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PART A : FINANCIAL MANAGEMENT 60 MARKS

ANSWER 1 (a)

(i) CalculationofClosingStock:

Cost of Goods Sold = Sales – Gross Profit (25% of Sales)

= Rs. 30,00,000 – Rs. 7,50,000

= Rs.22,50,000

ClosingStock = Cost of Goods Sold / StockTurnover

= Rs. 22,50,000/6 = Rs. 3,75,000

(ii) Calculation of FixedAssets:

FixedAssets = Cost of Goods Sold / Fixed AssetsTurnover

= Rs.22,50,000/1.5

= Rs.15,00,000

(iii) Calculation of CurrentAssets:

CurrentRatio = 1.5 and Liquid Ratio = 1

Stock = 1.5 – 1 =0.5

CurrentAssets = Amount of Stock ×1.5/0.5

= Rs. 3,75,000 × 1.5/0.5 = Rs. 11,25,000

(iv) Calculation ofDebtors:

Debtors = Sales × Debtors Collection period/12

= Rs. 30,00,000 × 2 /12

= Rs.5,00,000

(v) Calculation of NetWorth:

Networth = Fixed Assets/1.2

= Rs. 15,00,000/1.2 = **Rs. 12,50,000**

(1*5 = 5 MARKS)

ANSWER 1 (b)

Pattern of raising Capital:

Portion of Debt = Rs. 20,00,000 × 25% = Rs. 5,00,000 and

Portion of Equity = Rs. 20,00,000 × 75% = Rs. 15,00,000, of this Rs. 4,00,000 is from retained earnings and Rs.11,00,000 by issuing fresh equity shares.

(i) Cost of Debt (K_d) = $\frac{\text{Total Interest } (1\text{-t})}{\text{Debt}}$

$$= \frac{(10\% \text{ of } Rs.2,00,000 + 13\% \text{ of } Rs.3,00,000)(1-0.3)}{Rs.5,00,000}$$

$$= \frac{Rs.59,000(1-0.3)}{Rs.5,00,000} = 0.826 \text{ or } 8.26\%$$

(ii) Cost of Equity (K_e) = $\frac{\text{EPS x Payout ratio } (1+g)}{P_0} + g$

$= \frac{Rs.12 \times 0.5\ (1+0.1)}{Rs.60} + 0.10$ = 0.11 + 0.10 = 0.21 or 21%

Cost of retained earnings kr = ke = 21%

(iii) Weighted average cost of capital (K_o)

Source of capital	Amount (Rs.)	Proportion of total Capital	Cost of Capital (%)	WACC (%)
Equity Capital	11,00,000	0.55	21.00	11.550
Retained earning	4,00,000	0.20	21	4.2
Debt	5,00,000	0.25	8.26	2.065
Total	20,00,000	1.00		17.815

(5 MARKS)

ANSWER 1 (c)

(i) Current Market price of shares (applying Walter'sModel)

- The EPS of the firm is Rs. 5 (i.e., Rs10,00,000/2,00,000).
- Rate of return on Investment (r) =20%.
- The Price Earnings (P/E) Ratio is given as 10, so capitalization rate (K_e), may betakenattheinverseofP/ERatio.Therefore,$K_e$is10%or.10(i.e.,1/10).
- The firm is distributing total dividends of Rs. 6,00,000among2,00,000 shares, giving a dividend per share of Rs.3.

The value of the share as per Walter's model may be found as follows:
Walter's model is given by-

$$P = \frac{D + \frac{r}{K_e}(E - D)}{K_e}$$

Where,

P =Market price per share.

E = Earnings per share = Rs. 5

D = Dividend per share = Rs.3

R = Return earned on investment = 20 %

K_e = Cost of equity capital = 10% or .10

$$P = \frac{3+\frac{0.20}{0.10}(5-3)}{0.10}$$

Current Market Price of shares can also be calculated as follows:

$$\text{Price Earnings(P/E)Ratio} = \frac{\text{Market Price ofShare}}{\text{Earnings per Share}}$$

$$10 = \frac{\text{Market Price ofShare}}{\text{Rs.10,00,000/2,00,000}}$$

$$10 = \frac{\text{Market Price ofShare}}{Rs.5}$$

Market PriceofShare = Rs.50

(ii) **Capitalizationrate**(K_e)ofitsriskclassis10%or.10(i.e.,1/10).

(iii) **Optimum dividend pay-outratio**

According to Walter's model when the return on investment is more than the cost of equity capital (10%), the price per share increases as the dividend pay-out ratio decreases. Hence, the optimum dividend pay-out ratio in this case is nil or 0 (zero).

(iv) **Market price per share at optimum dividend pay-outratio**

At a pay-out ratio of zero, the market value of the company's share will be:

$$P = \frac{0+\frac{0.20}{0.10}(5-0)}{0.10} = \text{Rs.}100$$

(5 MARKS)

ANSWER 1 (D)

(i) Optimizing returns when projects are independent and divisible.

