SUGGESTED SOLUTION

INTERMEDIATE

Test Code - JKN_FME_11

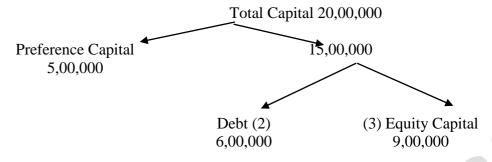**(Date :09/09/2020)**

ANSWER-1

ANSWER-A

WN-1:

Total Capital 20,00,000

Preference Capital 5,00,000 → 15,00,000

15,00,000 → Debt (2) 6,00,000 and (3) Equity Capital 9,00,000

(1 Mark)

WN- 2: Post tax K_D

K_D = I (1-t)

= 16% (1-0.30) = $\boxed{11.20\%}$

(1 Mark)

Weighted Average Cost of Capital

12% Preference Capital	5,00,000	25	12%	3
Equity Capital	9,00,000	45	20%	9
16% Debt	6,00,000	30	11.20%	3.36
	20,00,000	100		15.36%

(3 Marks)

Weighted Average Cost of Capital = 15.36%.

ANSWER-B

Preparation of Balance Sheet Working Notes:

Sales = Gross Profit / Gross Profit Margin

= 60,000 / 0.2 = Rs. 3,00,000

Total Assets = Sales / Total Asset Turnover

= 3,00,000 / 0.3 = Rs.10,00,000

Net Worth = 0.9 X Total Assets

= 0.9 X Rs. 10,00,000 = Rs. 9,00,000

Current Liability = Total Assets – Net Worth

= Rs. 10,00,000 – Rs. 9,00,000

= Rs. 1,00,000

Current Assets = 1.5 x Current Liability

= 1.5 x Rs. 1,00,000 = Rs. 1,50,000

Stock = Current Assets – Liquid Assets

= Current Assets – (Liquid Assets / Current Liabilities =1)

= 1,50,000 – (LA / 1,00,000 = 1) = Rs. 50,000

	Debtors	= Average Collection Period X Credit Sales / 360

Debtors = Average Collection Period X Credit Sales / 360

= 60 x 0.8 x 3,00,000 / 360 = Rs. 40,000

Cash = Current Assets – Debtors – Stock

= Rs. 1,50,000 – Rs. 40,000 – Rs. 50,000

=Rs. 60,000

Fixed Assets = Total Assets – Current Assets

= Rs. 10,00,000 – Rs. 1,50,000

= Rs. 8,50,000

Balance Sheet

Liabilities	Rs.	Assets	Rs.
Net Worth	9,00,000	Fixed Assets	8,50,000
Current Liabilities	1,00,000	Stock	50,000
		Debtors	40,000
		Cash	60,000
Total liabilities	10,00,000	Total Assets	10,00,000

(5 MARKS)

ANSWER-C

Market Price (P) per share as per Walter's Model is :

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

Where,

P = Price of Share

r = Return on investment or rate of earning

K_e = Rate of Capitalisation or Cost of Equity

Calculation of Market price (P) under the following dividend payout ratio and earning rates :

	(i)	(ii)	(iii)
Rate of earning (r)	DP ratio 50%	DP ratio 75%	DP ratio 100%

15%	$$\dfrac{5 + \left(\dfrac{0.15}{0.10}\right)(10-5)}{0.10}$$ = 12.5/ 0.10 = Rs. 125	$$\dfrac{7.5 + \left(\dfrac{0.15}{0.10}\right)(10-7.5)}{0.10}$$ 11.25/0.10 = Rs. 112.5	$$\dfrac{10 + \left(\dfrac{0.15}{0.10}\right)(10-10)}{0.10}$$ 10/0.10 = Rs. 100
10%	$$\dfrac{5 + \left(\dfrac{0.10}{0.10}\right)(10-5)}{0.10}$$ = 10/ 0.10 = Rs. 100	$$\dfrac{7.5 + \left(\dfrac{0.10}{0.10}\right)(10-7.5)}{0.10}$$ = 10/0.10 = Rs. 100	$$\dfrac{10 + \left(\dfrac{0.10}{0.10}\right)(10-10)}{0.10}$$ = 10/0.10 = Rs. 100
5%	$$\dfrac{5 + \left(\dfrac{0.05}{0.10}\right)(10-5)}{0.10}$$ = 7.5/ 0.10 = Rs. 75	$$\dfrac{7.5 + \left(\dfrac{0.05}{0.10}\right)(10-7.5)}{0.10}$$ = 8.75/ 0.10 = Rs. 87.5	$$\dfrac{10 + \left(\dfrac{0.05}{0.10}\right)(10-10)}{0.10}$$ = 10/ 0.10 = Rs. 100

