

**PART- A : FINANCIAL MANAGEMENT (60 marks)**

**Note: Question 1 is compulsory. Attempt any five from the rest.**

**Question 1 (5 marks each)**

**A)**

The net profit is calculated as follows:	
Sales Revenue	45,00,000
Less: Direct Cost	30,00,000
Gross Profit	15,00,000
Less : operating cost	4,80,000
EBIT	10,20,000
Less: Interest at 9%	1,35,000
EBT	8,85,000
Less : taxes at 40%	3,54,000
PAT	5,31,000
i) Net profit Margin = $\frac{EBIT(1-t) * 100}{Sales}$	
$= \frac{102000(1-0.40)*100}{4500000}$	0.136
ii) Return on assets = $\frac{EBIT(1-t) * 100}{Total Assets}$	
$= \frac{102000(1-0.40)*100}{5000000}$	0.122
ii) Asset Turnover = $\frac{Sales}{Assets}$	
$= \frac{4500000}{5000000}$	0.900
iv) Return on Equity	
ROE = $\frac{PAT}{Equity}$	
$= \frac{531000}{3500000}$	0.152

**B)**

(i) Calculation of Value of Firms ABC Limited and PQR Limited according to MM Hypothesis	
Market Value of ABC Limited (Unlevered)	
$V_u = \frac{EBIT(1-t)}{K_e}$	
$= \frac{2,50,000(1-0.30)}{20\%}$	
$= \underline{1,75,000}$	
20%	
$= Rs. 8,75,000/-$	
<b>Market Value of PQR Limited (Levered)</b>	
$V_e = V_u + DT$	
$= 8,75,000 + (10,00,000 \times 0.30)$	

= 8,75,000 + 3,00,000

= 11,75,000/-

**C)**

Calculation of Working Capital Requirement		
<b>(A) Current Assets</b>		
(i) Stock of material for 4 weeks (192,000 x 40 x 4/52)		5,90,770
(ii) Work in progress for ½ month or 2 weeks		
Material (192000 x 40 x 2/52) 0.50	1,47,692	
Labour (192000 x 15 x 2/52) 0.50	55,384	
Overhead (192,000 x 30 x 2/52) 0.50	1,10,770	3,13,846
(iii) Finished stock (192,000 x 85 x 4/52)		12,55,384
(iv) Debtors for 2 months (192,000 x 85 x 8/52)		25,10,770
Cash in hand or at bank		1,00,000
Investment in Current Assets		47,70,770
<b>(B) Current Liabilities</b>		
(i) Creditors for one month (192,000 x 40 x 4/52)		5,90,770
(ii) Average lag in payment of expenses		
Overheads (192,000 x 30 x 4/52)	4,43,076	
Labour (192,000 x 15 x 3/104)	83,076	5,26,152
Current Liabilities		11,16,922
Net working capital (A – B)		36,53,848

**D)**

Contribution = (3.00 – 1.75) x 5,00,000 = `6,25,000							
Fixed costs = 4,00,000 – [(12,50,000 – 3,00,000)/5] = `2,10,000							
<b>Particulars</b>	<b>Note No.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Cost of Machinery (80% - downpayment and balance at the end of year 1)	1	(10,00,000)	(2,50,000)	-	-	-	-
Salvage Value at the end of 5th year	2	-	-	-	-	-	3,00,000
Contribution	3	-	6,25,000	6,25,000	6,25,000	6,25,000	6,25,000
Fixed Cost	4	-	(2,10,000)	-	-	-	(2,10,000)

		-		(2,10,000)	(2,10,000)	(2,10,000)	
Advertisement cost	5	-	(1,00,000)	(1,50,000)	-	-	-
<b>Net Cash flow</b>	<b>6</b>	<b>(10,00,000)</b>	<b>65,000</b>	<b>2,65,000</b>	<b>4,15,000</b>	<b>4,15,000</b>	<b>7,15,000</b>
DF @ 10%	7	1	0.909	0.826	0.751	0.683	0.621
<b>PV of cash flows (6*7)</b>	<b>8</b>	<b>(10,00,000)</b>	<b>59,085</b>	<b>2,18,890</b>	<b>3,11,665</b>	<b>2,83,445</b>	<b>4,44,015</b>
<b>NPV</b>	<b>9</b>	<b>3,17,100</b>					
The net present value of the project is ` 3,17,100.							

