

1-Financial Management

Meaning Financial Management

Financial Management is a vital activity in any organization. It is the process of planning, organizing, controlling and monitoring financial resources with a view to achieve organizational goals and objectives. It is an ideal practice for controlling the financial activities of an organization such as procurement of funds, utilization of funds, accounting, payments, risk assessment and every other thing related to money.

Goals of Financial Management:

Goals of financial management should be so articulated as to help achieve the objective of wealth maximization and maximisation of profit pool. Financial goals may be stated as maximizing short-term profits and minimizing risks.

Profit maximization refers to the sales level where profits are highest. You might assume that the higher the sales level, the higher the profits - but that is not always true. Wealth maximization is the concept of increasing the value of a business in order to increase the value of the shares held by stockholders. The concept requires a company's management team to continually search for the highest possible returns on funds invested in the business, while mitigating any associated risk of loss. This calls for a detailed analysis of the cash flows associated with each prospective investment, as well as constant attention to the strategic direction of the organization.

Scope of Financial Management

- Estimating the Requirement of Funds: Businesses make forecast on funds needed in both short run and long run, hence, they can improve the efficiency of funding. The estimation is based on the budget e.g. sales budget, production budget.
- Determining the Capital Structure: Capital structure is how a firm finances its overall operations and growth by using different sources of funds.^[2] Once the requirement of funds has estimated, the financial manager should decide the mix of debt and equity and also types of debt.
- Investment Fund: A good investment plan can bring businesses huge returns.
- To ascertain maximum profit as well as maintain the core value of the organization

Functions of Financial Management

- Estimation of capital requirements: A finance manager has to make estimation with regards to capital requirements of the company. This will depend upon expected costs and profits and future programmes and policies of a concern. Estimations have to be made in an adequate manner which increases earning capacity of enterprise.
- Determination of capital composition: Once the estimation have been made, the capital structure have to be decided. This involves short- term and long- term debt equity analysis. This will depend upon the proportion of equity capital a company is possessing and additional funds which have to be raised from outside parties.
- Choice of sources of funds: For additional funds to be procured, a company has many choices like-
 - Issue of shares and debentures
 - Loans to be taken from banks and financial institutions
 - Public deposits to be drawn like in form of bonds.
 - Choice of factor will depend on relative merits and demerits of each source and period of financing.
- Investment of funds: The finance manager has to decide to allocate funds into profitable ventures so that there is safety on investment and regular returns is possible.

- Disposal of surplus: The net profits decision have to be made by the finance manager. This can be done in two ways:
- Dividend declaration - It includes identifying the rate of dividends and other benefits like bonus.
- Retained profits - The volume has to be decided which will depend upon expansional, innovational, diversification plans of the company.
- Management of cash: Finance manager has to make decisions with regards to cash management. Cash is required for many purposes like payment of wages and salaries, payment of electricity and water bills, payment to creditors, meeting current liabilities, maintenance of enough stock, purchase of raw materials, etc.
- Financial controls: The finance manager has not only to plan, procure and utilize the funds but he also has to exercise control over finances. This can be done through many techniques like ratio analysis, financial forecasting, cost and profit control, etc.
- Financial planning is the task of determining how a business will afford to achieve its strategic goals and objectives. Usually, a company creates a Financial Plan immediately after the vision and objectives have been set. The Financial Plan describes each of the activities, resources, equipment and materials that are needed to achieve these objectives, as well as the timeframes involved.

Sound Financial Planning

(1) Simplicity:

A sound financial structure should provide simple financial structure which could be managed easily and understandable even to a layman. "Simplicity" is an essential sine qua non which helps the promoters and the management in acquiring the required amount of capital. It is also easy to work out a simple financial plan.

(2) Foresight:

Foresight must be used in planning the scope of operation in order that the needs for capital may be estimated as accurately as possible. A plan visualised without foresight spells disaster for the company, if it fails to meet the needs for both fixed and working capital. In simple words, the canon of foresight means that besides the needs of 'today' the requirements of 'tomorrow' should also be kept in view.

(3) Flexibility:

Financial readjustments become necessary often. The financial plan must be easily adaptable to them. There should be a degree of flexibility so that financial plan can be adopted with a minimum of delay to meet changing conditions in the future.

(4) Optimum use of funds:

Capital should not only be adequate but should also be productively employed. Financial plan should prevent wasteful use of capital, avoid idle capacity and ensure proper utilisation of funds to build up earning capacity of the enterprise.