(5 MARKS)

ANSWER-D

Computation of Earnings Per Share (EPS)

Plans	I (Rs.)	II (Rs.)
Earnings before interest & tax (EBIT)	40,00,000	40,00,000
Less: Interest charges (12% of Rs.75 lakh)	--	(9,00,000)
Earnings before tax (EBT)	40,00,000	31,00,000
Less: Tax @ 30%	(12,00,000)	(9,30,000)
Earnings after tax (EAT)	28,00,000	21,70,000
No. of equity shares (@ Rs.10+Rs.15)	4,00,000	1,00,000
E.P.S (Rs.)	7.00	21.70

Computation of Financial Break-even Points

Plan 'I' = 0 – Under this plan there is no interest payment, hence the financial break- even point will be zero.

Plan 'II' = Rs. 9,00,000 - Under this plan there is an interest payment of Rs.9,00,000, hence the financial break -even point will be Rs.9 lakhs

Computation of Indifference Point between Plan I and Plan II:

Indifference point is a point where EBIT of Plan-I and Plan-II are equal. This can be calculated by applying the following formula:

$\{(EBIT - I_1)(1 - T)\} / E_1 = \{(EBIT - I_2)(1 - T)\} / E_2$

So $\dfrac{EBIT(1-0.3)}{400000 \text{ shares}}$

$= \dfrac{(EBIT - Rs.\ 900000)(1-0.3)}{100000\ shares}$

Or, 2.8 EBIT − 25,20,000 = 0.7EBIT

Or, 2.1EBIT   = 25,20,000

EBIT   =12,00,000

(5 marks)

ANSWER-2

(i) Calculation of Net Present Value (NPV):

	Year-1	Year-2	Year-3	Year-4	Year-5
Sales volume (Qty. in lakh)	10	10	10	10	10
Contribution per unit (Rs.) (Selling price – variable cost)	250	250	250	250	250
Total contribution (Rs.in lakh)	2,500	2,500	2,500	2,500	2,500
Less: Fixed overheads (Rs. In lakh)	300	300	300	300	300
PBDT	2,200	2,200	2,200	2,200	2,200
Less: Depreciation (Rs. in lakh) (Working note-1)	500	375	281.25	210.94	158.20
PBT	1,700	1,825	1,918.75	1,989.06	2,041.80
Less: Tax @ 35%	595	638.75	671.56	696.17	714.63
PAT	1,105	1,186.25	1,247.19	1,292.89	1,327.17
Add: Depreciation	500	375	281.25	210.94	158.20
Add: Salvage value of plant & machinery	-	-	-	-	474.61
Add: Working capital	-	-	-	-	800
Net Cash inflow	1,605	1,561.25	1,528.44	1,503.83	2,759.98
P.V factor @15%	0.869	0.756	0.657	0.571	0.497
P.V of cash inflows	1,394.74	1,180.31	1,004.18	858.68	1,371.71

Net Present Value = P.V of cash inflows – P.V of cash outflows

= Rs. (1,394.74+1,180.31+1,004.18+858.68+1,371.71) – (Rs.2,000 + Rs. 800)

= Rs.3,009.62 lakh

The NPV of the project is positive, hence, the project is viable.

(4 Marks)

Working note-1:

	Year-1	Year-2	Year-3	Year-4	Year-5
Opening balance	2,000	1,500	1,125	843.75	632.81
Depreciation @25%	500	375	281.25	210.94	158.20
Closing WDV	1,500	1,125	843.75	632.81	474.61

(ii) Determination of sensitivity of NPV w.r.t.

