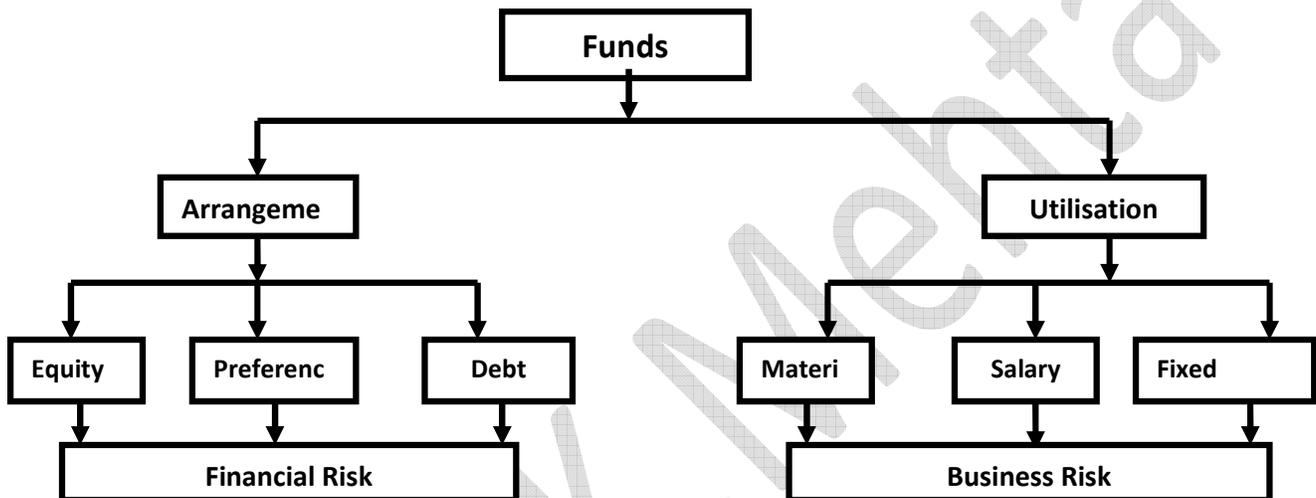


Answer to Question No.1 Business risk and Financial risk

1. Fixed cost is in the nature of committed business expenditure. Business Risk is the risk associated with day –to – day activities in the sense that the business may over – burden itself with some operating fixed cost which will be incurred irrespective of the quantum of sales.
2. Interest and Preference Dividend are in the nature of committed financial expenses. Financial Risk is the risk associated with usages of debt and preference capital in the sense that interest and preference dividend has to be paid irrespective of the quantum of operating profit (EBIT).
3. Comparing business risk with financial risk, it can be concluded that business risk is related to usage of funds and financial risk is related to arrangement of funds.



4. Business Risk can be ascertained with the help of operating leverage and Financial Risk can be ascertained with the help of Financial Leverage.

Answer to Question No.2

Computation of EPS:-

	A Ltd.	B Ltd.
EBIT (20% of Capital)	1,00,000	1,00,000
(-) Interest	-	(22,500)
EBT	1,00,000	77,500
(-) Tax@50%	(50,000)	(38750)
EAT	50,000	38750
No. of Equity Shares	50,000	25,000
EPS	₹ 1	₹ 1.55

EPS of A Ltd. is less than B Ltd. due to following reasons:-

- (1) **Trading on Equity:** - In case of B Ltd., 50% of total capital is debt financed @ 9% whereas ROCE is 20%. Due to this, extra benefit arises to B Ltd. on account of favorable financial leverage position. In case of A Ltd., there is no such benefit because the company is fully equity financed.
- (2) **Tax Saving:-** There is tax saving in the hands of B Ltd. on account of the fact that interest is regarded as eligible expenditure while computing taxable income.
- (3) **No. of Equity Shares:-** In case of A Ltd., there are 50,000 equity shares whereas in case of B Ltd., there are 250,000 equity shares. Hence, EPS is bound to be more when income gets distributed among lesser number of equity shares.

Answer to Question No.3

Cost of equity (K_e) = 19%

Cost of Preference Shares (K_p) = $PD/MP = ₹ 2/₹ 16 = 12.5\%$

In the given question, the face value of preference share is ₹ 25 and as such the dividend per share is 8% of ₹ 25, i.e., ₹ 2. Dividend per share of ₹ 2 is part of market price of preference shares of ₹ 18. Hence, the market price excluding dividend = $18 - 2 = ₹ 16$

Cost of Debt (k_d) = $\frac{I(1-T)}{MP} = \frac{13(1-0.4)}{110} = 7.1\%$

Computation of WACC

Source	Market Value	Weight	C/C	WACC
Equity Share Capital	$50,000 \times 39 = 19,50,000$	68%	19%	12.92%
8% Pref. Shares	$16,000 \times 16 = 2,56,000$	9%	12.5%	1.12%
13% Perpetual debt	$6,000 \times 110 = 6,60,000$	23%	7.1%	1.63%
				15.67%

Answer to Question No.4

$K_d = \frac{DI}{MP} + g = \frac{3.60}{40} + 7\% = 16\%$

$K_p = \frac{PD + \left(\frac{RV - MP}{N}\right)}{\left(\frac{RV + MP}{2}\right)} = \frac{11 + \left(\frac{100 - 75}{10}\right)}{\left(\frac{100 + 75}{2}\right)} = 15.43\%$