ComputationofNPVsperRe.1ofInvestmentandRankingoftheProjects

Project	Investment (Rs.)	NPV (Rs.)	NPV per Re.1 invested (Rs.)	Ranking
C	40,000	20,000	0.50	1
D	1,00,000	35,000	0.35	3
E	50,000	24,000	0.48	2
F	60,000	18,000	0.30	4

Building up of a Package of Projects based on their Rankings

Project	Investment (Rs.)	NPV (Rs.)
C	40,000	20,000
E	50,000	24,000
D (1/10th of Project)	10,000	3,500
Total	1,00,000	47,500

The company would be well advised to invest in Projects C, E and D (1/10 th) and

reject Project F to optimise return within the amount of Rs. 1,00,000 available for investment.

(ii) Optimizing returns when projects are indivisible.

Package of Project	Investment (Rs.)	Total NPV (Rs.)
C and E	90,000 (40,000 + 50,000)	44,000 (20,000 + 24,000)
C and F	1,00,000 (40,000 + 60,000)	38,000 (20,000 + 18,000)
Only D	1,00,000	35,000

The company would be well advised to invest in Projects C and E to optimise return within the amount of Rs. 1,00,000 available forinvestment.

(5 MARKS)

ANSWER 2

(a)

Sales in units	**2,00,000 (Rs.)**	**2,40,000 (Rs.)**
Sales Value @ Rs. 10 Per Unit	20,00,000	24,00,000
Variable Cost @ Rs. 6 per unit	(12,00,000)	(14,40,000)
Contribution	8,00,000	9,60,000
Fixed expenses	(4,00,000)	(4,00,000)
EBIT	4,00,000	5,60,000
Debenture Interest	(2,00,000)	(2,00,000)
EBT	2,00,000	3,60,000
Tax @ 50%	(1,00,000)	(1,80,000)
Profit after tax (PAT)	1,00,000	1,80,000
No of Share	20,000	20,000
Earnings per share (EPS)	5	9
(i)The percentage Increase in **EPS**	$\frac{4}{5}$ x 100 =80%	
(ii) **Financial Leverage** = $\frac{EBIT}{EBT}$	$\frac{Rs.4,00,000}{Rs.2,00,000}$ = 2	$\frac{Rs.5,60,000}{Rs.3,60,000}$ = 1.56
(iii) **Operating leverage**=$\frac{Contibution}{EBIT}$	$\frac{Rs.8,00,000}{Rs.4,00,000}$ = 2	$\frac{Rs.9,60,000}{Rs.5,60,000}$ = 1.71

(9 MARKS)

(b) When production is increased from 2,00,000 units to 2,40,000 units both financial leverage and operating leverages reduced from 2 to 1.56 and 1.71 respectively. Reduction in financial leverage and operating leverages signifies reduction in business risk and financialrisk.

(1 MARK)

ANSWER 3

(i) Computation of EPS under three – Financial plans.

Plant I : Equity Financing

	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
EBIT	62,500	1,25,000	2,50,000	3,75,000	6,25,000
Interest	0	0	0	0	0
EBT	62,500	1,25,000	2,50,000	3,75,000	6,25,000
Less : Tax @ 40%	25,000	50,000	1,00,000	1,50,000	2,50,000
PAT	37,500	75,000	1,50,000	2,25,000	3,75,000
No. of equity shares	3,12,500	3,12,500	3,12,500	3,12,500	3,12,500
EPS	0.12	0.24	0.48	0.72	1.20

(1.5 MARKS)

Plan II : Debt – Equity Mix

	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
EBIT	62,500	1,25,000	2,50,000	3,75,000	6,25,000
Less : Interest	1,25,000	1,25,000	1,25,000	1,25,000	1,25,000
EBT	(62,500)	0	1,25,000	2,50,000	5,00,000
Less : Tax @ 40%	25,000*	0	50,000	1,00,000	2,00,000
PAT	(37,500)	0	75,000	1,50,000	3,00,000
No. of equity shares	1,56,250	1,56,250	1,56,250	1,56,250	1,56,250
EPS	(Rs. 0.24)	0	0.48	0.96	1.92

- The Company can set off losses against the overall business profit or may carry forward it to next financial years.

(1.5 MARKS)

Plan III : Preference Shares – Equity Mix

	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
EBIT	62,500	1,25,000	2,50,000	3,75,000	6,25,000
Less : Interest	0	0	0	0	0
EBT	62,500	1,25,000	2,50,000	3,75,000	6,25,000
Less : Tax @ 40%	25,000	50,000	1,00,000	1,50,000	2,50,000
PAT	37,500	75,000	1,50,000	2,25,000	3,75,000
Less : Pref. dividend	1,25,000*	1,25,000*	1,25,000	1,25,000	1,25,000
PAT after Pref. dividend	(87,500)	(50,000)	25,000	1,00,000	2,50,000
No. of Equity Shares	1,56,250	1,56,250	1,56,250	1,56,250	1,56,250
EPS	(0.56)	(0.32)	0.16	0.64	1.60

* In case of cumulative preference shares, the company has to pay cumulative dividend to preference shareholders, when company earns sufficient profits.