There should be optimum utilisation of available financial resources. If this is not done, the profitability will decline. There should be a proper balance between the fixed capital and the working capital.

(5) Liquidity:

It means that a reasonable percentage of the current assets must be kept in the form of liquid cash. Cash is required to finance purchases, to pay salaries, wages and other incidental expenses. The degree of liquidity to be maintained is determined by the size of the company, its age, its credit status, the nature of its operations, the rate of turnover etc.

(6) Anticipation of contingencies:

The planners should visualise contingencies or emergency situations in designing their financial plan. This may lead to keeping of some surplus capital for meeting the unforeseen events. It would be better if these contingencies are anticipated in advance.

(7) Economy:

Last but not the least, the financial plan should be made in such a manner that the cost of capital procurement should be minimum. The capital mobilised should not impose disproportionate burden on the company.

Factors Affecting Financial Planning

Financial planning of a business is determined by the following factors:

(i) **Objectives.** Objectives of financial planning should be consistent with the overall objectives of the business. The main objectives of financial planning are to raise funds at reasonable cost and utilize them in the best possible manner.

(ii) **Requirements of the Enterprise.** A good financial plan should take care of the present and future requirements of the business. Provision of or various contingencies, replacement of assets, and growth and diversification of business enterprise must be made.

(iii) **Economy.** Case of raising capital should be reasonable. Capital structure should be such as to create an appropriate balance between the cost of funds and the company's ability to pay.

(iv) **Solvency and Liquidity.** The funds should be invested in those ventures which are likely to give sufficient return on investment. Moreover, adequate cash should always be available to meet the requirements of the enterprise. The enterprise should be solvent and liquid not only in the short-term but also in the long-term.

(v) **Flexibility.** Financial planning should ensure flexibility allow the diversion of funds into more profitable channels. It should also make provision for raising of additional funds at a short notice.

(vi) **Optimum Capital Structure.** There should be proper capitalisation of the company. An optimum mix of equity shares, preference shares and debentures should be kept in mind while raising funds from different resources.

CHAPTER : 2 FINANCIAL DECISION AND INVESTMENT DECISION

Financial Decision:

Capital structure of a company refers to the composition or makeup of its capitalisation and it includes all longterm capital resources i.e. loans, reserves, shares, and bonds.

→ Factors determining the capital structure

1. Financial leverage
2. Growth & stability of sales
3. Cost of sales
4. Nature & size of the firm
5. Flexibility
6. Capital market condition
7. legal requirement

EPS = Earning per share
EBIT = Earnings before interest and tax

Problems:

- 1) Determine the EPS [Earning per share] of a company, which has an earning before interest and tax [EBIT] of ₹200,000/-.
Its capital structure consist of the following securities.

10% debenture ₹6,00,000/-

12% preference share ₹2,00,000/-

E. share of ₹100/- each 50,000/-

The company is in the 50% tax. Determine the percentage change in EPS associated with 25% increase and 25% decrease in EBIT

→ Given:

EBIT = 200000

10% debentures = 600000

12% p. shares = 200000

E. share 100 each = 50000 (5000)

Tax = 50%

EBIT = ↑ 25% / ↓ 25%

→ Computation of Earning per share

Particulars	Existing EBIT	Increase of	Decrease ^{25%}
Earnings before interest & tax [EBIT]	80000	25000	15000
(-) Interest (debenture)	(-) 6000	(-) 6000	(-) 6000
Earning before tax	14000	19000	9000
(-) Tax (50%)	(-) 7000	(-) 9500	(-) 4500
Earning after tax	7000	9500	4500
(-) Preference shares dividend	(-) 24000	(-) 24000	(-) 24000
Earning available to E.S holders	46000	7100	2100
EPS = $\frac{E.A.E.S}{\text{No. of E.S}}$	$\frac{46000}{5000} = 9.2$	$\frac{7100}{5000} = 1.42$	$\frac{2100}{5000} = 0.42$

2) A company Ltd has a share capital of £100000/- divided into e. share of £10/- each. It has major expansion program requiring an investment of another £50000/-. the management is considering the following alternative for raising this among.

Issue of 5000 e. share of £10/- each

Issue of 5000, 12% p. share of £10/- each

Issue of 10% debenture of £50000/-

The companies present EBIT is £30000/- per annum. You are required to calculate the effect of each of the above methods of financing on earnings per share.

