

ATTEMPT ALL QUESTIONS

Q.1 A Company issued 10,000 shares of Rs. 10 each at a premium of Rs. 3 per share in the following manner:

Application	Rs.4
Allotment	Rs.5 + 3
On call	Rs. 1

Company received application for 13,000 shares. Company rejected & refunded the amount of application of 1,000 shares and made pro rata on remaining applications. Mr. R holder of 500 shares failed to pay any amount after application money. Company forfeited his shares after making call and subsequently re-issued 350 shares out of them @ Rs. 8 per share. Give necessary journal entries in the books of the Company.

(10 Marks)

Solution :

Journal Entries

In the books of the Company

S. No.	Particulars	L.E	Amount Rs.	Amount Rs.
1.	Bank a/c (13000 × 4) To Equity share application a/c (Being application money received)	Dr.	52,000	52,000

S. No.	Particulars	L.F.	Amount Rs.	Amount Rs.
2.	Equity share application a/c (13000 × 4) To Equity share capital a/c (10000 × 4) To Equity share allotment a/c To Bank a/c (1000 × 4) (Being pro rata allotment made on excess application received)	Dr.	52,000	40,000 8,000 4,000
3.	Equity share allotment a/c (10,000 × 8) To Equity share capital a/c (10,000 × 5)	Dr.	80,000	50,000

	To Securities Premium reserve a/c ($10,000 \times 3$)			30,000
	(Being allotment money due)			
4.	Bank a/c (1) Dr.		68,400	
	To Equity share allotment a/c			68,400
	(Being allotment money received)			
5.	Equity share 1st call a/c ($10,000 \times 1$) Dr.		10,000	
	To Equity share capital a/c			10,000
	(Being first call amount due)			
6.	Bank a/c (9500×1) Dr.		9,500	
	To Equity share 1st call a/c			9,500
	(Being 1st call money received)			
7.	Equity share capital a/c (500×10) Dr.		5,000	
	Securities premium reserve a/c (500×3)		1,500	
	To Equity share forfeiture a/c			2,400
	To Equity share allotment a/c			3,600
	To Equity share 1st call (500×1)			500
	(Being 500 shares forfeited on non-payment of allotment & call money)			
8.	Bank a/c (350×8) Dr.		2,800	
	Equity share forfeiture a/c (350×2) Dr.		700	
	To Equity share capital a/c (350×10)			3,500
	(Being 350 shares reissued @ Rs. 8 per share)			
9.	Equity share forfeiture a/c (2) Dr.		980	
	To Capital Reserve a/c			980
	(Being balance transferred to Capital Reserve)			

Working Note:-

	Allotted	Applied
1.	10,000 -	12,000
	500 -	$\frac{12000}{10000} \times 500 = 600$

Application money to be paid = $500 \times 4 = 2000$

Application money actually paid = $600 \times 4 = 2400$

Excess amount = $2400 - 2000 = 400$

(included in allotment)

	Rs.
Amount received ($10,000 \times 8$)	80,000
Less : Amount received earlier	(8,000)
Less : Default (500×8)	(4,000)
$\therefore$ Allotment money received	68,000

	Rs.
2. No. of shares	Forfeited amount
500	2,400 (application and extra money paid)
350	$\frac{2400}{500} \times 350 =$
	Rs. 1,680
Less : Loss on reissue	(700)
Transferred to Capital Reserve	980

Attempt Either Q.2 or Q.2A

Q.2 You are the Company Secretary of DP Ltd and assigned task of profitability projections of difference scenarios based on historical data provided: (Rs in Cr.)

Revenue (Sales)	200
Variable cost (60% of Sales)	120
Fixed Cost (others)	20
Depreciation	25
Taxes	10
Cash flow from operation	50
Net Cash flow	50

Company is forecasting that sales will be increased by 37.5% approximately keeping in the mind of Market forces whereas, the variable cost will be forecasted at 56% of sales. Company is in the anticipation of having

~~fixed cost of Rs.15 cr. On the other side (i.e.) on worst situation, Company is forecasting the that sales will be~~

curb by 25% approximately keeping in the mind of Market forces whereas, the variable cost will be forecasted at 65% of sales. Company is in the anticipation of having fixed cost of Rs. 25 cr.