**Question 2 (4 marks each)**

A)

The maximisation of profit is often considered as an implied objective of a firm. Options resulting into maximisation of profit may be selected by the firm's decision makers. They even sometime may adopt policies yielding exorbitant profits in short run which may prove to be unhealthy for the growth, survival and overall interests of the firm. The profit of the firm in this case is measured in terms of its total accounting profit available to its shareholders. The value of a firm is defined as the market price of the firm's stock. The market price of a firm's stock represents the focal judgment of all market participants as to what the value of the particular firm is. It takes into account present and prospective future earnings per share, the timing and risk of these earnings, the dividend policy of the firm and many other factors that bear upon the market price of the stock. The value maximisation objective of a firm is superior to its profit maximisation objective due to following reasons.

1. The value maximisation objective of a firm considers all future cash flows, dividends, earning per share, risk of a decision etc. whereas profit maximisation objective does not consider the effect of EPS, dividend paid or any other returns to shareholders or the wealth of the shareholder.

2. A firm that wishes to maximise the shareholders wealth may pay regular dividends whereas a firm with the objective of profit maximisation may refrain from dividend payment to its shareholders.

3. Shareholders would prefer an increase in the firm's wealth against its generation of increasing flow of profits.

4. The market price of a share reflects the shareholders expected return, considering the long-term prospects of the firm, reflects the differences in timings of the returns, considers risk and recognizes the importance of distribution of returns. The maximisation of a firm's value as reflected in the market price of a share is viewed as a proper goal of a firm. The profit maximisation can be considered as a part of the wealth maximisation strategy.

B)  $A (CVFAr, t) = 1,00,00,000$

$A (CVFA0.12, 7) = 1,00,00,000$

$A = 1,00,00,000 / (CVFA 0.12, 7)$

$A = 1,00,00,000 / 10.089 = \text{Rs } 9,91,178.51$

**Question 3 (8 marks)**

Borrowing option:

Annual Instalment = `5,00,000/ 5 = `1,00,000/-

Annual depreciation = `5,00,000/ 5 = `1,00,000/-

**Computation of net cash outflow:**

Year	Principal ( $\text{₹}$ )	Interest @10% ( $\text{₹}$ )	Total ( $\text{₹}$ )	Tax Saving on Depreciation & Interest ( $\text{₹}$ )	Net cash Outflow ( $\text{₹}$ )	PV @ 8%	Total PV ( $\text{₹}$ )
1	1,00,000	50,000	1,50,000	45,000 (30% of 1,50,000)	1,05,000	0.926	97,230
2	1,00,000	40,000	1,40,000	42,000 (30% of 1,40,000)	98,000	0.857	83,986
3	1,00,000	30,000	1,30,000	39,000 (30% of 1,30,000)	91,000	0.794	72,254
4	1,00,000	20,000	1,20,000	36,000 (30% of 1,20,000)	84,000	0.735	61,740
5	1,00,000	10,000	1,10,000	33,000 (30% of 1,10,000)	77,000	0.681	52,437
							3,67,647
Less: Present value of Inflows at the end of 5 <sup>th</sup> year ( $\text{₹}$ 50,000 $\times$ 0.7) or $\text{₹}$ 35,000 $\times$ 0.681 =							23,835
PV of Net Cash outflows							3,43,812

Calculation of lease rentals:

Therefore, Required Annual after tax outflow = ` 3,43,812/3.993 = ` 86,104/-\*

Therefore, Annual lease rental = ` 86,104/0.70 = ` 1,23,006/-

In Case If it is assumed that installment is payable in the beginning of the year then lease rent shall be computed as follows:

Required Annual after tax outflow = 3,43,812/4.31 = `79,734/-

Therefore, Annual lease rental = 79,734/0.70 = `1,13,906/-

**Question 4 (4 marks each)**

A)

**Advantages (Any 2)**

(i) Emphasizes the long term gains

(ii) Recognises risk or certainty

(iii) Recognises the timing of returns

(iv) Considers shareholder's return.

**Disadvantages**

(i) Offers no clear relationship between financial decisions and share price.

(ii) Can lead to management anxiety and frustration

B)