(2 MARKS)

(ii) From the above EPS computations tables under the three financial plans we can see that when EBIT is Rs. 2,50,000 or more, Plan II : Debt – Equity mix is preferable over the Plan I and Plan III, as rate of EPS is more under this plan. On the other hand an EBIT of less than Rs.

2,50,000, Plan I : Equity Financing has higher EPS than Plan II and Plan III. Plan III Preference share Equity mix is not acceptable at any level of EBIT, as EPS under this plan is lower.

The choice of the financing plan will depend on the performance of the company and other macro economic conditions. If the company is expected to have higher operating profit Plan II : Debt – Equity Mix is preferable. Moreover, debt financing gives more benefit due to availability of tax shield.

(2 MARKS)

(i) EBIT – EPS Indifference point : Plan I and Plan II

$$\frac{EBIT_1 \times (1-t)}{No.of\ equity\ shares\ (N_1)} = \frac{(EBIT_2 - Interest\ ) \times (1-t)}{No.of\ equity\ shares\ (N_2)}$$

$$\frac{EBIT\ (1-0.40)}{3{,}12{,}500\ shares} = \frac{(EBIT - Rs.\,1{,}25{,}000) \times (1-0.40)}{1{,}56{,}250\ shares}$$

0.6 EBIT = 1.2 EBIT – Rs. 1,50,000

EBIT $= \frac{Rs.1{,}50{,}000}{0.6}$ = Rs. 2,50,000

Indifference points between Plan I and Plan II is Rs. 2,50,000

(1.5 MARKS)

EBIT – EPS Indifference Point : Plan I and Plan III

$$\frac{EBIT_1 \times (1-t)}{No.of\ equity\ shares\ (N_1)} = \frac{EBIT_3 \times (1-t) - Pref.dividend}{No.of\ equity\ shares\ (N_3)}$$

$$\frac{EBIT_1 (1-0.40)}{3{,}12{,}500\ shares} = \frac{EBIT_3 (1-0.40) - Rs.1{,}25{,}000}{1{,}56{,}250\ shares}$$

0.6 EBIT = 1.2 EBIT – Rs. 2,50,000

EBIT = $\frac{Rs.2{,}50{,}000}{0.6}$ = Rs. 4,16,667

Indifference points between Plan I and Plan III is Rs. 4,16,667.

(1.5 MARKS)

ANSWER 4

1. Project S (Rs. Lakhs)

NPV Estimate (N)	Probability CP)	Expected NPV ,	Deviation from Expected NPV (D)	Square of Deviation [D^2]	Variance [P x D^2]
(1)	**(2)**	**(3) = (1) x (2)**	**(4) = (1)- Σ (3)**	**(5)**	**(6) = (2) x (5)**
3	0.1	0.3	(6.0)	36.0	3.6
6	0,4	2.4	(3.0)	9.0	3.6
12	0.4	4.8	3.0	9.0	3.6
15	0.1	1.5	6.0	36.0	3.6
Expected NPV	**9.0**				**14.4**

(3 MARKS)

2. Project T (Rs. Lakhs)

NPV Estimate (N)	Probability(P)	Expected NPV	Deviation from Expected NPV (D)	Square of Deviation [D^2]	Variance [P x D^2]
(1)	**(2)**	**(3) = (1) x (2)**	**(4) = (1) — 2(3)**	**(5)**	**(6) = (2)x(5)**
5	0.2	1.0	(9.1)	82.81	16.56
9	0.3	2.7	(5.1)	26.01	7.80
18	0.3	5.4	3.9	15.21	4.56
25	0.2	5.0	10.9	118.81	23.76
Expected NPV	**14.1**			**52.68**	

(3 MARKS)

3. Evaluation

Particulars	Project S	Project T
Variance [σ^2]	14.4	52.68
Standard Deviation [σ] [Risk Associated with the Project]	$\sqrt{14.4} = 3.79$	$\sqrt{52.68} = 7.26$
Expected NPV	9.0	14.10
Co-efficient of Variation = $\frac{\text{Standard Deviation}}{\text{Expected NPV}}$	$\frac{3.79}{9} = 0.42$	$\frac{7.26}{14.1} = 0.51$
Investment	30.0	50.0
Total Inflows = Investment + Expected NPV	30 + 9 = 39.0	50 + 14.1 = 64.1
Profitability Index = $\frac{\text{PV of Inflows}}{\text{PV of Outflows}}$	$\frac{39}{30} = 1.30$	$\frac{64.1}{50} = 1.28$

(3 MARKS)

Observation: Project T is more risky than Project S, as the Standard Deviation and co-efficient of Variation is higher for Project T. Project S is also better in terms of return on investment, since the Profitability Index is higher.