a. Decrease in selling price by 10%

	Year-1	Year-2	Year-3	Year-4	Year-5
Sales volume (Qty. in lakh)	10	10	10	10	10
New Selling price	450	450	450	450	450
Variable cost	250	250	250	250	250
Contribution per unit (Rs.) (Selling price – variable cost)	200	200	200	200	200
Total contribution (Rs.in lakh)	2,000	2,000	2,000	2,000	2,000
Less: Fixed overheads (Rs. In lakh)	300	300	300	300	300
PBDT	1,700	1,700	1,700	1,700	1,700
Less: Depreciation (Rs. in lakh) (Working note-1)	500	375	281.25	210.94	158.20
PBT	1,200	1,325	1,418.75	1,489.06	1,541.80
Less: Tax @ 35%	420	463.75	496.56	521.17	539.63
PAT	780	861.25	922.19	967.89	1,002.17
Add: Depreciation	500	375	281.25	210.94	158.20
Add: Salvage value of plant & machinery	-	-	-	-	474.61
Add: Working capital	-	-	-	-	800
Net Cash inflow	1,280	1,236.25	1,203.44	1,178.83	2,434.98
P.V factor @15%	0.869	0.756	0.657	0.571	0.497
P.V of cash inflows	1,112.32	934.61	790.66	673.11	1,210.18

NPV = Rs. (1,112.32+934.61+790.66+673.11+1,210.18) – (Rs. 2,000 + Rs. 800)

= Rs. 4,720.88 – Rs. 2,800 = 1,920.88 lakh

10% reduction in selling price reduces the NPV by 36.18% (3,009.62-1,920.88/3,009.62)

(3 Marks)

b. Increase in project cost by 10%

	Year-1	Year-2	Year-3	Year-4	Year-5
PBDT	2,200	2,200	2,200	2,200	2,200
Less: Depreciation (Rs. in lakh) (Working note-2)	550	412.5	309.37	232.03	174.03
PBT	1,650	1,787.50	1,890.63	1,967.97	2,025.97
Less: Tax @ 35%	577.50	625.63	661.72	688.79	709.09
PAT	1072.50	1,161.87	1,228.91	1,279.18	1,316.88

Add: Depreciation	550	412.5	309.37	232.03	174.03
Add: Salvage value of plant & machinery	-	-	-	-	474.61
Add: Working capital	-	-	-	-	800
Net Cash inflow	1,622.50	1,574.37	1,538.28	1,511.21	2,765.52
P.V factor @15%	0.869	0.756	0.657	0.571	0.497
P.V of cash inflows	1,409.95	1,190.22	1,010.65	862.90	1,374.46

NPV = Rs. (1,409.95+1,190.22+1,010.65+862.90+1,374.46) – (Rs. 2,200 + Rs. 800)

= Rs. 5,848.18 – Rs. 3,000 = 2,848.18 lakh

10% increase in project cost reduces the NPV only by 5.36% (3,009.62 - 2,848.18/3,009.62)

(3 Marks)

Working note-2:

	Year-1	Year-2	Year-3	Year-4	Year-5
Opening balance	2,200	1,650	1,237.50	928.13	696.10
Depreciation @25%	550	412.5	309.37	232.03	174.03
Closing WDV	1,650	1,237.50	928.13	696.10	522.07

ANSWER-3

Particulars	Amount
Current Assets	
- Debtors [10,000 x 90] x 2	18,00,000
Stock	
(a) Raw Material [10,000 x 40] x 1.5	6,00,000
(b) Finished Goods [10,000 x 90] x 1	9,00,000
(c) WIP [10,000 x 65 (40 + 10 + 15)] x 1	6,50,000
Cash Balance [20% of current liability]	2,40,000
(A)	41,90,000
Current Liability	
Creditors [10,000 x 40] x 3	12,00,000
(B)	12,00,000
Working Capital Requirement	29,90,000

(8 Marks)

Working Note:
(1)

Particulars	Per Unit
Direct	
Material	40
Direct Wages	20

Overheads (excluding Depreciation)	30
Total Cost	**90**

<div align="right">

(2 Marks)

</div>

(2)   For WIP material is assumed to be 100% completion stage and conversion cost 50%.

ANSWER-4

Working Note

Particulars	Amount Lakhs
Sales 100	50
(-) Variable Cost (20)	10
Contribution 80	40
(-) Fixed Cost (excluding Interest)	(20)
EBIT	20
(-) Interest (25 x 20%)	(5)
EBT	15
(-) Tax (40%)	(6)
PAT	9
(-) Preference Dividend (10 x 10%)	(1)
Profits for Equity Shareholders	8
÷ Number of Equity Shares	4
EPS	2

<div align="right">

(5 Marks)

</div>

(1) EPS = Rs.2/share

<div align="right">

(1 Mark)

</div>

(2) $\text{DOL} = \dfrac{\text{Contribution}}{\text{EBIT}}$

$$= \frac{40}{20} = \boxed{2}$$

<div align="right">

(1 Mark)