**CALCULATION OF NET PRESENT VALUE**

	( $\text{₹}$ )
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PV of Annual cash inflows ( $\text{₹ } 45,000 \times 3.169$ )	1,42,605
Initial Project Cost	1,20,000
NPV (PV of Cash flow – Initial Cost)	22,605
<b>If initial project cost is varied adversely by 10%*</b>	
Initial Project Cost ( $1,20,000 \times 110\%$ )	$\text{₹ } 1,32,000$
NPV (Revised) ( $\text{₹ } 1,42,605 - \text{₹ } 1,32,000$ )	$\text{₹ } 10,605$
Change in NPV ( $\text{₹ } 22,605 - \text{₹ } 10,605$ ) / $\text{₹ } 22,605$ i.e	53.08%
<b>If annual cash inflow is varied adversely by 10%*</b>	
Revised annual inflow ( $\text{₹ } 45,000 \times 90\%$ )	$\text{₹ } 40,500$
NPV (Revised) ( $\text{₹ } 40,500 \times 3.169$ ) – ( $\text{₹ } 1,20,000$ )	(+) $\text{₹ } 8,345$
Change in NPV ( $\text{₹ } 22,605 - \text{₹ } 8,345$ ) / $\text{₹ } 22,605$	63.08%
<b>If cost of capital is varied adversely by 10%*</b>	
NPV (Revised) ( $\text{₹ } 45,000 \times 3.103$ ) – $\text{₹ } 1,20,000$	(+) $\text{₹ } 19,635$
Change in NPV ( $\text{₹ } 22,605 - \text{₹ } 19,635$ ) / $\text{₹ } 22,605$	13.14 %

**Conclusion:** Project is most sensitive to 'annual cash inflows' (\*It is assumed that adverse variation is 10%)

**Question 5 (8 marks)**

Particulars	Note No.	Machine "Antic"	Machine "Bold"
Purchase Cost	1	75,00,000	50,00,000
Life of Machine (in years)	2	3	2
Running cost of machine per year	3	20,00,000	30,00,000
PVIFA at 9%	4		
For 3 years		2.5313	-
For 2 years		-	1.7591
PV of running cost of machine (3*4)	5	50,62,600	52,77,300
Cash outflows of Machine (1+5)	6	1,25,62,600	1,02,77,300
<b>Equivalent PV of Annual Cash outflow (6/4)</b>	7	<b>49,62,904</b>	<b>58,42,363</b>
<b>Recommendation:</b> DMS & Co. should buy Machine 'Antic' since equivalent annual cash outflow is less than that of Machine 'Bold'.			

**Question 6 (8 marks)**

<b>(1) Statement of Operating Profit:</b>						
						Rs. in lacs
Particulars	Note No.	1	2	3	4	

<b>Sales</b>	A	<b>3,220</b>	<b>3,220</b>	<b>4,180</b>	<b>4,180</b>	
Material Consumption		300	400	850	850	
Wages		600	650	850	1,000	
Other expenses		400	450	540	700	
Factory overheads (insurance)		300	300	300	300	
Loss of rent		100	100	100	100	
Interest		320	240	160	80	
Depreciation		500	380	280	210	
<b>Total Cost</b>	B	<b>2,520</b>	<b>2,520</b>	<b>3,080</b>	<b>3,240</b>	
<b>Profit (A)-(B)</b>	C	<b>700</b>	<b>700</b>	<b>1,100</b>	<b>940</b>	
Tax @50%		(350)	(350)	(550)	(470)	
<b>PAT</b>	D	<b>350</b>	<b>350</b>	<b>550</b>	<b>470</b>	
<b>(2) Statement of Incremental Casflows:</b>						
						<i>Rs. in lacs</i>
<b>Particulars</b>	<b>Note No.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Material Stocks		(200)	(350)	-	-	550
Compensation for contract		(300)	-	-	-	-
Contract payment saved		-	500	500	500	500
Tax on contract payment		-	(250)	(250)	(250)	(250)
Incremental profit		-	700	700	1,100	940
Depreciation added back		-	500	380	280	210
Tax on profits		-	(350)	(350)	(550)	(470)
Loan repayment		-	(500)	(500)	(500)	(500)
Profit on sale of machinery (net)		-	-	-	-	50
<b>Total incremental cash flows</b>	A	<b>(500)</b>	<b>250</b>	<b>480</b>	<b>580</b>	<b>1,030</b>
PV Factor		1.000	0.870	0.756	0.658	0.572
<b>NPV of cashflows</b>	B	<b>(500)</b>	<b>218</b>	<b>363</b>	<b>382</b>	<b>589</b>
<b>NPV</b>	C					

1,051

Advice: Since the net present value of cash flows is ` 1,051 lacs which is positive the management should install the machine for processing the waste.

**Notes:**

1. Material stock increases are taken in cash flows.
2. Idle time wages have also been considered
3. Apportioned factory overheads are not relevant only insurance charges of this project are relevant.
4. Interest calculated at 16% based on 4 equal instalments of loan repayment.
5. Sale of machinery- Net income after deducting removal expenses taken. Tax on Capital gains ignored.
6. Saving in contract payment and income tax thereon considered in the cash flows.

**Question 7 (8 marks)****A)**

Navya Ltd.