EBIT continues to be same even after expansion

EBIT increases by 10000

Assume tax liability is 50%.

→ Equity share = 100000 of 10 (existing) = $\frac{100000}{10} = 10000$

50000 → ES 5000 £10/-
 → PS 12% 5000 10/- EBIT = 30000
 → Deb 10% deb 50000

Analysis table

	i	ii	iii
E.S	15000	10000	10000
P.S	-	6000	-
Deb	-	-	5000

Equity share	Preference share	Debenture
5000 @ 10/-	5000 @ 10% (12%)	50000 (10%)
10000 + 5000 = 15000	= 10000	= 10000

when EBIT is 30000

Particulars	i (E.S)	ii (P.S)	iii (Deb)
EBIT	30000	30000	30000
(-) Interest (Deb) $(5000 \times 10\%)$	-	-	(-) 5000
EBT	30000	30000	25000
(-) Tax (50%)	(-) 15000	(-) 15000	(-) 12500
EAT	15000	15000	12500
(-) P.D $(5000 \times 10 \times 12\%)$	-	(-) 6000	-
Earning available to E.S holders	15000	9000	12500
EPS: $\frac{EAT}{\text{No. of E.S holders}}$	$\frac{15000}{15000} = 1$	$\frac{9000}{10000} = 0.9$	$\frac{12500}{10000} = 1.25$

→ when EBIT is 40000

Particulars	i (E.S)	ii (P.S)	iii (Deb)
EBIT	40000	40000	40000
(-) Interest (Deb)	-	-	(-) 5000
EBT	40000	40000	35000
(-) Tax (50%)	(-) 20000	(-) 20000	(-) 17500
EAT	20000	20000	17500
(-) P.D $(5000 \times 10 \times 12\%)$	-	6000	-
Earning available for E.S holders	20000	14000	17500
EPS: $\frac{EAT}{\text{No. of Share holders}}$	$\frac{20000}{15000} = 1.33$	$\frac{14000}{10000} = 1.4$	$\frac{17500}{10000} = 1.75$

③ ABC co., Ltd has currently an all e. share consisting of 15000 e. share of ₹100/- each. The management is planning to raise another 25 lakh rupees to finance a major program of expansion and is considering 3 alternative method of financing.

- TO issue 25000 e.s of ₹100/- each.
- TO issue 25000, 8% debenture of ₹100/- each.
- TO issue 25000, 8% p. share of ₹100/- each.

The co.,s expected EBIT will be ₹ 800000/- assuming tax rate is 50%. Determine the EPS in each alternative and comment which alternative is best and why?

→ $[15000 \text{ (E.S.) } \times 100/-] = 15,00,000$

\swarrow 25000 E.S. (₹100/-)
 \searrow 25000 8% deb (₹100/5)
 \searrow 25000 8% p. share (₹100/5)

Analysis Table

	I	II	III
E. share	4000000	1500000	1500000
P. share	—	—	2500000
Debtenture	—	2500000	—
	$\frac{4000000}{100}$	$\frac{1500000}{100}$	$\frac{1500000}{100}$
	= 40000	= 15000	= 15000

Calculation of EPS

Particulars	I E.S	II Deb	III P.S
EBIT	800000	800000	800000
(-) Interest (Deb) $(25000 \times 100 \times 8\%)$	—	200000	—
EBT	800000	600000	800000
(-) Tax (50%)	400000	300000	400000
EAT	400000	300000	400000
(-) P.D	—	—	200000
Earnings available to E.S holder	400000	300000	200000
EPS = $\frac{\text{EAT}}{\text{No. of E.S}}$	$\frac{400000}{40000} = 10$	$\frac{300000}{15000} = 20$	$\frac{200000}{15000} = 13.33$

Conclusion :

2nd alternative is considered to be the best alternative because EPS is more when compared to the other 2 alternatives.