(1 MARK)

ANSWER 5

Calculation of Net Working Capitalrequirement:

	(Rs.)	(Rs.)
A. Current Assets:		
Inventories:		
Stock of Raw material (Refer to Working note (iii)	1,44,000	
Stock of Work in progress (Refer to Working note (ii)	7,50,000	
Stock of Finished goods (Refer to Working note (iv)	20,40,000	
Debtors for Sales(Refer to Working note (v)	1,02,000	
Cash	2,00,000	

Gross Working Capital	32,36,000	32,36,000
B. Current Liabilities:		
Creditors for Purchases (Refer to Working note (vi)	1,56,000	
Creditors for wages (Refer to Working note (vii)	23,250	
	1,79,250	1,79,250
Net Working Capital (A - B)		**30,56,750**

(3 MARKS)

Working Notes:

(i) Annual cost ofproduction

	(Rs.)
Raw material requirements {(31,200 × Rs.40) + (12,000 x Rs.40)}	17,28,000
Direct wages {(31,200 ×Rs.15) +(12,000 X Rs.15 x 0.5)}	5,58,000
Overheads (exclusive of depreciation) {(31,200 × Rs.30) + (12,000 x Rs.30 x 0.5)}	11,16,000
Gross Factory Cost	34,02,000
Less: Closing W.I.P [12,000 (Rs.40 + Rs.7.5 + Rs.15)]	(7,50,000)
Cost of Goods Produced	26,52,000
Less: Closing Stock of Finished Goods (Rs.26,52,000 × 24,000/31,200)	(20,40,000)
Total Cash Cost of Sales*	6,12,000

[*Note: Alternatively, Total Cash Cost of Sales = (31,200 units – 24,000 units) x (Rs. 40+ Rs. 15 + Rs.30) = Rs. 6,12,000]

(ii) Work in progressstock

	(Rs.)
Raw material requirements (12,000 units × Rs.40)	4,80,000
Direct wages (50% × 12,000 units × Rs.15)	90,000
Overheads (50% × 12,000 units × Rs.30)	1,80,000
	7,50,000

(iii) Raw materialstock

It is given that raw material in stock is average 30 days consumption. Since, the company is newly formed; the raw material requirement for production and work in progress will be issued and consumed during the year. Hence, the raw material consumption for the year (360 days)is as follows:

	(Rs.)
For Finished goods (31,200 × Rs.40)	12,48,000
For Work in progress (12,000 × Rs.40)	4,80,000
	17,28,000

Raw material stock = $\frac{\text{Rs.17,28,000}}{\text{360days}}$ X 30 days = Rs.1,44,000

(iv) **Finished goodsstock:**

24,000 units @ Rs. (40+15+30) per unit = Rs.20,40,000

(v) **Debtors for sale:** Rs. 6,12,000 X $\frac{60\ days}{360\ days}$ X Rs.1,02,000

(vi) **Creditors for raw material Purchases [Working Note(iii)]:**

Annual Material Consumed (Rs.12,48,000 + Rs.4,80,000)	Rs.17,28,000
Add: Closing stock of raw material [(Rs.17,28,000 x 30 days) / 360 days]	Rs. 1,44,000
	Rs.18,72,000

Credit allowed by suppliers =$\frac{\text{Rs.18,72,000}}{\text{360days}}$ X 30 days = Rs.1,56,000

(vii) **Creditors forwages:**

Outstanding wage payment = [(31,200 units x Rs. 15) + (12,000 units x Rs. 15 x .50)] x 15 days / 360days

$\frac{\text{Rs.5,58,000}}{\text{360days}}$ X 15 days = Rs.23,250

(1*7 = 7 MARKS)

ANSWER 6 (a)

Short note on Over - Capitalisation.

Meaning :

1. Over-Capitalisation is a situation, where a Firm has more Capital than what it needs, i.e. Assets are worth less than its Issued Share Capital, and Earnings are insufficient to pay Interest and Dividend.
2. Over- Capitalisation mainly arises when the existing Capital is not effectively utilized on account of fall in earning capacity of the Company, while the Company has raised funds more than its requirements.
3. Over - Capitalisation is mainly identified by the fall in payment of Interest and Dividend, leading to fall in value of the Shares of the Company.

Causes :

Over Capitalisation arises due to following reasons :

1. Raising more money through issue of Shares or Debentures, than what the Company can employ profitably.
2. Borrowing huge amounts at a rate higher than what the Company can earn, Causes(i.e. ROCE < Interest Rate on Debt)
3. Excessive payment for the acquisition of Fictitious Assets, like Goodwill, etc.
4. Improper provision for depreciation and replacement of assets, and distribution of dividends at a higher rate.

5. Wrong estimation of earnings and capitalisation.

Effects

Over - Capitalisation results into following consequences :

1. Considerable reduction in the rate of interest and dividend payments.
2. Reduction in Market Price of Shares.
3. Resorting of "window - dressing" and profit manipulation by book adjustments.
4. Need for re-organisation or re-construction, and sometimes even leading to liquidation.

Remedies

To avoid the evil consequences of over - capitalisation, the following remedies are suggested :

1. Through re-organisation.
2. Buyback of Shares.
3. Reduction in claims of Debenture holders and Creditors.
4. Value of Share may also be reduced. This will result in sufficient funds for the Company to carry out replacement of assets.