(i) Walter's model is given by –

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

Where, P = Market price per share,

E = Earnings per share = ₹20,00,000 ÷ 4,00,000 = ₹ 5

D = Dividend per share = 60% of 5 = ₹ 3

r = Return earned on investment = 15%

K<sub>e</sub> = Cost of equity capital = 12%

$$\therefore P = \frac{3 + (5 - 3) \times \frac{0.15}{0.12}}{0.12} = \frac{3 + 2 \times \frac{0.15}{0.12}}{0.12} = ₹ 45.83$$

- (ii) According to Walter's model when the return on investment is more than the cost of equity capital, the price per share increases as the dividend pay-out ratio decreases. Hence, the optimum dividend pay-out ratio in this case is Nil. So, at a payout ratio of zero, the market value of the company's share will be:-

$$\frac{0 + (5 - 0) \times \frac{0.15}{0.12}}{0.12} = ₹ 52.08$$

**B)**

Determination of Optimal Cash Balance according to William J. Baumol Model		1 mark for the formula and 3 marks for the calculation
The formula for determining optimum cash balance is:		
C = root of (2U*P)/S		
C = root of ( 2*2,62,500*12*25) / 0.075		

root of 15,75,00,000 / 0.075		
root of 2,10,00,00,000		
Optimum Cash Balance, C, = Rs. 45,826		

## PART – B: ECONOMICS FOR FINANCE (40 Marks)

Note: Question 1 is compulsory. Attempt any four from the rest.

### Question 1 (4 marks each)

A)

(i)  $GDP_{MP} = C + I + G + (X - Z)$

$$110 + 20 + (70 - 20) + (20 - 50) = 150 \text{ million}$$

(ii)  $GNP_{MP} = \text{GDP at market prices} + \text{net property income from abroad}$   
 $150 + 10 = 160$   
million

(iii)  $GDP_{\text{at factor cost}} = \text{GDP market prices} - \text{indirect taxes}$   
 $150 - 30 = 120 \text{ million}$

(iv) Per Capita Income =  $\frac{GNP_{\text{at Factor Cost}}}{\text{Population}} = \frac{(160m - 30m)}{0.5 \text{ million}}$   
 $= 130 / 0.5 = 260$

**B)** Many developed and developing economies are facing the challenge of rising inequality in incomes and opportunities. Redistribution of income to ensure distributive justice is essentially a fiscal function. Fiscal policy is a chief instrument available for governments to influence income distribution and plays a significant role in reducing inequality and achieving equity and social justice. The distribution of income in the society is influenced by fiscal policy both directly and indirectly. While current disposable incomes of individuals and corporates are dependent on direct taxes, the potential for future earnings is indirectly influenced by the nation's fiscal policy choices.

Government revenues and expenditure have traditionally been regarded as important instruments for carrying out desired redistribution of income. Each of these can be manipulated to achieve desired distributional effects.

A progressive direct tax system appropriately designed to protect incentives ensures that those who have greater ability to pay contribute more towards defraying the expenses of government and that the tax burden is distributed fairly among the population.

Indirect taxes can be differential: for example, the commodities which are primarily consumed by the richer income group, such as luxuries, are taxed heavily and the commodities the expenditure on which form a larger proportion of the income of the lower income group, such as necessities, are taxed light. Property taxes act both as a source of revenue and as an efficient redistributive instrument.

A carefully planned policy of public expenditure helps in redistributing income from the rich to the poorer sections of the society. This is done through spending programmes targeted on welfare measures for the disadvantaged, such as :

- (i) poverty alleviation programmes
- (ii) free or subsidized medical care, education, housing, essential commodities etc. to improve the quality of living of poor
- (iii) infrastructure provision on a selective basis
- (iv) various social security schemes and more efficient social transfers under which people are entitled to noncontributory, means -tested social pensions, conditional cash transfer programs, unemployment relief, sickness allowance etc.

- (v) subsidized production of products of mass consumption
- (vi) public production and/ or grant of subsidies to ensure sufficient supply of essential goods, and
- (vii) strengthening of human capital for enhancing employability etc.

The design of redistribution policies should justify both re distributive and efficiency objectives. Choice of a progressive tax system with high marginal taxes may act as a strong deterrent to work, save and invest. Therefore, the tax structure has to be carefully framed to mitigate possible adverse impacts on production and efficiency. Additionally, the redistributive fiscal policy and the extent of spending on redistribution should be consistent with the macroeconomic policy objectives, especially macroeconomic stability of the nation.