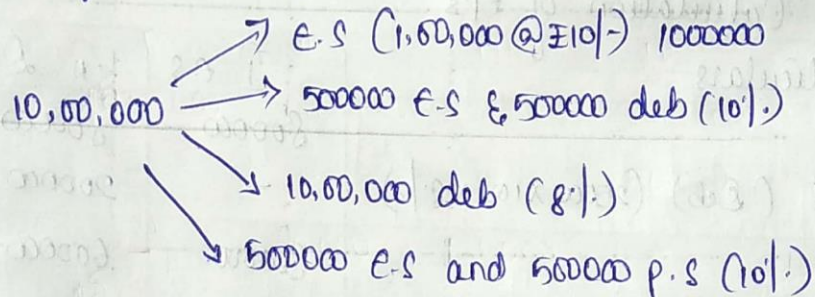
Q. X Ltd capitalised with £10,00,000/- divided into 1,00,000 e. share of £10/- each. The management desire to raise another 10,00,000 rupees to finance a major expansion project. There are 4 possible financing plan.

- (i) All e. share
- (ii) 50000 of e. share and 50000 in debenture carrying 10% interest
- (iii) All debenture carrying 8% interest
- (iv) 50000 of e. share and 50000 in p. share carrying 10% in dividend

The existing EBIT amted to rupees 10000/annum. You are required to calculate EPS under each of the above 4 financing plan. assuming tax rate of 50%.

Calculate the EPS if on account of expansion the level of EBIT is doubled.

→ (1,00,000 of £10/- E.S) = 10,00,000



Analysis Table

	I	II	III	IV
E. share	2000000	1500000	1000000	1500000
P. share	-	-	-	500000 (10%)
Debenture	-	500000 (10%)	1000000 (8%)	-
	$\frac{2000000}{10}$	$\frac{1500000}{10}$	$\frac{1000000}{10}$	$\frac{1500000}{10}$
	= 200000	= 150000	= 100000	= 150000

→ Calculation of EPS

Particulars	I	II	III	IV
EBIT	120000	120000	120000	120000
(-) Interest (deb)	-	(-) 50000	(-) 80000	-
EBT	120000	70000	40000	120000
(-) Tax (50%)	(-) 60000	(-) 35000	(-) 20000	(-) 60000
EAT	60000	35000	20000	60000
(-) P.D	-	-	-	(-) 50000
EAFS	60000	35000	20000	10000
EPS = $\frac{EAFS}{\text{No. of E.S}}$	$\frac{60000}{200000}$	$\frac{35000}{150000}$	$\frac{20000}{100000}$	$\frac{10000}{150000}$
	= 0.3	= 0.233	= 0.2	= 0.067

→ Calculation of EPS when EBIT is doubled
 $120000 + 120000 = 240000$

Particulars	I	II	III	IV
EBIT	240000	240000	240000	240000
(-) Interest (deb)	-	(-) 50000	(-) 80000	-
EBT	240000	190000	160000	240000
(-) Tax (50%)	(-) 20000	(-) 95000	(-) 80000	(-) 20000
EAT	120000	95000	80000	120000
(-) P.D	-	-	-	(-) 50000
EAFS	120000	95000	80000	70000
EPS = $\frac{EAFS}{\text{No. of E.S}}$	$\frac{120000}{200000}$	$\frac{95000}{150000}$	$\frac{80000}{100000}$	$\frac{70000}{150000}$
	= 0.6	= 0.63	= 0.8	= 0.47

⑤ Excellent Ltd has currently e-share capital of ₹250000/- consisting of 25000 shares of 100 each. The management is planning to raise another 20,00,000 rupees to finance a major program of expansion through one of the possible financial plan. The options are

if all through e. share

if ₹10,00,000/- through e.s. & ₹10,00,000 through debenture @ 8% interest / annum.

(iii) ₹25,00,000/- through e.s. and ₹15,00,000/- through longterm borrowing (debenture) at 9% int/annum.

(iv) ₹10,00,000/- through e.s. and ₹10,00,000/- through p.s. with 5% dividend.

The co.'s expected earnings before int & tax will be EBIT = ₹8,00,000/- assuming a tax rate of 50%, determine EPS for each alternative & comment which alternative is best & why.

→ ₹25,00,000 e.s. (25000 at ₹100/-) = ₹25,00,000

20,00,000
 20,00,000
 10,00,000 e.s. & 10,00,000 deb (8%.)
 5,00,000 e.s. & 15,00,000 deb (9%.)
 10,00,000 e.s. & 10,00,000 p.s. (5%.)