It is forecasted that depreciation remains unchanged in case of any scenario and tax rate shall be applicable at 28.57% (10 Marks)

Answer :

Statement showing Profitability Projection (Rs in Cr.)			
Particulars	Historical Data	Optimistic Scenario	Pessimistic Scenario
Sales	200	275 (200+37.5%)	150 (200-25%)
Less: Variable cost	(120) (60% of sales)	(154) (56% of 275)	(97.5) (65% of 150)
Contribution	80	121	52.5
Less: Fixed Cost			
• Other	(20)	(15)	(25)
• Depreciation	(25)	(25)	(25)
EBIT/EBT	35	81	2.5
Less: Tax (28.57%)	(10)	(23.14)	(0.71)
EAT	25	57.86	1.79

So, it can be seen from the above forecasting that, in case of optimistic scenario, company may earn profit Rs. 57.86 crores (i.e. increase in profitability 131% approx) against the historical data. While, profitability will be lower projected in worst situation i.e. around Rs. 1.79 cr. (i.e., Decrease in profitability 93% approx as

OR

Q.2A Given below are the data on a capital project 'C':

Cost of the Project	Rs. 2,28,400
Useful Life	4 years
Profitability Index	1.0417
Internal Rate of Return	15%
Salvage Value	0

Calculate- (i) Annual Cash Flow, (ii) Cost of Capital, (iii) Net Present Value (NPV), (iv) Discounted Payback Period
Given the following table of Discount Factors:

Discount Factor	15%	14%	13%	12%
1 Year	0.869	0.877	0.885	0.893

CS-Executive New Syllabus

Marks- 50

Subject – Corporate Accounting & Financial Management

Time – 90 Minute

Topic Name - Capital structure, Capital Budgeting, Issue of Shares, Forecasting of financial statements

2 Years	0.756	0.769	0.783	0.797
3 Years	0.658	0.675	0.693	0.712
4 Years	0.572	0.592	0.613	0.636

(10 Marks)

Solution:

1. Since IRR = 15%, Discounted Cash Inflows at 15% = Initial Investment in the Project. So, Cost of Project = Initial Investment = CFAT p.a. × Cum. PVF at 15% for 4 years Rs. 2,28,400 = CFAT p.a. × 2.855. solving, CFAT p.a. =	Rs. 80,000
2. Profitability Index = $\frac{\text{Total DCFAT}}{\text{Initial Investment}} = 1.0417$ (given). So, Total DCFAT = PI × Initial Investment DCFAT = CFAT p.a. × PVF at On substitution, Rs. 2,37,924 = Rs. 80,000 × PVF at K _o . On solving, PVF at K _o = $\frac{2,37,924}{80,000} = 2.974$. From the above Table, K _o = 13% for Total PVF = 2.974	1.0417 × 2,28,400 = Rs. 2,37,924 K_o = 13%
3. NPV = Total DCFAT - Initial Investment = Rs. 2,37,924 - Rs. 2,28,400	Rs. 9,524

4. Discounted Payback Period

Year	CFAT	PVF 13%	DCFAT 13%	Cum DCF 13%	Year 3	Rs. 49,040 for 12 months	Year 4
1	80,000	0.885	70,800	70,800			
					Rs. 1,88,880	Rs. 2,28,400 (Initial Invst)	Rs. 2,37,920
2	80,000	0.783	62,640	1,33,440	Prop. Time for earning (2,28,400 - 1,88,880) = Rs. 39,520		
3	80,000	0.693	55,440	1,88,880	$\frac{39,520}{49,040} \times 12 = 9.67$ Mths. Discounted Payback Period= 3 yrs, 10 Months.		

Q.3 The Management of Z Ltd wants to raise its funds from market to meet out the financial demands of its long-term projects. The Company has various combination of proposals to raise its funds. You are given the following proposals of the Company:

1.	Proposals	% of Equity	% of Debt	% of Preference Shares
	P	100	-	-
	Q	50	50	-
	R	50	-	50

2. Cost of Debt -10%, Cost of Preference Shares -10%

3. Tax Rate - 50%

4. Equity Shares of the Face Value of Rs. 10 each will be issued at a Premium of Rs. 10 per Share.

5. Total Investment to be raised Rs. 40,00,000.

6. Expected Earnings Before Interest and Tax Rs. 18,00,000.

From the above proposals the Management wants to take advice from you for appropriate plan after computing the following - (1) Earnings Per Share, (2) Financial Break-Even-Point, and (3) Compute the EBIT Range among the plans for indifference. Also indicate if any of the plans dominate. **(10 Marks)**

Solution: 1. Computation of EPS with given EBIT of Rs. 18,00,000 and 2. Financial BEP