### Question 2 (4 marks each)

(i) Level of Disposable income  $Y_d$  is given by

$$Y_d = Y - \text{Tax} + \text{Transfer Payments, Where, Transfer Payment} = 110$$

$$= Y - 0.2Y + 110 = 0.8Y + 110,$$

$$\text{and } C = 50 + 0.75 Y_d$$

$$= 50 + 0.75(0.8Y + 110) \text{ (where } Y_d = 0.8Y + 110)$$

$$= 50 + (0.75 \times 0.8Y) + (0.75 \times 110) = 132.50 + 0.6Y$$

$$C = 132.50 + 0.6Y$$

$$\text{Now } Y = C + I + G, \text{ Where } C = 132.50 + 0.6Y, I = 100, G = 200 \text{ (Given)}$$

$$Y = (132.50 + 0.6Y) + 100 + 200$$

$$= 432.50 + 0.6Y$$

$$Y - 0.6Y = 0.4Y = 432.50$$

$$\text{or } Y = 432.50 / 0.4 = ₹ 1,081.25 \text{ Crores}$$

$$\text{Expenditure Multiplier} = \frac{1}{1-b} = \frac{1}{1-0.6} = 2.5 \text{ (Multiplier in closed economy} = \frac{1}{1-b} \text{)}$$

$$\text{(Here } b = \text{MPC} = \frac{\Delta C}{\Delta Y} \text{)}$$

(ii) If autonomous taxes worth of ₹ 25 Crores added, this will reduce disposable income by ₹ 25 crores

Level of Disposable income  $Y_d$  is given by

$$Y_d = Y - \text{Tax} + \text{Transfer payments}$$

$$\text{Thus } Y_d = Y - 0.2Y + (110 - 25) = 0.8Y + 85 \text{ (Income Tax Given} = 0.2Y, \text{ Transfer Payments} = 110)$$

$$C = 50 + 0.75(0.8Y + 85) \text{ (Given } C = 50 + 0.75 Y_d)$$

$$C = 50 + (0.75 \times 0.8Y) + (0.75 \times 85)$$

$$= 50 + 0.6Y + 63.75 = 113.75 + 0.6Y$$

$$Y = C + I + G$$

$$= (113.75 + 0.6Y) + 100 + 200 = 413.75 + 0.6Y \text{ (} C = 113.75 + 0.6Y, I = 100, G = 200)$$

$$Y - 0.6Y = 413.75$$

$$0.4Y = 413.75$$

$$Y = \frac{413.75}{0.4} = ₹ 1034.375 \text{ Crores.}$$

(iii)  $Y = C + I + G + (X - M)$ , Where Consumption,  $(C) = 132.50 + 0.6 Y$ , Investment  $(I) = 100$ , Government Expenditure  $(G) = 200$

Since  $X = 25$ ,  $M = 5 + 0.25 Y$

$$Y = (132.50 + 0.6Y) + 100 + 200 + \{25 - (5 + 0.25Y)\} \text{ (Given } X = 25 \text{ crores and } M$$

$$= 5 + 0.25Y)$$

$$Y = (132.50 + 0.6Y) + 100 + 200 + (25 - 5 - 0.25Y)$$

$$= (1 - 0.6 + 0.25) Y = 452.50$$

$$Y = \frac{452.50}{0.65} = ₹ 696.15 \text{ Crores}$$

$$\text{Imports} = 5 + 0.25Y = 5 + (0.25 \times 696.15) = ₹ 179.04 \text{ Crores}$$

Balance of trade = Exports – Imports

$$\text{Balance of Trade} = 25 - M = 25 - 179.04 = -₹ 154.04 \text{ crores.}$$

Thus, there is adverse balance in Trade of ₹ 154.04 crores

### Question 3

- Changes in exchange rates portray depreciation or appreciation of one currency against another. The terms, 'currency appreciation' and 'currency depreciation' describe the movements of the exchange rate. Currency appreciates when its value increases with respect to the value of another currency or a basket of other currencies. On the contrary, currency depreciates when its value falls with respect to the value of another currency or a basket of other currencies. If the Rupee dollar exchange rate changes from \$1 = ₹ 65 to \$1 = ₹ 68, the value of the Indian Rupee has diminished or Indian Rupee has depreciated and the US dollar has appreciated. On the contrary, home-currency appreciation or foreign-currency depreciation takes place when there is a decrease in the home currency price of foreign currency (or alternatively, an increase in the foreign currency price of home currency). The home currency thus becomes relatively more valuable. Under a floating rate system, if for any reason, the demand curve for foreign currency shifts to the right representing increased demand for foreign currency, and supply curve remains unchanged, then the exchange value of foreign currency rises and the domestic currency depreciates in value. **(1 mark)**