Analysis table

	I	II	III	IV
E.S.	25,00,000	35,00,000	30,00,000	35,00,000
P.S.	-	-	-	50,000
Debenture	-	80,000	135000	-
	25,00,000	35,00,000	30,00,000	35,00,000
	100	100	100	100
	= 25,000	= 35000	= 30000	= 35000

Calculation of EPS

Particulars	I	II	III	IV
EBIT	800000	800000	800000	800000
(-) Interest (deb)	-	(-) 80000	(-) 135000	-
EBT	800000	720000	665000	800000
(-) Tax (50%)	400000	360000	332500	400000
EAT	400000	360000	332500	400000
(-) P.D	-	-	-	50000
EATCS	400000	360000	332500	350000
EPS = $\frac{EATCS}{\text{No. of e.s.}}$	$\frac{400000}{45000}$ = 8.89	$\frac{360000}{35000}$ = 10.29	$\frac{332500}{30000}$ = 11.083	$\frac{350000}{35000}$ = 10

Conclusion:

3rd alternative is considered to be best alternative because EPS is more when compared to the other three alternatives.

⑥ A newly established company wishes to determine an appropriate capital structure. It can issue 12% deb and 10% preference capital and the existing tax rate is 35%. The co. requires 50,00,000/-. The possible capital structure -

Plan	debenture	P. share	E. capital	
1	0	0	100%	Deb = 12% P.S. = 10% Tax = 35%
2	30%	0	70%	$50,00,000/100 = 50000$
3	30%	20%	50%	$35,00,000/100 = 35000$
4	50%	0	50%	$25,00,000/100 = 25000$
5	50%	20%	30%	$25,00,000/100 = 25000$ $15,00,000/100 = 15000$

The EBIT is 12%.. Calculate EPS assuming that the face value per E. share is 100/.

Calculation of EPS

Particulars	I	II	III	IV	V
EBIT	600000	600000	600000	600000	600000
(-) Interest (deb)	-	1,80,000	1,80,000	30,000	30,000
EBT	600000	420000	420000	300000	300000
(-) Tax (35%)	210000	1,47,000	1,47,000	1,05,000	1,05,000
EAT	390000	273000	273000	1,95,000	1,95,000
(-) P.D	-	-	1,00,000	-	1,00,000
EAES	390000	273000	1,73,000	1,95,000	95,000
EPS = $\frac{EAES}{\text{No. of E.S.}}$	$\frac{390000}{50000}$	$\frac{273000}{35000}$	$\frac{1,73,000}{25000}$	$\frac{1,95,000}{25000}$	$\frac{95,000}{15000}$
	7.8	7.8	6.92	7.8	6.33

④ Firm X and Y are identical except that firm X is not levered by, firm Y is levered. The following data relating to them

Particulars	Firm X	Firm Y
Assets	500000	500000
Debt Capital	—	250000 (9% int)
E.S. Capital	500000	250000
No. of shares	500000	25000
Rate of return on Asset (EBIT)	20%	20%

Calculate EPS for both the firm assuming tax rate is 50%. Will it be advantageous to firm Y to raise the level of debt by 75%.



Calculation of EPS

Extra adjustment

Particulars	'Y' debt increase by 75%	X	Y
EBIT	100000	100000	100000
(-) Interest (deb)	$600000 \times 7.5\% \times 9\%$ (-) 33750	(-) —	(-) 22500
EBT	66250	100000	77500
(-) Tax (50%)	(-) 33125	(-) 50000	(-) 38750
EAT	33125	50000	38750
(-) P.D	—	—	—
EAFS	33125	50000	38750
EPS = $\frac{EAFS}{\text{No. of shares}}$	$\frac{33125}{12500} = 2.65$	$\frac{50000}{50000} = 1$	$\frac{38750}{25000} = 1.55$