Particulars	Proposal P	Proposal Q	Proposal R
Capital Required	Rs. 40,00,000	Rs. 40,00,000	Rs. 40,00,000
Less: Debt Component	Nil	(50%) Rs. 20,00,000	Nil
Preference Share Capital	Nil	Nil	(50%) Rs. 20,00,000
Balance Equity Capital required	Rs. 40,00,000	Rs. 20,00,000	Rs. 20,00,000
Market Price per Share, i.e. Issue Price per Share	Rs. 20	Rs. 20	Rs. 20
Number of Equity Shares to be issued $= \frac{\text{Equity Capital}}{\text{Issue Price, i.e. MPS}}$	2,00,000 Shares	1,00,000 Shares	1,00,000 Shares
EBIT (given)	Rs. 18,00,000	Rs. 18,00,000	Rs. 18,00,000
Less: Interest (10% on Debt)	Nil	Rs. 2,00,000	Nil
EBT	Rs. 18,00,000	Rs. 16,00,000	Rs. 18,00,000
Less: Tax at 50%	Rs. 9,00,000	Rs. 8,00,000	Rs. 9,00,000
EAT	Rs. 9,00,000	Rs. 8,00,000	Rs. 9,00,000
Less: Preference Dividend (10% on PSC)	Nil	Nil	Rs. 2,00,000
Residual Earnings	Rs. 9,00,000	Rs. 8,00,000	Rs. 7,00,000
EPS = $\frac{\text{Residual Earnings}}{\text{No. of Equity Shares}}$	Rs. 4.50	Rs. 8.00	Rs. 7.00
Financial BEP is computed by the formula - Required EBIT = Interest + $\frac{\text{Preference Dividend}}{(100\% - \text{Tax Rate})}$	Nil	(Interest only) = Rs. 2,00,000	$\frac{\text{Rs. 2,00,000}}{50\%} = \text{Rs. 4,00,000}$

3. Computation of EBIT - EPS Indifference Point

Particulars	Proposal P	Proposal Q	Proposal R
EBIT	E	E	E
Less: Interest (10% on Debt)	Nil	Rs. 2,00,000	Nil
EBT	E	E - 2,00,000	E
Less: Tax at 50%	0.5 E	0.5 E - 1,00,000	0.5 E
EAT	0.5 E	0.5 E - 1,00,000	0.5 E
Less: Preference Dividend (10% on PSC)	Nil	Nil	Rs. 2,00,000
Residual Earnings	0.5 E	0.5 E - 1,00,000	0.5 E - 2,00,000
No. of Equity Shares (WN 1 above)	2,00,000 Shares	1,00,000 Shares	1,00,000 Shares
EPS = $\frac{\text{Residual Earnings}}{\text{No. of Equity Shares}}$	$\frac{0.5E}{2,00,000 \text{ Shares}}$	$\frac{0.5E - 1,00,000}{1,00,000 \text{ Shares}}$	$\frac{0.5E - 2,00,000}{1,00,000 \text{ Shares}}$

For indifference between the above alternatives, EPS should be equal. Hence, Indifference Points are as under -

For Proposal P & Q: $\frac{0.5E}{2,00,000} = \frac{0.5E - 1,00,000}{1,00,000}$. On simplification, $0.5 E = 1 E - 2,00,000$. **So, E = 4,00,000**

For Proposal Q & R: $\frac{0.5 E - 1,00,000}{1,00,000} = \frac{0.5 E - 2,00,000}{1,00,000}$. Hence, there is no indifference point at all between Proposal Q & R.

For Proposal R & P: $\frac{0.5 E - 2,00,000}{1,00,000} = \frac{0.5E}{2,00,000}$. On simplification, $1E - 4,00,000 = 0.5 E$. **So, E = 8,00,000**

Conclusion: EPS is maximum under Proposal Q and is hence preferable.

Note: Plan B dominates Plan C since Financial BEP of Plan B is only Rs. 2,00,000 whereas for Plan C it is Rs. 4,00,000.

Q.4 Z Limited is considering the installation of a new project costing Rs.80,00,000. Expected annual sales revenue from the project is Rs.90,00,000 and its variable costs are 60% of sales. Expected annual fixed cost other than interest is Rs.10,00,000. Corporate tax rate is 30%. The company wants to arrange the funds through issuing 4,00,000 equity shares of Rs.10 each and 12% debentures of Rs.40,00,000. You are required to:

(i) Calculate the Operating, Financial and Combined Leverages and Earnings per share (EPS).

(ii) Determine the likely level of EBIT, if EPS is (1) Rs.4, (2) Rs.2, (3) Rs.0.

(10 Marks)

Solution: (i) Calculation of Leverages and Earnings per Share (EPS)

Income Statement

(Amount in Rs.)