</div>

(3) $\text{DFL} = \dfrac{\text{EBIT}}{\text{EBT} - \left[\dfrac{\text{PD}}{1\text{-}t}\right]}$

$$= \frac{20}{15 - \left[\dfrac{1}{1-0.4}\right]}$$

$$= \frac{20}{15 - 1.667}$$

$$= \frac{20}{13.333} = \boxed{1.50}$$

<div align="right">

(1 Mark)

</div>

(4) DCL $= $ DOL x DFL

$\qquad = 2 \times 1.50 = \boxed{3}$

<div align="right">**(1 Mark)**</div>

(5) Financial BEP

$$= I + \left[\frac{PD}{1-t}\right]$$

$$= 5 + \left[\frac{1}{1-0.4}\right]$$

$$= 5 + 1.667 = \boxed{6.667}$$

<div align="right">**(1 Mark)**</div>

ANSWER-5

(1) **Cash Budget for the period April to July.**

	April	May	June	July
Opening Balance	10,000	7,000	4,500	2,500
(+) Receipts				
Collection from Debtors	30,000	33,000	36,000	39,000
(A)	40,000	40,000	40,500	41,500
(-) Payments				
Wages & Expenses	11,000	11,500	12,000	12,500
Payment to Suppliers	22,000	24,000	26,000	28,000
(B)	33,000	35,500	38,000	40,500
Closing Balance (A-B)	7,000	4,500	2,500	1,000

<div align="right">**(5 Marks)**</div>

(2) **Profit and Loss Forecast for April to July.**

Particulars		Amount
Sales		1,74,000
(+) Closing Stock (July Purchase)		32,000
		2,06,000
(-) Opening Stock (March Purchase)	24,000	
Purchases	1,16,000	
Wages and other Expenses	47,000	1,87,000
Net Profits		**19,000**

<div align="right">**(5 Marks)**</div>

ANSWER-6

ANSWER-A

This theory states that firms prefer to issue debt when they are positive about future earnings. Equity is issued when they are doubtful and internal finance is insufficient.

The pecking order theory argues that the capital structure decision is affected by manager's choice of a source of capital that gives higher priority to sources that reveal the least amount of information.

Pecking order theory suggests that managers may use various sources for raising of fund in the following order.

1. Managers first choice is to use internal finance

2. In absence of internal finance they can use secured debt, unsecured debt, hybrid debt etc.

3. Managers may issue new equity shares as a last option. So

briefly under this theory rules are

Rule 1: Use internal financing first.

Rule 2: Issue debt next

Rule 3: Issue of new equity shares at last. **(3 Marks)**

ANSWER-B

On one hand when cost of 'fixed cost fund' is less than the return on investment financial leverage will help to increase return on equity and EPS. The firm will also benefit from the saving of tax on interest on debts etc. However, when cost of debt will be more than the return it will affect return of equity and EPS unfavourably and as a result firm can be under financial distress. This is why financial leverage is known as "double edged sword".

Effect on EPS and ROE:

When, ROI > Interest – Favourable – Advantage When, ROI < Interest – Unfavourable –

Disadvantage

When, ROI = Interest – Neutral – Neither advantage nor disadvantage.

Or

1. External Commercial Borrowings (ECB) refer to Commercial Loans, which maybe in the form of Bank Loans, Buyers Credit, Suppliers Credit, Securitised Instruments (e.g. Floating Rate Notes or Fixed Rate Bonds), availed from Non-Resident Lenders, with minimum average maturity of 3 years.

2. Borrowers can raise ECBs through internationally recognised sources like (a) international Banks, (b) International Capital Markets, (c) Multilateral Financial Institutions e.g. ADB, (d) Export Credit Agencies, (e) Suppliers of Equipment, (f) Foreign Collaborators, and (g) Foreign Equity Holders.

3. ECB's can be accessed through - (a) Automatic Route (for Companies registered under the Companies Act, and NGOs engaged in micro-finance activities), or (b) Approval Route (i.e. after obtaining RBI / Government Approval).

(3 MARKS)

ANSWER-C

The profit maximization is not an operationally feasible criterion." This statement is true because profit maximization can be a short-term objective for any organization and cannot be its sole objective. Profit maximization fails to serve as an operational criterion for maximizing the owner's economic welfare. It fails to provide an operationally feasible measure for ranking alternative courses of action in terms of their economic efficiency. It suffers from the following limitations:

(i) **Vague term:** The definition of the term profit is ambiguous. Does it mean short term or long term profit? Does it refer to profit before or after tax? Total profit or profit per share?