75% deb

500000
25% E.S. = $\frac{125000}{10} = 12500$

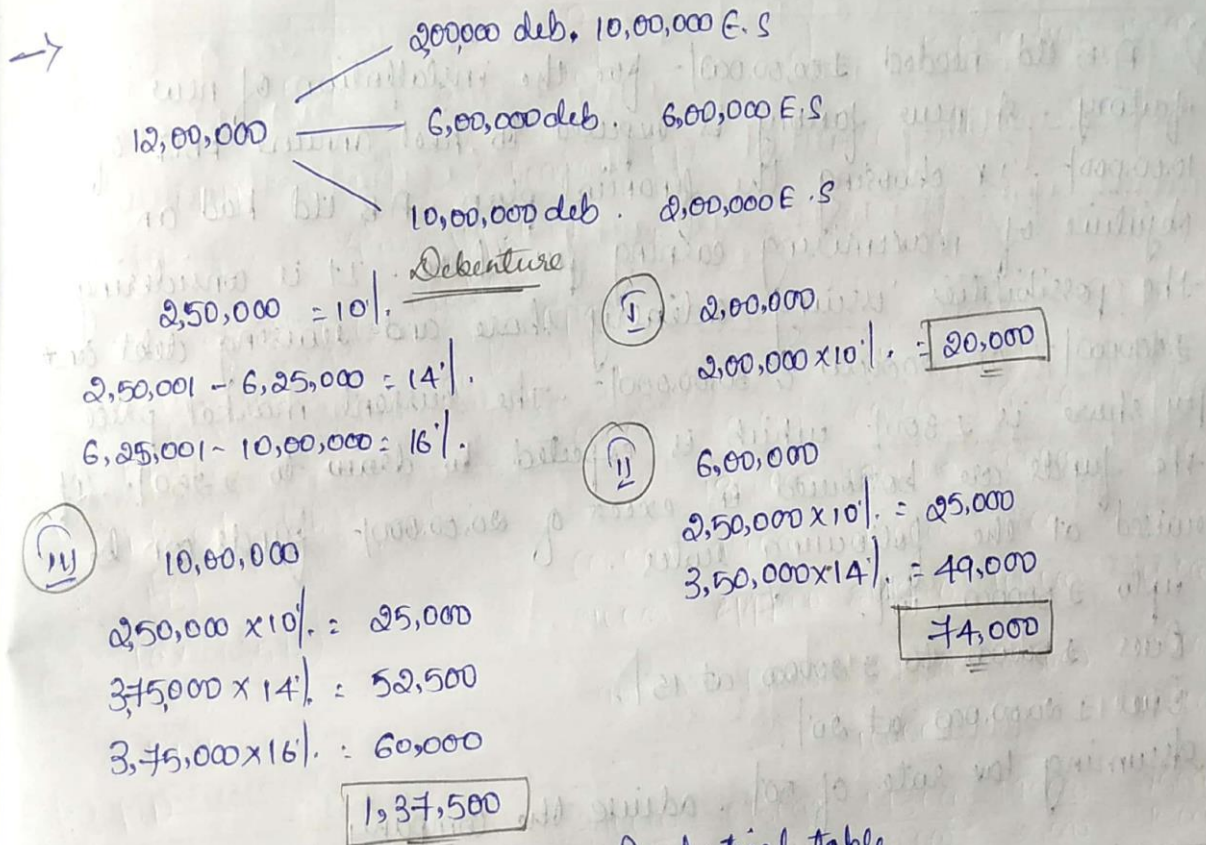
→ Conclusion: It is advantageous to firm Y to raise the debt financing to 75%, because it increases the EPS from 1.55 to 2.65.

⑧ A company needs ₹12,00,000/- for installation of new factory, which would yield an annual EBIT of ₹8,00,000/-. The company has a objective of maximizing the EPS. It is considering the possibility of issuing e-shares plus raising debt of ₹2,00,000/- or ₹6,00,000/- or ₹10,00,000/-.

The current market price p. share is ₹40/-, which is expected to draw to ₹25/- p. share. If the market borrowing ^{debt} where to exceed ₹7,50,000/-. Cost of borrowing is indicated as under.

Upto ₹2,50,000/- @ 10% p.a.
 ₹2,50,000/- - ₹6,25,000/- @ 14% p.a.
 ₹6,25,000/- - ₹10,00,000/- @ 16% p.a.

Assuming a tax rate of 50%, work out the EPS and scheme which could meet the objective of the management.



Calculation of EBIT Analytical table

Particulars	(i)	(ii)	(iii)
E.S.	10,00,000	6,00,000	2,00,000
Deb	2,00,000	6,00,000	10,00,000
No. of ES.	10,00,000 40	6,00,000 40	2,00,000 25
	<u>25000</u>	<u>15000</u>	<u>8000</u>

Calculation of EBIT			
Particulars	I	II	III
EBIT	2,00,000	2,00,000	2,00,000
(-) Interest (deb)	(-) 20,000	(-) 40,000	(-) 137,500
EBT	1,80,000	1,60,000	62,500
(-) Tax (50%)	(-) 90,000	(-) 63,000	(-) 31,250
EAT	90,000	63,000	31,250
(-) P.D	—	—	—
EAES	90,000	63,000	31,250
EPS = $\frac{EAES}{\text{No. of shares}}$	$\frac{90,000}{25,000} = 3.6$	$\frac{63,000}{15,000} = 4.2$	$\frac{31,250}{8,000} = 3.9$