$K_d = (\text{Debentures}) = \frac{I(1-T) + \left(\frac{RV - MP}{N}\right)}{\left(\frac{RV - MP}{2}\right)} = \frac{13.5 \left(\frac{1-0.40}{1}\right) + \left(\frac{100-80}{6}\right)}{\left(\frac{100-80}{2}\right)} = 12.7\%$

$K_d = (\text{Term Loan}) = 15\% (1-0.40) = 9\%$

(i) (a) Computation of WACC using book value

Source	Book value	Weights	C/C	WACC
Equity Capital	₹ 15 cr.	25.64%	16%	4.10%
Preference Capital	₹ 1 cr.	1.71%	15.43%	0.26%
Retained Earnings	₹ 20 cr.	34.18%	16%	5.47%
Debentures	₹ 10 cr.	17.09%	12.7%	2.17%
Term Loan	₹ 12.5 cr.	21.37%	9%	1.92%
	₹ 58.5 cr.			13.92%

(b) Computation of WACC using market value (ignoring retained earnings)

Source	Book value	Weights	C/C	WACC
Equity Capital	₹ 60 cr.	73.83%	16%	11.81%
Preference Capital	0.75 cr.	0.92%	15.43%	0.14%
Debentures	8 cr.	95.85%	12.7%	1.25%
Term Loan	12.5 cr.	15.38%	9%	1.38%
	₹ 81.25 cr.			14.92%

Market values

$$\text{Equity capital} = ₹ 15 \text{ cr.} \times \frac{40}{10} = ₹ 60 \text{ cr.}$$

$$\text{Preference capital} = ₹ 1 \text{ cr.} \times \frac{75}{100} = ₹ 0.75 \text{ cr.}$$

$$\text{Debentures} = ₹ 10 \text{ cr.} \times \frac{80}{100} = ₹ 8 \text{ cr.}$$

(ii)

Computation of WMCC

Source	Book value	Weights	C/C	WACC
Retained Earnings	₹ 1.5 cr.	15%	16%	2.4%
New Equity	₹ 3.5 cr.	35%	18.25%	6.39%
15% Debt	₹ 2.5 cr.	25%	9%	2.25%
16% Debt	₹ 2.5 cr.	25%	9.6%	2.4%
	₹ 10 cr.			13.44%

$$K_e(\text{Existing}) = \frac{D1}{MP} + g = \frac{3.60}{40} + 7\% = 16\%$$

$$K_e(\text{New}) = \frac{D1}{NP} + g = \frac{3.60}{32} + 7\% = 18.25\%$$

$$K_d(15\% \text{ debt}) = 15\% (1-0.40) = 9\%$$

$$K_d(16\% \text{ debt}) = 16\% (1-0.40) = 9.6\%$$

Answer to Question No.5

Meaning of Fiscal Policy:- The term "Fiscal" is connected with government or public money. Hence, the term "Fiscal Policy" means the policy adopted by government for taking crucial decisions like:-

- Collection of various types of taxes from public-at-large and other sources of raising the funds.
- Such funds are required to be used for development of infrastructure, reducing unemployment and other works in the interest of the nation.

Objectives of Fiscal Policy

- Full employment of workforce and other sources.
- Price stability, i.e., avoiding the situation of excess inflation/deflation.
- Accelerating the rate of economic development.
- Equitable distribution of income and wealth.
- Capital formation and investment
- Predictable and stable economic policies.

Answer to Question No.6

Public Goods & free rider's problem: - Free – rider's problem arises with public goods because the manufacturer of public good cannot exclude non – payers from consuming or enjoying the benefits of the public good. These individual who want to enjoy the benefits of the public goods but do not contribute to its costs of production are called free riders. Since non – payers cannot be excluded from consumption of public goods, the private producers (guided by the objective of maximizing profits) will either not produce the public good or produce to little of it. This would lead to either no production or an insufficient production for the public good. It is because of this reason that the government assumes responsibility for the production of public goods such as national defence and police protection.

Answer to Question No.7**(1) Promoting Positive Externalities:-**

- (a) Government can provide subsidy for production of public welfare goods. It will lead to reduction in production cost and as such, the firms will be able to produce and supply huge quantity of goods.
- (b) Government enters the market directly as an entrepreneur to produce those goods where externalities are vastly positive, e.g., sewerage treatment is exclusively handed by the government in the interest of general public.

(2) Reducing Negative Externalities:-

- (a) **Direct Control:-** Government may either impose total prohibition on socially undesirable goods or setting the limits of negative externalities like permissible additives in food products and soft-drinks.
- (b) **Indirect Control:-** Here, the government may reduce the tax burden or provide other incentives for manufacture of public welfare goods like healthcare, education, etc.

Answer to Question No.8**Crowding out**

- (1) **Meaning :-** Crowding out refers to the situation where the consumption of goods and services and by the private sector are reduced because of increase in government spending.
- (2) **Bad Satiation: -** This situation is bad because of government spending is to support and enhance private spending and not to replace it.
- (3) **Inability to self-correct:-** One may argue that government spending is useful during the period of recession. However, even in such a case, it will reduce the economy's ability to self-correct during the period of recession.
- (4) **Other Negative Aspect:-**
 - (a) Government Spending may have to be debt financed which will create future problem regarding loan repayment and interest payment.
 - (b) Private Investments will be reduced and discouraged.