(ii) **Timing of Return:** The profit maximization objective does not make distinction between returns received in different time periods. It gives no consideration to the time value of money, and values benefits received today and benefits received after a period as the same.

(iii) **It ignores the risk factor.**

(iv) **The term maximization is also vague.**

(4 Marks)

PART II (Economics for Finance)

Q. 7

(a)

(i) Voluntary Export Restraints (VERs) refer to a type of informal quota administered by an exporting country voluntarily restraining the quantity of goods that can be exported out of that country during a specified period of time.

(ii) Such restrains originate primarily considerations and are imposed based on negotiation of the importer with the exporter.

(iii) The inducement for the exporter to agree to a VER is mostly to appease the importing country

(1 Mark)

(iv) VERs are a result of requests made by the importing country to provide a measure of protection for its domestic businesses that produces competing goods.

(v) VERs are often created because the exporting countries would prefer to impose their own restriction than risk sustaining worse terms from tariffs and/or quotas.

(vi) Producers in the importing country experience an increase in well-being, though, as there is decreased competition, increased in price, profits, etc.

(1 Mark)

(b)

Following are the general limitations in measurement of national income. GDP measures ignore the following:

i. Income distributions and, therefore, GDP per capita is a completely inadequate measure of welfare. Countries may have significantly different income distributions and, consequently, different levels of overall well-being for the same level of per capita income.

ii. Quality improvement in systems and processes due to technological as well as managerial innovations which reflect true growth in output from year to year.

iii. Productions hidden from government authorities, either because those engaged in it are evading taxes or because it is illegal (drugs, gambling etc.).

iv. Non-market production (with a few exception) and Non-economic contributors to well-being for example: health of a country's citizens, education levels, political participation, or other social and political factors that may significantly affect well-being levels.

(1 ½ Marks)

v. The dis-utility of loss of leisure time. We known that, other things remaining the same a country's GDP rises if the total hours of work increase.

vi. Economic 'bads' for example: crime, pollution, traffic congestion etc. which makes us worse off.

vii. The volunteer work and services rendered without remuneration undertaken in the economy, even though such work can contribute to social well-being as much as paid work.

viii. Many things that contribute to our economic welfare such as, leisure time, fairness, gender equality, security of community feeling etc..,

(1 ½ Marks)

(c)

1. Allocation function: A market economy is subject to serious malfunctioning in several basic respects. There is also the problem of nonexistence of market in a variety of situations. While private goods will be sufficiently provided by the market, public goods will not be produced in sufficient quantities by the market. Market failures which hold back the efficient allocation of resources.

In the absence of appropriate government intervention, market failures may occur and the resources are likely to be misallocated by too much production of certain goods or too little production of certain other goods. The allocation responsibility of the governments involves suitable corrective action when private markets fail to provide the right and combination of goods and services. Briefly put, market failures provide the rationale for government's allocation function.

(1 ½ Marks)

2. Redistribution Function: The outcomes of this growth have not spread evenly across the households. The distribution responsibility of the government arises from the fact that, left to the market, the distribution of income and wealth among individual in the society is likely to be skewed and therefore the government has to intervene to ensure a more desirable and just distribution.

The redistribution function of the government aims at:

• redistribution of income to achieve an equitable distribution of societal output among household

• advancing the well-being of those members of the society who suffer from deprivations of different types

• providing equality in income, wealth and opportunities

• providing security for people who have hardships, and

• ensuring that everyone enjoys a minimal standard of living

(1 ½ Marks)

(d)

i. Crowding out effect is the negative effect fiscal policy may generate when money from the private sector is crowded out' to the public sector.

ii. In other words, when spending by government in an economy replaces private spending the latter is said to be crowded out.

iii. For example, if government provided free computers to students, the demand from students for computers may not be forthcoming.

iv. When government increases it's spending by borrowing from the loanable funds from market, the demand for loans increases and this pushes the interest rates up.

v. Private investments are sensitive to interest rates and therefore some private investment spending is discouraged.

vi. Similarly, when government increases the budget deficit by selling bonds or treasury bills, the amount of money with the private sector decreases and consequently interest rates will be pushed.

vii. Because of government to much borrowing private investments are thrown out this is known as crowding out.