(Q9) A.B Ltd needed £50,00,000/- for the installation of new factory, A new factory is expected to heel annual EBIT of 10,00,000/-. In choosing the financial plan. A.B Ltd had an objective of maximising earning per share. It is considering the possibilities issuing ordinary share and raising debt and £50,00,000/- on 20,00,000 & 30,00,000/-. The current market price per share is £300/- which is expected to draw to £250/- . If the funds are borrowed in excess of 20,00,000/- funds can be raised at the following rates.

upto £500000 . 10%.

Over £500000 to £2000000 at 15%.

Over £20,00,000 at 20%.

Assuming tax rate of 50% . advise the company .

50,00,000 $\begin{cases} 50,00,000 \text{ (deb)}, 45,00,000 \text{ (ES)} \\ 20,00,000 \text{ (deb)}, 30,00,000 \text{ (ES)} \\ 30,00,000 \text{ (deb)}, 20,00,000 \text{ (ES)} \end{cases}$

500000 x 10%.

500000 - 200000 \rightarrow 15%.

200000 \rightarrow 20%.

$$10,00,000 \times 10\% = 10,00,000$$

$$50,00,000 \times 10\% = 50,00,000$$

$$20,00,000$$

$$50,00,000 \times 10\% = 50,00,000$$

$$15,00,000 \times 15\% = 22,50,000$$

$$245,000$$

$$30,00,000$$

$$50,00,000 \times 10\% = 50,00,000$$

$$15,00,000 \times 15\% = 22,50,000$$

$$10,00,000 \times 20\% = 20,00,000$$

$$475,000$$

Analysis Table.

Particulars	I	II	III
Equity share	45,00,000	30,00,000	20,00,000
Debt	5,00,000	20,00,000	30,00,000
No. of equity share	$\frac{45,00,000}{300}$	$\frac{30,00,000}{300}$	$\frac{20,00,000}{250}$
	$= 15,000$	$= 10,000$	$= 8,000$

Calculation of EPS

Particulars	I	II	III
EBIT	10,00,000	10,00,000	10,00,000
(-) Interest (deb)	50,000	2,75,000	4,75,000
EBT	950,000	725,000	525,000
(-) Tax (50%)	475,000	362,500	262,500
EAT	475,000	362,500	262,500
P.D	—	—	—
EPS = $\frac{EAT}{\text{No. of shares}}$	$\frac{475,000}{15,000}$	$\frac{362,500}{10,000}$	$\frac{262,500}{8,000}$
	$= 31.67$	$= 36.25$	$= 32.81$

- ① A company's capital structure consists of the following:
- equity share of £100/- each. £20,00,000/-
 - 9% preference share £12,00,000/-
 - 7% debentures £8 lakh
 - Total 50,00,000/-

The company earns 12% on its capital. The income tax rate is 50%. You are required to raise a sum of 25,00,000/- to finance its expansion program for which the following alternatives are available:

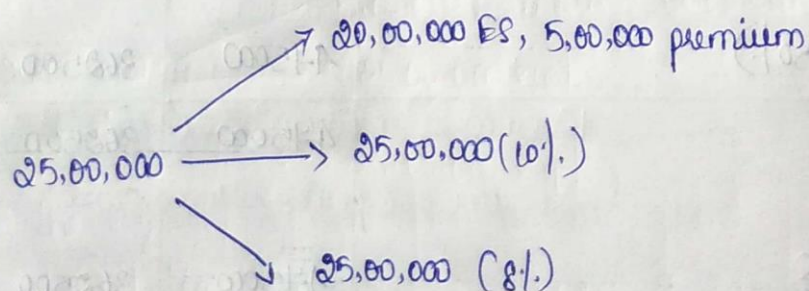
- a) Issue of 25000 e.s at a premium of £25/- per share.
- b) Issue of 10% preference share.
- c) Issue of 8% debentures.

It is estimated that P.E ratio in the cases of equity, preference and debenture financing would be 21.4, 17 and 15.7 respectively. Which of the 3 financial alternatives would you recommend and why?