Following are the impact of exchange rate changes on the real economy: **(1 mark each)**

- The developments in the foreign exchange markets affect the domestic economy both directly and indirectly. All else equal, an appreciation (depreciation) of a country's currency raises (decreases) the relative price of its exports and lowers (increases) the relative price of its imports leading to changes in import and export volumes and consequently on import spending and export revenue. Depreciation adversely affects importers as they have to pay more domestic currency on the same quantity of imports and benefits exporters as forex earnings will fetch more in terms of domestic currency.
- For an economy where exports are significantly high, a depreciated currency would mean a lot of gain. Depreciation of domestic currency primarily decreases the relative price of domestically produced goods and diverts spending from foreign goods to domestic goods. Increased demand, both for domestic import-competing goods and for exports encourages economic activity and creates output expansion. Overall, the outcome of exchange rate depreciation is an expansionary impact on the economy at an aggregate level.

- As a result of depreciation or devaluation, the terms of trade of the nation can rise, fall or remain unchanged, depending on whether price of exports rises by more than, less than or same percentages as price of imports. Depreciation also can have a positive impact on country's trade deficit as it makes imports more expensive for domestic consumers and
- exports cheaper for foreigners. However, the fiscal health of a country whose currency depreciates is likely to be affected with rising import payments and consequent rising current account deficit (CAD) and diminished growth prospects of overall economy.
- Depreciation is also likely to fuel consumer price inflation, directly through its effect on prices of imported consumer goods and also due to increased demand for domestic goods. The impact will be greater if the composition of domestic consumption baskets consists more of imported goods. Indirectly, cost push inflation may result through possible escalation in the cost of imported components and intermediaries used in production.
- When a country's currency depreciates, production of export goods and import substitutes becomes more profitable. Therefore, factors of production will be induced to move into the tradable goods sectors and out of the non tradable goods sectors. By lowering export prices, currency depreciation helps increase the international competitiveness of domestic industries, increases the volume of exports, augments windfall profits in export oriented sectors and import-competing industries and promotes trade balance. If exports originate from labour-intensive industries, increased export prices will have spiraling effects on wages, employment and income. If inputs and components for manufacturing are mostly imported and cannot be domestically produced, increased import prices will increase firms' cost of production, push domestic prices up and decrease real output.
- Foreign capital inflows are characteristically vulnerable to exchange rate fluctuations. Depreciating currency hits investor sentiments and has radical impact on patterns of international capital flows. Foreign investors are likely to be indecisive or highly cautious before investing in a country which has high exchange rate volatility. Foreign direct investment flows are likely to shrink and foreign portfolio investments are likely to flow into debt and equity. This may shoot up capital account deficits affecting the country's fiscal health. Reduced foreign investments also widen the gap between investments required for growth and actual investments. Over a period of time, unemployment is likely to mount in the economy.
- If investor sentiments are such that they anticipate further depreciation, there may be large scale withdrawal of portfolio investments and huge redemptions through global exchange traded funds leading to further depreciation of domestic currency. This may result in a highly volatile domestic equity market affecting the confidence of domestic investors.
- Companies that have borrowed in foreign exchange through external commercial borrowings (ECBs) but have not sufficiently hedged against foreign exchange risks would also be negatively impacted as they would require more domestic currency to repay their loans. A depreciated domestic currency would also increase their debt burden and lower their profits and impact their balance sheets adversely. Exchange rate fluctuations make financial forecasting more difficult for firms and larger amounts will have to be earmarked for insuring against exchange rate risks through hedging.
- Investors who have purchased a foreign asset, or the corporation which floats a foreign debt, will find themselves facing foreign exchange risk. However, remittances

to homeland by non residents and businesses abroad fetches more in terms of domestic currency.

- In case of foreign currency denominated government debts, currency depreciation will increase the interest burden and cause strain to the exchequer for repaying and servicing foreign debt.
- Depreciation would enhance government revenues from import related taxes, especially if the country imports more of essential goods. Depreciation would also result in higher amount of local currency for a given amount of foreign currency borrowings of government.

**Question 4 (4 marks each)**

**A) Concept: (2 marks)**

- a) Trade Negotiation is a process in which Nations meet together to discuss the possibility of trade, with the goal of reaching a Trade Agreement.
- b) Both Nations are interested in negotiating a successful trade agreement because it has the potential of promoting economic growth and allowing Companies to expand their markets, but both are also concerned with protecting their economy and safety.
- c) Sometimes, Trade Negotiations may involve more than two Nations, along with Moderators who take a neutral stance to help the countries reach an agreement.