(2 Marks)

Q.8

(a)

(i) Common access resources or common pool resources are a special class of impure public good which are non-excludable as people cannot be excluded from using them. These are rival in nature and their consumption lessens the benefits available for others. This rival nature of common resources is what distinguishes them from pure public goods, which exhibit both non-excludability and non-rivalry in consumption.

Since price mechanism does not apply to common resources, producers and consumer do not pay for these resources and therefore, they overuse them and cause their depletion and degradation. This creates threat to the sustainability of these resources and, therefore, the availability of common access resources for future generations. **(2 Marks)**

Economist use them **'tragedy of the commons'** to describe the problem which occurs when rivalrous but non-excludable goods are overuse, to the disadvantage of the entire world. Example of common access resources are fishers, common pastures, rivers, sea, backwaters biodiversity etc.

(1 Marks)

(ii) Marginal Standing Facility (MSF):

1. MSF started in the year 2011. (RBI lender of last resort)

2. MSF refers to the facility under which schedule commercial bank can borrow additional amount up to 1% of NDTL for overnight purpose.

3. MSF will be activated when commercial banks have exhausted all borrowings option currently it is 4.65%.

4. Minimum amount to be borrowed 1 cr. or in multiplies of that.

5. Banks can borrow MSF on all working days except Saturday between 7 PM to 7.30 PM in Mumbai.

(1 ½ Marks)

Instrument	Interest rates
Reserve repo rate	Lower band
Repo rate	Middle band
MSF	Upper band

(0.5 Mark)

(b)

Common access resources or common pool resources are a special class of

Particulars	Industry A	Industry B	Industry C
Sale Price of Output	400 + 200 + 1,000 = 1,600	500 + 800 = 1,300	**600 + 500 = 1,100**
Less: Cost of Intermediate Consumption	100	400	**200 + 500 = 700**
Value Added by Industry	**1,500**	**900**	**400**

(3 Marks)

GDP at Market Price = **GNP at Market Prices** (no Net Factor Income from abroad **Less:** Indirect Taxes	2,800 (100)
Add: Subsidies	50
Gross National Product at Factor Cost	**2,750**
Less: Depreciation	(100)
Net National Product at Factor Cost	**2,650**
Less: Subsidies	(50)
Add: Indirect Taxes	100
Net National Product at Market Prices	**2,700**

(2 Marks)

Q.9

(a)

(i) International trade is the exchange of goods and services as well as resources between countries. It involves transactions between residents of different countries. Whereas domestic trade or internal trade involves exchange of goods and services within the domestic territory of a country.

Advantages of international trade? (MERITS)

International trade may lead to a lot of advantages for countries as it leads of opening up of the global economy leading to expansion of the domestic market internationally. Following are the arguments in the favour of international Trade:

- It is powerful stimulus to economic efficiency and contributes to economic growth and rising incomes.
- It includes companies to reap the quantitative and qualitative benefits of extended division of labour.
- Manufacturing capabilities and benefits from economics of large scale production.
- Reduction in domestic price due to increased competition thereby increasing the living standard of citizens.
- International trade provides access to new market and new material and enables sourcing of inputs and components internationally at competitive prices.
- Exports stimulate economic growth by creating jobs, which could potentially reduce poverty.

(1 ½ Marks)

Disadvantages of International Trade (DEMERITS)

- Possible negative labour market outcomes in terms of labour- saving technological change that depress demand for unskilled workers, loss of labourers bargaining power.
- Economic exploitation is a likely outcome when underprivileged countries become vulnerable to the growing political power of corporations operating globally.
- Excessive stress on exports and profit-driven exhaustion of natural resources due to unsustainable production and consumption.
- It may have adverse effect on the development of domestic industries and may even threaten the survival of infant industries.
- Risky dependence of underdeveloped countries on foreign nation impairs economic autonomy and endangers their political sovereignty.

- Instead of cooperation among nation, trade may breed rivalry on account of severe competition.