Sales Revenue	90,00,000
Less: Variable Cost @ 60%	(54,00,000)
Contribution	36,00,000
Less: Fixed Costs other than Interest	(10,00,000)
Earnings before Interest and Tax (EBIT)	26,00,000

CS-Executive New Syllabus

Marks- 50

Subject – Corporate Accounting & Financial Management

Time – 90 Minute

Topic Name - Capital structure, Capital Budgeting, Issue of Shares, Forecasting of financial statements

Less: Interest (12% on Rs.40,00,000)	(4,80,000)
Earnings Before Tax (EBT)	21,20,000
Less: Tax @ 30%	(6,36,000)
Earnings After Tax (EAT)	14,84,000

$$1. \quad DOL = \frac{\text{Contribution}}{\text{EBIT}} = \frac{\text{Rs.36,00,000}}{\text{Rs.26,00,000}} = 1.3846$$

$$2. \quad DFL = \frac{\text{EBIT}}{\text{EBT}} = \frac{\text{Rs.26,00,000}}{\text{Rs.21,20,000}} = 1.2264$$

$$3. \quad DCL = DOL \times DFL = 1.38 \times 1.23 = 1.6974$$

$$4. \quad EPS = \frac{\text{EAT}}{\text{No. of Equity Shares}} = \frac{\text{Rs.14,84,000}}{4,00,000} = \text{Rs.3.71}$$

(ii) Calculation of likely levels of EBIT at different EPS:

$$EPS = \frac{(\text{EBIT} - I)(1 - t)}{\text{Number of Equity Shares}}$$

$$(1) \quad 4 = \frac{(\text{EBIT} - \text{Rs.4,80,000})(1 - 0.3)}{4,00,000}$$

$$\text{EBIT} - \text{Rs.4,80,000} = \frac{\text{Rs.16,00,000}}{0.70}$$

$$\text{EBIT} - \text{Rs.4,80,000} = \text{Rs.22,85,714} \quad \text{EBIT} = \text{Rs.27,65,714}$$

$$(2) \quad 2 = \frac{(\text{EBIT} - \text{Rs.4,80,000})(1 - 0.3)}{4,00,000}$$

$$\text{EBIT} - \text{Rs.4,80,000} = \frac{\text{Rs.8,00,000}}{0.70}$$

$$\text{EBIT} = \text{Rs.4,80,000} + \text{Rs.11,42,857} = \text{Rs.16,22,857}$$

$$(3) \quad 0 = \frac{(\text{EBIT} - \text{Rs.4,80,000})(1 - 0.3)}{4,00,000}$$

$$\text{EBIT} = \text{Rs.4,80,000}$$

Q.5 (a) Importance of Financial Forecasting

(5 Marks)

Answer :

Financial forecasts are a crucial part of business planning, budgeting, operations, funding that help leaders and outside stakeholders make better choices. Few important points have been pointed:

- It serves as the basis for budgeting decisions.
- It gives businesses access to cohesive reports, allowing finance departments to establish business goals that are both realistic and feasible.
- It provides management valuable insights into the way the business performed in the past and the way it will compare in the future.
- It provides a barometer for those making material financial decisions.
- It facilitates to build investor relations and Show investors and creditors that your corporate has well and structured plan and is prepared for any unforeseen events impacting revenues and budgets.
- It provides customizable approach based on the core set of foundational components.
- To make accurate budget and facilitates to establish realistic business goals.
- With the help of accurate financial forecasting, problem areas can easily be traced out and company with remedial action plan can reduce the financial risk.
- Many times, accurate and authenticate financial forecast reflecting higher Return on Investment and

that helps to build and enhance the investor's confidence.

Q.5 (b) A doctor is planning to buy an X-Ray machine for his hospital. He has two options. He can either purchase it by making a cash payment of ` 5 lakhs or ` 6,15,000 are to be paid in six equal annual installments. Which option do you suggest to the doctor assuming the rate of return is 12 percent? Present value of annuity of Re. 1 at 12 percent rate of discount for six years is 4.111. (5 Marks)

Answer

Option I: Cash Down Payment

Cash down payment = ` 5,00,000

Option II: Annual Instalment Basis

Annual installment = `  $6,15,000 \times 1/6$  = ` 1,02,500

Present Value of 1 to 6 instalments @12% = `  $1,02,500 \times 4.111$  = ` 4,21,378

Advise: The doctor should buy X-Ray machine on installment basis because the present value of cash out flows is lower than cash down payment. This means Option II is better than Option I.