(4 MARKS)

ANSWER 6 (b)

Financial Management is a managerial activity that deals with planning and controlling of a Firm's financial resources. Financial Management deals with procurement of funds and effective utilisation of funds in business. The two basic aspects / functions of Financial Management are explained below –

Aspect	1. Procurement of Funds	2. Effective Utilisation of Funds
Also called	Capital Structure or Financing Decisions	Investing or Investment Decisions
Types	Funds can be obtained from various sources - (a) Long Term Sources (Equity, Preference Capital, Debentures, Term Loans, etc.) (b) Short Term Sources (Trade Credit, Short-Term Advances, Bank Finance for Working Capital, etc.)	Funds may be invested / utilised in - (a) Fixed Assets, Capital Projects and other Long-term Investments, (b) Current Assets, viz. Stock, Debtors, and other Short Term Investments.
Description	Funds procured from various sources have different characteristics in terms of risk, cost and control.	Funds invested in different types of assets, yield different rates of return.
Objective	While procuring funds from different sources, the objective is to minimize the cost of funds obtained.	While investing / utilizing the Funds, the objective is to maximize return on investment.
Activities	Procurement of funds involves the following - (a) Identification of Sources of Finance. (b) Determination of Finance Mix. (c) Raising of Funds. (d) Division of Profits between dividends and retention of profits, i.e. internal fund generation, and (e) Proper balancing of risk, cost and control factors.	Investing / Utilisation of Funds involves - (a) Identification of different investment and business opportunities and their returns, (b) Evaluation of various projects based on different criteria / factors, (c) Balancing between Fixed Assets and need for adequate Working Capital, etc.

(4 MARKS)

ANSWER 6 (c)

Steps involved inDecision Tree analysis:

Step 1- Define Investment: Decision three analysis can be applied to avariety of business decision-makingscenarios.

Step 2- Identification of Decision Alternatives: It is very essential to clearly identity decision alternatives. For example, if a company is planning to introduce a new product, it may be local launch, national launch or international launch.

Step 3- Drawing a Decision Tree: After identifyingdecision alternatives, at the relevant data such as the projected cash flows, probability distribution expected present value etc. should be put in diagrammatic form called decisiontree.

Step 4- Evaluating the Alternatives: After drawing out the decision the next step is the evaluation of alternatives.

(2 MARKS)

OR

ANSWER 6 (c)

Limitations of Leasing

(1) The lease rentals become payable soon after the acquisition of assets and no moratorium period is permissible as in case of term loans from financial institutions. The lease arrangement may, therefore, not be suitable for setting up of the new projects as it would entail cash outflows even before the project comes into operation.

(2) The leased assets are purchased by the lessor who is the owner of equipment. The seller's warranties for satisfactory operation of the leased assets may sometimes not be available tolessee.

(3) Lessor generally obtains credit facilities from banks etc. to purchase the leased equipment which aresubject to hypothecation charge in favourof the bank. Default in payment by the lessor may sometimes result in seizure of assets by banks causing loss to thelessee.

(4) Lease financing has a very high cost of interest as compared to interestcharged on term loans by financialinstitutions/banks.

(2 MARKS)

PART B : ECONOMICS 40 MARKS

ANSWER 7 (a)

A decline in private spending may be partially or completely offset the expansion ofdemand resulting from an increase in government expenditure. Crowding out effect is the negative effect fiscal policy may generate when money from the private sector is 'crowded out' to the public sector. Private investments, especially the ones which are interest –sensitive, will be reduced if interest rates rise due to increased spending bygovernment.

(2 MARKS)

ANSWER 7 (b)

Leakages: A leakage is an outflow or withdrawal of income from the circular flow. Leakages are money leaving the circular flow and therefore, not available for spending on currently produced goods and services. Leakages reduce the flow of income.

Injections: An injection is a non-consumption expenditure. It is an expenditure on goods and services produced within the domestic territory but not used by the domestic household for consumption purposes. Injections are exogenous additions tothecircularflowandaddtothetotalvolumeofthebasiccircularflow.

In the two-sector model with households and firms, household saving is the only leakage and investment is the only injection. In the three-sector model which includes the government, saving and taxes are the two leakages and investment and government purchases are the two injections. In the four-sector model which includes foreign sector also, saving, taxes, and imports are the three leakages; investment, government purchases, and exports are the threeinjections.

The state of equilibrium occurs when the total leakages are equal to the total injections that occur in theeconomy.

Savings + Taxes + Imports = Investment + Government Spending + Exports

(2 MARKS)

ANSWER 7 (c)

Calculation ofM1

M1 = Currency and coins with the people + demanddeposits of banks (current and saving accounts) + other deposits of theRBI.

M1 = 2,13,279.8 + 1,62,374.5 + 765.1

= 3,76,419.4 Crores

(3 MARKS)

ANSWER 7 (d)

International trade is a powerful stimulus to economic efficiency and contributes to economic growth and risingincomes.