(1 ½ Marks)

(ii)

(a) $$\text{Credit Multiplier} = \frac{1}{\text{Required Reseve Ratio}}$$

$$\text{For RRR} = 0.015, \text{Credit Multiplier} = \frac{1}{0.015} = 66.667$$

(1 Mark)

(b) $$\text{Credit Creation} = \text{Initial Deposit} \times \frac{1}{\text{RRR}}$$

$$\text{For RRR} = 0.06, \text{Credit creation will be } 5200 \times \frac{1}{0.06} = 86.666.67$$

(1 Mark)

(b)

(i) Quasi Public Goods focuses on the mix

services that arise from the provision of the good. For example, if one gets sterilized against measles, it confers not only a private benefit to the individual, but also an external benefit because it reduces the chances getting infected of other person who are in contact with him. You can observe here that the external effect associated with the consumtion of a private good may have the characteristic of a public good. **(1 ½ Marks)**

The quasi-public goods or services, also called a near public (for e.g. education, health services) possess nearly all the qualities of the private goods and some of the benefits of public good. It is easy to keep people away from them by charging a price or fee. However, it is undesirable to keep people away from such goods because the society would be better off if more people consume them.

(1 ½ Marks)

(ii)

a. LAF started in year 2000. (RBI is Bankers Bank)

b. LAF is a window available with central bank known as discount window which provides financial accommodation to commercial banks

c. It helps at the time of Liquidity shortage and control short term Interest rate, through Repo and Reverse repo auction **(1 Mark)**

1. Repo Auction: It is a rate at which commercial bank borrows money from central bank by keeping some security mortgage which could be repurchased at later stage. Currently repo rate is 4% **Repo operation helps to inject liquidity into the market**

2. Reverse Repo: It is a percentage that central bank borrows from commercial bank by keeping securities as mortgage. Currently it is 3.35% Reverse repo operation absorbs liquidity in the system.

LAF is conducted at a fixed time on daily basis on all working days in Mumbai (excluding Saturdays).

(1 Mark)

Q.10

(a)

(i)   These limitations are as follows:

1.   One of the biggest problems with using discretionary fiscal policy to counteract fluctuations is the different types of lags involved in fiscal-policy action. There are significant lags are:

- Recognition lag: The economy is a complex phenomenon and   the state of the macroeconomic variable is usually not easily   comprehensible. Just as in case of any other policy, the government must first recognize the need for a policy change.

- Decision lag: Once the need for intervention is recognized, the government has to evaluate the possible alternative policies. Delays are likely to occur to decide on the most appropriate policy.

- Implementation lag: even when appropriate policy measures are   decided on, there are possible delays in bringing in legislation and implementing them.

- Impact lag: impact lag occurs when the outcomes of a policy are not visible for some time.

(1 ½ Marks)

2.   Fiscal policy changes may at time 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 vice versa.

3.   There are difficulties in instantaneously changing government' spending and 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 project which are already midway.

5.   Public works cannot be adjusted easily along with movements of the trade cycle because many huge projects such as highway and dams have long gestation period. Besides, some urgent public project cannot be postponed for reasons of expenditure cut to correct fluctuation caused by business cycles.

6.   Due to uncertainties, there are difficulties of forecasting when period of inflation or deflation may set in and also promptly determining the accurate policy to be undertaken.

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 an economy.

(1 ½ Marks)

(ii) Pump priming involves a one-shot injection of government expenditure into a depressed economy with the aim of boosting business confidence and encouraging larger private investment. It is a temporary fiscal stimulus in order to set off the multiplier process. The argument is that with a temporary injection of purchasing power into the economy through a rise in government spending financed by borrowing rather than taxes, it is possible   for government to bring about permanent recovery from a slump.   Pump priming was widely used by governments in the post-war era in order to maintain full employment; however, it became discredited later when it failed to halt rising unemployment and was held responsible for inflation.

(2 Marks)

(b)

(i) Monetary policy encompasses all actions of the central bank which are aimed at directly controlling the money supply and indirectly at regulating the demand for money.

Following are some of the important **objective of the Monetary Policy:**

The most commonly pursued objectives of monetary policy of the central banks across the world are maintenance of price stability (or controlling inflation) and achievement of high level of economy's growth and maintenance of full employment.

(0.5 Mark)

- To regulate the issue of bank notes and the keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage.
- To promote rapid economic growth, and price stability (inflation /deflation)
- To maintain a robust debt management.
- To sustain a moderate structure of interest rates to encourage investments,
- To maintain exchange rate stability and external balance of payment equilibrium
- To ensure an adequate flow of credit to the productive sectors
- To create an efficient market for government securities.

(2 ½ Marks)

(ii)

1. While national income is income earned by factors of production, Personal Income is the income received by the household sector including

2. Non-Profit Institutions Serving Households. Thus, national income is a measure of income earned and personal income is a measure of actual current income receipt of persons from all sources which may not be earned from productive activities during a given period of time.