**1. Types of Trade Agreements: Trade Agreements may be the following types – (2 marks)**

Type	Description
<b>1. Unilateral Trade Agreement</b>	<ul style="list-style-type: none"> <li>• Here, the Importing Country offers certain incentives to encourage the Exporting Country to engage in economic activities that will boost both Countries' economies.</li> <li>• This Agreement joins two or more Nations in a joint commitment to expand their trade.</li> <li>• Normally, this includes domestic structural reforms such as lowering tariffs and reducing bureaucratic regulations. <b>Example:</b> Generalised system of Preferences.</li> </ul>
<b>2. Bilateral Trade Agreement</b>	<ul style="list-style-type: none"> <li>• Bilateral Trade Agreement are between on two nations at a time, (or two Blocs, or a Bloc and a country).</li> <li>• These Agreements give those two Nations favoured trading status between each other.</li> </ul>
<b>3. Multilateral Trade Agreement</b>	<ul style="list-style-type: none"> <li>• This Trade Agreement is between <b>many nations</b> at one time.</li> <li>• They are very complicated to negotiate, but are very powerful once all parties / Nations sign the agreement. <b>Example:</b> WTO Agreement.</li> <li>• Primary Benefit of Multilateral Agreement is that all nations get treated equally.</li> </ul>
<b>4. Pluri-lateral Trade Agreement</b>	<ul style="list-style-type: none"> <li>• It is an agreement between more than two countries, but not a great many, which would then be a Multilateral Agreement.</li> <li>• Member Countries would be given the choice to agree to new rules on a voluntary basis.</li> </ul>

**B) Concept of Money Supply**

1. **Meaning:** "money supplies" denotes the Total Quantity of Money Available to the people in an Economy. The Quantity of Money at any point of time is a measureable concept. **(1 mark)**
2. **Supply of Money – whether Stock or Flow? : (3 marks)**

a) Supply of Money	<ul style="list-style-type: none"> <li>• It refers to the total amount of Money at any particular point of time. It is a Stock Concept.</li> </ul>
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	<ul style="list-style-type: none"> <li>Change in the Stock of Money (i.e. increase or decrease per month or year), is a Flow Variable.</li> </ul>
b) Stock of Money	<ul style="list-style-type: none"> <li>Generally, Stock of Money refers to the stock of Money to the 'Public' as means of payments and store of value.</li> <li>Such stock of Money is always less than the Total stock of Money that <b>really</b> exists in an economy.</li> </ul>

### 3. Public:

The term 'Public' includes all Economic Units-	The term 'Public' excludes Producers of Monet -
a) Household, Firms and institution, b) Quasi Government institutions, c) Non-Banking financial Institutions, d) Non-Departmental Public-Sector Undertakings, e) Foreign Central Banks and Foreign Government, and f) International Monetary Fund which holds a part of Indian Money in India in the form of Deposits with RBI.	1. Government, which includes – <ul style="list-style-type: none"> <li>Central Government and</li> <li>All State Government and</li> <li>Local Bodies.</li> </ul> 2. Banking System, which means – <ul style="list-style-type: none"> <li>Reserve Bank of India, and</li> <li>All Banks that accept Demand Deposits</li> </ul> <b>[Note]</b>

**Note:** Demand Deposits means those deposits from which Money can be withdrawn by cheque, mainly CASA Deposits. (CASA = Current Account & Savings Account). In short, in the Standard Measures of Money, Itner - Bank Deposits and Money held by the government and the Banking system are not included

### Question 5 (4 marks each)

#### A) Basic Concept

#### 1. Concept: fiscal Policy – (1 mark)

- Involves the use of Government Spending, Taxation and Borrowing to influence both the pattern of economic activity and level of growth of Aggregate Demand, Output and Employment.
- Includes any design on the part of the Government to change the price level, composition or timing of Government expenditure or to alter the burden, structure or frequency of tax payment.

#### 2. Features: Fiscal Policy – (1 ½ mark)

- Is designed to influence the pattern and level of economic activity in a country.
- Is in the nature of a demand – side policy.
- Does not assume full employment level. **[Note:** An economy which is producing at full – employment level does not require Government action in the form of Fiscal Policy.]
- Is aimed at managing macro – economics aggregates, but has micro – economics impact also.

#### 3. Objectives: Common Objectives of Fiscal Policy include – (11/2 mark)

- Achievement and maintenance of full employment,
- Maintenance of price stability,
- Efficiency the allocation of resource,
- Acceleration of the rate of economic growth and development, and
- Equitable distribution of income and wealth.

