000	0	15000	10000	5000	1000
Utilities	-100	-60	-3	0	40	30	20	10

The distribution of cash flows of project A and Project B are as follows:

Project A					
Cash Flow (`)	-15000	- 10000	15000	10000	5000
Probability	0.10	0.20	0.40	0.20	0.10
Project B					
Cash Flow (`)	- 10000	-4000	15000	5000	10000
Probability	0.10	0.15	0.40	0.25	0.10

Which project should be selected and why ?

Question 4(6 Marks)

P Ltd. has decided to acquire a machine costing ` 50 lakhs through leasing. Quotations from 2 leasing companies have been obtained which are summarised below:

	Quote A	Quote B
Lease term	3 years	4 years
Initial lease rent (` lakhs)	5.00	1.00
Annual lease rent (payable in arrears) (` lakhs)	21.06	19.66

P Ltd. evaluates investment proposals at 10% cost of capital and its effective tax rate is 30%. Terminal payment in both cases is negligible and may be ignored.

Make calculations and show which quote is beneficial to P Ltd. Present value factors at 10% rate for years 1-4 are respectively 0.91, 0.83, 0.75 and 0.68. Calculations may be rounded off to 2 decimals in lakhs.

Question 5 (6 Marks)

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

Present values	t1	t2	t3	t4	t5
PVIF0.14, t	0.877	0.769	0.675	0.592	0.519
PVIF0.08, t	0.926	0.857	0.794	0.735	0.681

You are required to estimate:

(Calculations be made upto 3 decimal places)

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

Question 6 (8 Marks)

Details about portfolio of shares of an investor are as below:

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

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

You are required to determine:

- portfolio beta,
- the value of risk free securities to be acquired,
- the number of shares of each company to be disposed off,
- the number of Nifty contracts to be bought/sold; and
- the value of portfolio beta for 2% rise in nifty

Question 7 (8 marks)

X Ltd. is a shoe manufacturing company. It is all equity financed and has a Paid-up Capital of Rs. 10,00,000 (Rs. 10 per share).

X Ltd. has hired Swastika consultants to analyse the future earnings. The report of Swastika consultants states as follows:

- The earnings and dividend will grow at 25% for the next two years.
- Earnings are likely to grow at the rate of 10% from 3rd year and onwards.

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

- a. Expected Market Price per share
- b. P/E Ratio