(i) The wider market made possible owing to trade induces companies to reap the quantitative and qualitative benefits of extended division of labour. As a result, they would enlarge their manufacturing capabilities and benefit from economies of large scaleproduction.

(ii) The gains from international trade are reinforced by the increased competition that domestic producers are confronted with on account of internationalization of production and marketing requiring businesses to invariably compete against global businesses. Competition from foreign goods compels manufacturers, especially in developing countries, to enhance competitiveness and profitability by adoption of cost reducingtechnology and business practices. Efficient deployment of productive resources to their best uses is adirect economic advantage of foreign trade. Greater efficiency in the use of natural, human, industrial and financial resources ensures productivity gains. Since international trade also tends to decrease the likelihood of domestic monopolies, it is always beneficial to thecommunity.

(iii) Trade provides access to new markets and new materials and enables sourcing of inputs and components internationally at competitive prices. Also, international trade enables consumers to have access to wider variety of goods and services that would not otherwise be available. It also enables nations to acquire foreign exchange reserves necessary for imports which are crucial for sustaining theireconomies.

(iv) International trade enhances the extent of market and augments the scope for mechanization andspecialisation.

(v) Exports stimulate economic growth by creating jobs, reducing poverty and augmenting factor incomes and in so doing raising standards of livelihood and overall demand for goods andservices.

(vi) Employment generating investments, including foreign direct investment, inevitably followtrade.

(vii) Opening up of new markets results in broadening of productive base and facilitates exportdiversification.

(viii) Trade also contributesto human resource development, facilitates fundamental and applied research and exchange of know-how and best practices between tradepartners.

(ix) Trade strengthens bonds between nations by bringing citizens of different countries together in mutually beneficial exchangesand thus promotes harmony and cooperation among nations.

(3 MARKS)

ANSWER 8 (a)

(i) The money value of output equals total output times the average price per unit.
The money value of output is (75000×7) = Rs.52,500

(ii) In a two sector economy, households receive an amount equal to the money value of output. Therefore, the money income of households is the same as the money value of output i.e. Rs.52,500

(iii) Total spending by households (Rs.52,500 × .75) i.e. Rs.39,375

(iv) The total money revenues received by the business sector is equal to aggregate spending by households ie. Rs.39,375

(v) The circular flow will be balanced and therefore in equilibrium when the injections are equal to the leakages. The saving by the household sector would imply leakage or withdrawal of money (equal to saving) from the circular flow of income. If at any time intended saving is greater than intended investment, (not given; assumed = zero) this would mean that people are spending lesser volume of money on consumption. Here, the business sector makes payments of Rs. 52,500 to produce output, whereas the households purchase only output worth Rs. 39,375 of what is produced. Therefore, the business sector has unsold inventories valuedatRs. 13,125. Consequently, the firms would decrease their production which would lead to a fall in output and income of thehousehold.

(5 MARKS)

ANSWER 8 (b) (i)

The following are the significant limitations in respect of choice andimplementationof fiscal policy.

1. One of the biggest problems with using discretionary fiscal policy to counteract fluctuations is the different types of lags involvedin fiscal-policy action. There are significant lags such as recognition lag, decision lag, implementation lag and impactlag
2. Fiscal policy changes may at times be badly timed due to the various lags so that it is highly possible that an expansionary policy is initiated when the economy is already on a

path of recovery and viceversa.

3. There are difficulties in instantaneously changing governments' spendingand taxation policies.
4. It is practically difficult to reduce government spending on various items such as defence and social security as well as on huge capital projects which are alreadymidway.
5. Public works cannot be adjusted easily along with movements of the trade cycle because many huge projects such as highways and dams have long gestation period. Besides, some urgentpublicprojects cannot be postponed for reasons of expenditure cut to correct fluctuations caused by business cycles.
6. Due to uncertainties, there are difficulties of forecasting when a period of inflation or deflation may set in and also promptly determining the accurate policy to beundertaken.
7. There are possible conflicts between different objectives of fiscal policy such that a policy designed to achieve one goal may adversely affect another. For example, an expansionary fiscal policy may worsen inflation in aneconomy
8. Supply-side economists are of the opinion that certain fiscalmeasures will cause disincentives. For example, increase in profits tax may adversely affect the incentives of firms to invest and an increase in social security benefits may adversely affect incentives to work andsave.
9. Deficit financing increases the purchasing power people. The production of goods and services, especially in under developed countries may not catch up simultaneously to meet the increased demand. This will result in prices spiraling beyondcontrol.
10. Increase is government borrowing creates perpetual burden on even future generations as debts have to be repaid. If theeconomy lags behind in productive utilization of borrowed money, sufficient surpluses will not be generated for servicing debts. External debt burden has been a constant problem for India and many developingcountries.
11. An increase in the size of government spending during recessions will 'crowd- out' private spending in an economy and lead to reduction in an economy's ability to self-correct from the recession, and possibly also reduce the economy's prospects of long-run economicgrowth.
12. If governments compete with theprivate sector to borrow money for spending, it is likely that interest rates will go up, and firms' willingness to invest may be reduced. Individuals too may be reluctant to borrow and spend and the desired increase in aggregate demand may not berealized.

