Answer to Question no.1

TEST- 4 (Solution)

Book Value Weights and Market Value Weights

1. For the purpose of calculate of WACC, it is necessary to identify the proportion of equity capital, Preference capital and Debt Capital in the capital structure of the business organization.
2. Such proportion may be established on the basis of :-
   - **(a)** Book Value, i.e., the face value of various sources of finance in the total capital employed.
   - **(b)** Market Value, i.e., the current prices prevailing in the market.
3. Market Value Weight are preferred because it represents the real and current expectation of the investors.
4. Book Value Weight are also adopted in many cases because the market value has the tendency to fluctuate widely and frequently.
5. In case of new projects, the market value doesn't exist and therefore, the marginal cost of capital is required to be calculated on the basis of Book Value Weights.

Answer to Question no.2

Preference dividend = 12% × 40,000 × 100 = 4,80,000

NI = 40,000 × 105 - 80,000 = 42,00,000- 80,000 = 41,20,000 (Floatation cost = 40,000 × 2 = 80,000)

Redemption value (RV) = 40,000 × 110 = 44,00,000

$$K_p = \frac{PD + (RV - NP)/N}{(RV + NP)/2} = \frac{4,80,000 + (44,00,000 - 41,20,000)/10}{(44,00,000 + 41,20,000)/10} = \frac{4,80,000 + 28,000}{42,60,000} = \frac{5,08,000}{42,60,000} = 11.92\%$$

Answer to Question no.3:

$$K_e = \frac{D1}{MP} + g = \frac{₹3.60}{₹40} + 7\% = 16\%$$

$$K_p = \frac{PD + \left(\frac{RV + MP}{N}\right)}{\left(\frac{RV + MP}{2}\right)} = \frac{11 + \left(\frac{100 - 75}{10}\right)}{\left(\frac{100 + 75}{2}\right)} = \frac{13.5}{87.5} = 15.43\%$$

$$K_d = \frac{I(1 - T) + \left(\frac{RV + MP}{N}\right)}{\left(\frac{RV + MP}{2}\right)} = \frac{13.50(1 - 0.40) + \left(\frac{100 - 80}{6}\right)}{\left(\frac{100 + 80}{2}\right)} = \frac{11.43}{90} = 12.70\%$$

(i) (a) <u>WACC using book value weights:-</u>

Sources	Book Value	Weight	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.	34.19%	16%	5.47%
Debentures	10 Cr.	17.09%	12.70%	2.17%
Term Loan	12.5 Cr.	21.37%	15%. (1-0.4) = 9%	1.92%
	58.5 Cr.			**13.92%**

(b) **WACC using Market Value Weights:-**

Sources	Market Value	Weight	C/C	WACC
Equity Capital	60 Cr.	73.85%	16%	11.82%
Preference Capital	0.75 Cr.	0.92%	15.43%	0.14%
Debentures	8 Cr.	9.85%	12.70%	1.25%
Term Loan	12.5 Cr.	15.38%	9%	1.38%
	₹ 81.25 Cr.			**14.59%**

Market Value Equity Capital = 15 Cr. x $\frac{40}{10}$ ₹ 60 Cr.

Preference Capital = ₹ 1 Cr. x $\frac{75}{100}$ = 0.75 Cr.

Debentures = 10 Cr. x $\frac{80}{100}$ = ₹ 8 Cr.

(ii) Computation of WMCC:-

Sources	Book Value	Weight	C/C	WMACC
Retained Earnings	₹1.5 Cr.	0.15	16%	2.4%
New Equity Shares	₹3.5 Cr.	0.35	18.25%	6.39%
15% Debt	₹2.5 Cr.	0.25	15%. (1-0.4) = 9%	2.25%
16% Debt	₹2.5 Cr.	0.25	16%. (1-0.4) = 9.6%	2.4%
	₹ 10 Cr.			**13.44%**

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

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

Answer to Question no.4:

"Fiscal Policy is an effective system for reduction in inequalities of Income and wealth". Give your comments.