#### B) (1 mark each)

Point	Description
<b>Meaning</b>	1. When spending by government in an economy replaces private spending, the latter is said to be crowded out. (note: government spending has to "support" and "enhance" private spending, not merely "replce" it. "crowding out" effect is the negative effect that a fiscal policy may generate, when money from the private sector is "crowded out" to the

	public sector.
<b>Example</b>	If government provides free computers to students, the demand from students for computers may not be forthcoming.
<b>Impact on consumption</b>	<ol style="list-style-type: none"> <li>1. If higher government spending during recessions ‘crowd out’ private spending in an economy, it will reduce the economy’s ability to self-correct from the recession, and reduce the economy’s prospects of long-run economic growth</li> <li>2. Effect of government spending in increasing aggregate demand would be smaller than what it should be, and thus the fiscal policy may become ineffective.</li> </ol>
<b>Impact on investment</b>	<ol style="list-style-type: none"> <li>1. Government increases its spending by borrowing funds from market, pushing up the demand and interest rates.</li> <li>2. Private investments spending, those which are interest – sensitive, will be reduced and discouraged.</li> <li>3. Thus, the decline in private spending partially or completely offset the expansion in demand resulting from an increase in government expenditure.</li> </ol>
<b>Protection</b>	<ol style="list-style-type: none"> <li>1. The governments should consider the “crowding out” before deciding on expanding its spending.</li> <li>2. During deep recessions, crowding – out is less likely to happen as private sector investment is already minimal and thus, there is only insignificant private spending to crowd out. Also, in a recession phase, the government would be able to borrow from the market without increasing interest rates steeply.</li> </ol>

#### Question 6

##### A) Functions / Benefits of money (1 mark each)

1. **Medium of exchange:** Money can be used directly, instantly, conveniently and without any costs or restrictions to make payments. So it is a totally Liquid asset & convenient medium of exchange that facilitates easy exchange of Goods & Services.

**Note:** Anything that would act as a medium of exchange is not necessarily Money. **Example:** A bill of exchange may also be a medium of exchange, but it is not money since it is not generally accepted as a means of payment.

2. **Common Measure of Value:**

a) Money functions as a ‘Common Measure of Value’ or ‘Common Denominator of Value’.

b) It is convenient to measure the price of all commodities in terms of a single unit rather than record the relative price of every good in terms of every other goods.

c) Hence, it greatly reduces the number of exchange ratios between goods and services.

3. **Comparability:** Since it is convenient to trade all commodities in exchange for a single commodity, goods and services which are otherwise not comparable are made comparable through expressing the worth of each in terms of money.+

4. **Satisfaction of Wants:** Money does not have any inherent power to directly satisfy human wants. However, by acting as a medium of exchange Money leads to purchasing power. So, possession of money enables us to purchase goods and services to satisfy our wants.

5. **Advantage over Barter System:**

a) Barter System assumes **double coincidence of wants**, e.g. a seller of sugarcane who wants Clothing in exchange is able to find a seller of clothing who is in need of sugarcane. This assumption is very unrealistic.

b) With introduction of Money, the single barter transaction is now split into two separate transaction of sale and purchase, thereby eliminating the need for double coincidence of wants.

c) Thus by acting as an Intermediary, Money increase the ease of trade and reduces the inefficiency and transaction costs involved in a barter exchange.

**6. Separation of Time and Space:**

- a) The splitting of a barter exchange transaction into two separate purchase and sale transaction, involves a separation in both time and space.
- b) This separation is possible because Money can be used as a store of value or store of means of payment during the intervening time. Thus, money functions as a temporary adobe of purchasing power.

**7. Deferred Payments:** money serves as a unit or standard of deferred payment i.e. Money facilitates recording of deferred promises to pay. Money is the unit in terms of which future payments are contracted or stated.

**8. Perfect Liquidity and Reversibility:** [reversibility means Value in payment = Value in receipt]

- a) Like certain other Assets like (Bonds, Bank Deposits, Land, Residential Buildings, etc.), Money also functions as a permanent store of value.
- b) However, these other assets may be subject ti limitations like Storage Costs, Lack of Liquidity, Lack of Perfect Reversibility and Possibility of Depreciation in Value.
- c) However, Money is the only asset with perfect liquidity and reversibility.

**Note:** In order to serve as a permanent store of value in the economy, the purchasing power of the value of money should either remain stable or should rise gradually over a period of time. Value of Money is linked to its Purchasing Power is the inverse of the Averages or General Level of Prices as measured by the Consumer Price Index.

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