(3 MARKS)

ANSWER 8 (b) (ii)

Open market operations are conducted by the RBI by way of sale or purchase of government securities to adjust money supply conditions. The central bank sells government securities to suck out liquidity from the system and buys back government securities to infuse liquidity into the system. When the RBI feels that there is excess liquidity in the market, it resorts to sale of securities thereby sucking out the rupee liquidity. Similarly, when the liquidity conditions are tight, the RBI will buy securities from the market, thereby releasing liquidity into the market. These operations are often conducted on a day-to-day basis in a manner that balances inflation while helping the banks to continuelending.

(2 MARKS)

ANSWER 9 (a) (i)

Non tariff measures are policy measures otherthan ordinary customs tariffs that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both (UNCTAD, 2010). For example, the sound use of NTMs like sanitary and phytosanitary measures and licensing could be legitimately used to ensure consumer health and to protect plant and animal life andenvironment

NTMs are not the same as non-tariff barriers (NTBs). NTMs are sometimes used asmeans to circumvent free-trade rules and favour domestic industries at the expense of foreign competition. In this case they are called non-tariff barriers (NTBs). NTBs are a subset of NTMs that have a 'protectionist or discriminatory intent' and implies a negative impacton trade. NTMs only become NTBs when they are more trade restrictive than necessary. Some examples of NTBs are compulsory standards, often not based on international norms or genuine science; stringent technical regulations requiring alterations in production processes, testing regimes which require complex procedures and product approvals requiring inspection of individualpremises

(3 MARKS)

ANSWER 9 (a) (ii)

Allocation function of fiscal policy is concerned with the process by which the total resources of the economy are divided among various uses as well as for provision of an optimum mix of various social goods (both public goods and merit goods). The allocation function also involves the reallocation of society's resources from private use to publicuse.

The resource allocation role of government's fiscal policy focuses on the potential for the government to improve economic performance and welfare through its expenditure and tax policies. It also determines who and what will be taxed as well as how and on what the government revenue will be spent.

(2 MARKS)

ANSWER 9 (b) (i)

Foreign direct investment is defined as a process whereby the resident of one country (i.e. homecountry) acquires ownership of an asset in another country (i.e. the host country) and such movement of capital involves ownership, control as well as management of the asset in the host country. Direct investments are real investments in factories, assets, land, inventories etc. and have three components, viz., equity capital, reinvested earnings and otherdirect capital in the form of intra-company loans. Foreign direct investment also includes all subsequent investment transactions between the investor and the enterprise and among affiliated enterprises, both incorporated and unincorporated. FDI involves longtermrelationship and reflects a lasting interest and control. According to the IMF and OECD definitions, the acquisition of at least ten percent of the ordinary shares or voting power in a public or private enterprise by non-resident investors makes it eligibleto be categorized as FDI. FDI may be categorized as horizontal, vertical, conglomerate and two- way direct foreign investments which are reciprocalinvestments.

Benefits of Foreign Direct Investment

Following are the benefits ascribed to foreign investments:

(i) Entry of foreign enterprises usually fosters competition and generates a competitive environmentinthehostcountry.

(ii) International capital allows countries to finance more investment than can be supported by domesticsavingsresultinginhigherproductivityand enhancedoutput.

(3 MARKS)

ANSWER 9 (b) (ii)

Marginal Propensity to Consume (MPC) $=\frac{\Delta C}{\Delta Y}$

Where Δ C is change in consumption and ΔY is change in income

Δ C = (9,000 – 6,000); ΔY = (12,000 – 8,000)

$\frac{\Delta C}{\Delta Y} = \frac{3000}{4000} = 0.75$

Marginal Propensity to Save (MPS) $=\frac{\Delta S}{\Delta Y} = 1 - \frac{\Delta C}{\Delta Y} = 1 - 0.75 = 0.25$

OR

S = Y-C

Marginal Propensity to Save(MPS) $= \frac{\Delta S}{\Delta Y} = \frac{(1200-9000)-(8000-6000)}{(12000-8000)}$

$= \frac{1000}{4000} = 0.25$

(2 MARKS)

ANSWER 10 (a) (i)

Perfect information which implies thatboth buyersand sellers have complete information about anything that may influence their decision making is an important element of an efficient competitive market. Information failure occurs when lack of information can result in consumers and producers making decisions that do not maximize welfare. Information failure is widespread in numerous market exchanges due to complex nature of goods and services that are transacted, inaccurate and incomplete data, and non-availability of correct information.

(3 MARKS)

ANSWER 10 (a) (ii)

The demand for moneyis a decision about how much of one's given stock of wealth should be held in the form of money rather than as other assets such as bonds. Demand for moneyis actually demand for liquidity and a demand to storevalue.