(1) Effective Tool:- In India, richest 1% owns 60% of total wealth and richest 10% owns 80% of total wealth. So, the inequality is prevalent at very high level in India. Through Fiscal Policy, the government attempts to reduce such inequalities.

(2) Progressive Direct Tax System:- In India, we have adopted progressive direct tax system in which the rich section of the society will contribute more amount towards the national exchequer. In other words, the rate of tax (Nil/Low/HIGH) is dependent upon the level of income earned by the households & the firms.

(3) Differential Indirect Tax System:- Along with direct tax system indirect tax system has been framed on differential basis, i.e., the goods and services which are consumed by rich section of society are subject to higher rates of tax whereas the goods & services which are primarily consumed by poor section of society are subject to lower or Nil rate of tax.

(4) Other Measures:- Besides direct and indirect taxes, the government can initiate some other measures for reducing the inequality in income & wealth. **For example:-**

(a) Poverty eradication programmes.

(b) Free or subsidized medical facilities, education facilities or other facilities for welfare of public-at-large.

(c) Various social security schemes like old age pension, students scholarships, etc.

(d) Subsidized production of goods which are meant for mass consumption.

Answer to Question no.5:

Market Power

(1) **Meaning:-** Market Power means the ability of the firm to sell the goods at the price which is more than its cost price. More the existence of Market Power, more are the chances of exploitation of customers.

(2) **Problems:-**

a) **Higher Prices:-** Firms with Market Power are price-markers, i.e., they charge unreasonable prices yielding abnormal huge profit margins.

b) **Lower Output:-** In case of a single producer (monopoly) or small number of producers (oligopoly), the production of goods or services may be intentionally obtained at low level.

c) **Missing Markets:-** There are some public welfare goods which are not produced by private sector due to No profit or Low rate of profit. Hence, there is situation of "Missing Markets".

(3) **Conclusion:-**
Market Power is a big reason of "Market Failure". Hence, government intervention becomes necessary and advisable.

Answer to Question no.6:

Government Intervenes to Correct Externalities

(1) **Promoting Positive Externalities:-**

a) **Subsidy:-** Government subsidy to the manufacturers of those goods which are meant for public welfare. It will reduce the cost of manufacturing of such goods & consequently, the manufacturer will charge lesser amount from public-at-large.

b) **Direct Production:-** Government can directly produce the public welfare goods so as to promote the positive externalities, e.g., sewerage treatment facility is directly provided by the government in public interest.

(2) **Reducing Negative Externalities:-**

a) **Direct Control:-** Government may impose total prohibition on goods which are causing negative externalities. If total prohibition is not possible, the government can specify the limits and restrictions regarding production. Sale, consumption and storage of those goods which are causing negative externalities.

b) **Indirect Control:-** Here, the government may impose heavy rates of taxes on those goods which are causing negative externalities, e.g., in case of cigarettes, the tax burden in GST@ 28% plus NCCD (National Calamity contingent Duty)

Answer to Question no.7:

Limitation of Fiscal Policy

(1) **Conflicting Objectives:-** Sometimes, we observe the situation of conflicting objectives thereby leading to ineffective implementation of various policies, e.g., if we adopt expansionary fiscal policy in order to tackle the problem of recession, there will always the rick of emergence of inflation in the economy.

(2) **Immediate Change:-** In order to increase or decrease the aggregate Demand, it is advised to adopt expansionary or contractionary Fiscal Policy . However, there are some practical difficulties in bringing immediate change in government policy regarding taxation and spending.

(3) **Public Works:-** There may a conflict among public welfare projects and fiscal policy measures, i.e., the projects like acquisition of defense equipments and construction of bridges and dames can't be adjusted as per the change in fiscal policy because these project have long gestation period.

(4) **Perpetual Burden:-** It is suggested that the Government can borrow the funds in order to tackle the situation of excess spending under Deficit Budget situation. This option of raising the funds by debt financing creates perpetual debt on the coming generations has to be repaid as per the agreement between lender and the borrower.