→ ES : 20,00,000
 RE : 10,00,000
 9% P.S : 12,00,000
 7% deb : 8,00,000
 Extra : 25,00,000

$$25,00,000 \times 12\% = 3,00,000$$

EBIT = 9,00,000



P.E Ratio : 21.4, 17, 15.7

Analytical table

Particulars	I	II	III
E.S	4000000	20,00,000	20,00,000
Premium	500000	-	-
P.S (9%)	12,00,000	12,00,000	12,00,000
Raised P.S (10%)	-	25,00,000	-
RE	10,00,000	10,00,000	10,00,000
Deb (7%)	800,000	8,00,000	8,00,000
Raised	-	-	25,00,000

Calculation of EPS

Particulars	I	II	III
EBIT	900,000	9,00,000	9,00,000
(-) Interest (deb)	(-) 56,000	(-) 56,000	(-) 2,56,000
EBT	8,44,000	8,44,000	6,44,000
(-) Tax	(-) 4,22,000	(-) 4,22,000	(-) 3,22,000
EAT	4,22,000	4,22,000	3,22,000
(-) P.D	(-) 1,08,000	(-) 3,58,000	(-) 1,08,000
EAES	3,14,000	64,000	2,14,000
EPS = $\frac{\text{EAES}}{\text{No. of shares}}$	$\frac{3,14,000}{40,000}$	$\frac{64,000}{20,000}$	$\frac{2,14,000}{20,000}$
EPS	= 7.84	= 3.2	= 10.7
PE ratio	21.4	17	15
market price per share (EPS x PE)	168	54	160.5

- (i) The existing capital structure of ABC Ltd is as follows.
- (i) E. share of £100 - each £40,00,000
 - (ii) Retained earnings £10,00,000
 - (iii) 9% p. share £25,00,000
 - (iv) 7% debenture £25,00,000

The co. earns 12% of its capitals. The income tax rate is 50%. The co. requires a sum of £25,00,000/- to finance its expansion project for which the following alternatives are available to it.

- (i) Issue of 2000 e-share at a premium of £5/- p/share
- (ii) Issue of 10% p. share.
- (iii) Issue of 9% deb

Projected that the PE ^{→ (profit earning)} ratio in the case of equity, preference and deb. financing would be 20, 17, 16 resp... which of the 3 financing alternatives would you recommend and why?

→ £100. E. share	—	40,00,000
R. E	—	10,00,000
9% p. share	—	25,00,000
7% debenture	—	25,00,000
Required	—	25,00,000

EBIT - 12%
Income tax - 50%

$$1,25,00,000 \times 12\%$$

$$\text{EBIT} = 15,00,000$$

$$25,00,000 \begin{cases} \text{5,00,000 premium, 60,00,000 share} \\ (25,00,000 \times 10\%) \\ (25,00,000 \times 9\%) \end{cases}$$

$$\text{Profit earning ratio} = 20, 17, 16$$

Analytical Table

Particulars	I	II	III
E. share	60,00,000	40,00,000	40,00,000
Premium	5,00,000	-	-
R.E	10,00,000	10,00,000	10,00,000
P.S (q.l.)	25,00,000	25,00,000	25,00,000
new P.S (w.l.)	-	25,00,000	-
deb (4.l.)	25,00,000	25,00,000	25,00,000
new deb (q.l.)	-	-	25,00,000
	<u>60,00,000</u> 100	<u>40,00,000</u> 100	<u>40,00,000</u> 100
no. of shares.	60000	40000	40000

$$\text{deb} = 25,00,000 \times 4\% = 175000$$

$$25,00,000 \times 9\% = 225000$$

Calculation of EPS

Particulars	I	II	III
EBIT	1500000	1500000	1500000
(-) Interest (deb)	(-) 175000	(-) 175000	(-) 400000
EBT	1325000	1325000	1100000
(-) Tax (50.l.)	(-) 662500	(-) 662500	(-) 550000
EAT	662500	662500	550000
(-) P.D	(-) 225000	(-) 225000	(-) 225000
EAES	437500	437500	325000
EPS = $\frac{\text{EAES}}{\text{no. of shares}}$	$\frac{437500}{60000}$ [7.29]	$\frac{437500}{40000}$ [10.94]	$\frac{325000}{40000}$ [8.13]
Conclusion: PE ratio	20	14	16
market price shares (EPS x PE ratio)	145.8	153.16	130.08
	[146]	[80]	[130]

Conclusion: If the objective is to maximize EPS 3rd alternative is best. If the objective is to increase the m.p/shares then 1st alternative is the best.