(2 MARKS)

ANSWER 10 (b) (i)

Demerit goods are deemed socially undesirable and their consumption imposes considerable negative externalities on the society as a whole. Examples of demerit goods are cigarettes, alcohol etc. Since demerit goods are clear cases of market failure, the government intervenes in the marketplace to discourage their production andconsumption mainly by the followingmethods:

(i) Attheextreme,thegovernmentmayenforcecompletebanonademeritgood;e.g. intoxicating drugs. In such cases, the possession, trading or consumption of the goodismadeillegal.

(ii) Impose unusually high taxes on producing or purchasing the demerit goods makingthemverycostlyandunaffordabletomany.

(iii) Through persuasion which is mainly intended to be achieved by negative advertising campaigns which emphasize the dangers associated with consumption ofdemeritgoodsandgrantingofsubsidiesforsuchadvertisements.

(iv) Throughlegislationsthatprohibittheadvertisingorpromotionofdemeritgoodsin whatsoevermanner.

(v) Strict regulations of the market for the good may be put in place so as to limit access to the good, especiallyby vulnerable groups such as children and adolescents. Restrictions in terms of a minimum age maybe stipulated at which young peoplearepermittedto buycigarettesandalcohol.

(vi) Regulatory controls in the form of spatial restrictions e.g. smoking in public places, sale of tobacco to be away from schools, and time restrictions under which sale at particulartimesduringthedayisbanned.

(3 MARKS)

ANSWER 10 (b) (ii)

The 'real exchange rate' describes 'how many' of a good or service in one country can be traded for 'one' of that good or service in a foreign country. Thus it incorporates changes inprices

$$\text{Real Exchange rate} = \text{Nominal exchange rate} \times \frac{\text{Domestic Price Index}}{\text{Foriegn Price Index}}$$

$$= 56 \times \frac{116}{112} = 58$$

(2 MARKS)

ANSWER 11 (a) (i)

Monetary Policy Committee (MPC) constituted by the Central Government is an empowered six-member committee with RBI Governor as the chairperson. Under the Monetary Policy Framework Agreement, the RBI will be responsible for price stability and for containing inflation targets at 4% (with a standard deviation of 2%) in the medium term. The committee is answerable to the Government of India if the inflation exceeds the range prescribed for three consecutive months. MPC has complete control over monetary policy decisions to ensure economicgrowth and price stability. The MPC decides the changes to be made to thepolicy rate (repo rate) so as to contain inflation within the target level specified to it by the central government. Fixing of the benchmark policy interest rate (repo rate) is made in a more consultative and participative manner and on the basis of majority vote by this panel of experts. This has added lot of value and transparency to monetary policy decisions.

(3 MARKS)

ANSWER 11 (a) (ii)

A central bank of a country is called a 'bankers' bank because it acts as a banker to the community of commercial banks and provides them with financial services to facilitate their efficientfunctioning.

- The central bank acts as a custodian of cash reserves of commercial banks in thecountry.
- The central bank provides efficient means of funds transfer for all banks. All commercial banks maintain accounts with the central bank and it enables smooth and swift clearing and settlements of inter-bank transactions and interbankpayments.
- The central bank acts as a lender of last resort. It provides liquidityto banks when the latter face shortage of liquidity. The scheduled commercialbanks can borrow from the discount window against the collateral of securities like commercial bills, government securities, treasury bills, or other eligiblepapers.

(2 MARKS)

ANSWER 11 (b) (i)

National Income (NI) =GDP (MP) –Depreciation +NFIA- Net IndirectTax

WhereGDP(MP) = Value of output- intermediate consumption ValueofOutput = Sales+ change instock

= 700+ (400-500)

=600

GDP (MP) =600-350 =250

Therefore NI= 250-150 +30-(110-50)

= 70 Crore

(3 MARKS)

ANSWER 11 (b) (ii)

A Social Good is defined as one which all enjoy in common in the sense that each individual's consumption of such a good leads to no subtraction from any other individuals consumption of that good. Similarity between Social Goods and Common Pool Resources is that both are non-excludable whereas dissimilarity is seen in their nature that is Social Goods are non-rival which means that the use of these goods does not reduce the availability for others, while Common Pool Resources are rival in nature which means that the use of these resources reduce the availability forothers.

(2 MARKS)

OR

ANSWER 11 (b) (ii)

The World Trade Organization has a three- tier systemof decision making. The WTO's top level decision-making body is the Ministerial Conference which can take decisions on all matters under any of the multilateral trade agreements. The Ministerial Conference meets at least once every twoyears. The nextlevel is the General Council which meets several times a year at the Geneva headquarters. The General Council also meets as the Trade Policy Review Body and the Dispute Settlement Body. At the next level, the Goods Council, Services CouncilandIntellectual Property (TRIPS) Council report to the General Council. These councils are responsible for overseeing the implementation of the WTO agreements in their respective areas of specialisation. Thethree alsohave subsidiary bodies. Numerous specialized committees, working groups and working parties deal with the individualagreements.

(2 MARKS)