3. In other words, it is the income 'actually paid out' to the household sector, but not necessarily earned. Examples of this include transfer payment such as social security benefits, unemployment compensation, welfare payment etc.

4. Individuals also contribute income which they do not actually receive; for example, undistributed corporate profits and the contribution of employers to social security. Personal income forms the basis for consumption expenditures and is derived from national income as follows:

(1 ½ Marks)

PI = NI + income received but not earned – income earned but received.

- Income received but not earned = Transfer in incomes
- Income earned but not received = Social security benefits, undistributed corporate profits

(0.5 Mark)

Q.11

(a)

(i) Milton Friedman (1956) extended Keynes' speculative money demand within the framework of assets price theory. Friedman treat the demand for money as nothing more than the application of a more general theory of demand for capital assets.

Demand for money is affected by the same factors as demand for any other assets, namely

1. Permanent income.
2. Relative return on assets. (Which incorporate risk).

Friedman maintains that it is permanent income and not current income that determines the demand for money. Permanent income which is Friedman's measure of wealth is the present expected value of all future income.

(1 ½ Marks)

Friedman identifies the following four determinates of the demand for money. The nominal demand for money:

- Is a function of total wealth, which is represented by permanent income divided by the discount rate, defined as the average return on the five asset classes namely money, bond, equity, physical capital and human capital.

- Is positively related to the price level, P. If the price level rises the demand for money increases and vice versa.

- Raises if the opportunity costs of money holding (i.e. returns on bonds and stock) decline and vice versa.

- Is influenced by inflation, a positive inflation rate reduces the real value of money balances, thereby increasing the opportunity coast of money holdings.

(1 ½ Marks)

(ii) Ad valorem tariff: An ad valorem tariff is levied as a constant percentage of the monetary value of one unit of the imported good.it is levied on the total value of the commodity

Duty or other charges levied on an item on the basis of its value and not on the basis of its quantity, size, weight, or other factor. **(2 Marks)**

(b)

(i) Depreciation lowers the relative price of a exports and raises the relative price of its imports. When a country's currency depreciates, foreigners find that its exports are cheaper and domestic residents find that imports from abroad are more expensive.

(0.5 Mark)

- Importers will be affected most as they will have to pay more rupees on importing products.

- A depreciation of domestic currency primarily increases the price of foreign goods relative to goods produced in the home country 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.

- By lowering exports prices, currency depreciation helps increase the international competitiveness of domestic industries, increases the volume of exports and promotes trade balance.

- When a country's currency depreciates, production for exports and of import substitutes become more profitable.
- The fiscal health of a country whose currency depreciates is likely to be affected with rising export earnings and import payments and consequent impact on current account balance.
- Depreciation is also likely to add to consumer price inflation in the short run, directly through its effect on prices of imported consumer goods and also due to increased demand for domestic goods.

(2 ½ Marks)

(ii) Features of private goods:

- Owner of private goods can exercise private property right and can prevent others from using the good or consuming their benefits.
- Private goods are 'excludable' i.e. it is possible to exclude or prevent consumers who have not paid for them from consuming them or having access to them
- Private goods do not have free rider problem. This means that the private goods will be available to only those persons who are willing to pay for it.
- Normally, the market will efficiently allocate resources for the production of private goods.
- The producer and seller will be able to generate more revenue thereby increasing their profit if they are able to increase the market demand for their products.
- Market equilibrium can be achieved in the production of private goods wherein the supply will always try to match the quantity demanded.

(2 Marks)

OR

(b)

(ii)

Foreign Portfolio Investment (FDI) also very commonly known as **Foreign Institutional Investment,** consists of securities and other financial assets passively held by foreign investors. It does not provide the investor with direct ownership of financial assets and is relatively liquid depending on the volatility of the market.

Unlike FDI, portfolio capital, in general, moves to investment in financial stocks, bonds and other financial instruments and is effected largely by individuals and institutions through the mechanism of capital market. These flows of financial capital have their immediate effect on balance or exchange rates rather than on production or income generation.

(1 ½ Marks)

Foreign portfolio investment (FDI) is not concerned with either manufacture of goods or with provision of services. Such investor also do not have any intention of exercising voting power or controlling or managing the affairs of the company in whose securities they invest. The singular intention of a foreign portfolio investor is to earn a remunerative return through investment in foreign securities

(0.5 Mark)