MOCK TEST PAPER 2

INTERMEDIATE (NEW): GROUP – II

PAPER – 8: FINANCIAL MANAGEMENT & ECONOMICS FOR FINANCE

8A : FINANCIAL MANAGEMENT

SUGGESTED ANSWERS/ HINTS

1. (a) (i) Cost of Equity Capital (K_e):

$$K_e = \frac{\text{Expected dividend per share}(D_1)}{\text{Market price per share}(P_0)} + \text{Growth rate}(g)$$

$$= \frac{₹\ 5 \times 1.05}{₹\ 25} + 0.05 = 26\%$$

(ii) Cost of Debenture (K_d):

Using Present Value method (or YTM)

Identification of relevant cash flows

Year	Cash flows
0	Current market price (P_0) = ₹ 95
1 to 10	Interest net of tax [I(1-t)] = 12% of ₹ 100 (1 – 0.30) = ₹ 8.40
10	Redemption value (RV) = ₹ 100 (1.12) = ₹ 112

Calculation of Net Present Values (NPV) at two discount rates

Year	Cash flows	Discount factor @ 9% (L)	Present Value	Discount factor @ 10% (H)	Present Value
0	(95)	1.0000	(95.00)	1.0000	(95.00)
1 to 10	8.40	6.4176	53.91	6.1445	51.61
10	112	0.4224	47.31	0.3855	43.18
NPV			+6.22		-0.21

Calculation of IRR

$$IRR = L + \frac{NPV_L}{NPV_L - NPV_H}(H - L)$$

$$= 9\% + \frac{6.22}{6.22 - (-0.21)}(10\% - 9\%) = 9\% + \frac{6.22}{6.43} = 9.97\%$$

Therefore, K_d = 9.97%

(b) Calculation of Indifference point between the two alternatives of financing.

Alternative-I By issue of 9,00,000 equity shares of ₹10 each amounting to ₹ 90 lakhs. No financial charges are involved.

Alternative-II By raising the funds in the following way:

Debt = ₹ 60 lakhs

Equity = ₹ 30 lakhs (3,00,000 equity shares of ₹ 10 each)

Interest payable on debt = $60,00,000 \times \frac{18}{100}$ = ₹ 10,80,000

The difference point between the two alternatives is calculated by:

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

$$\frac{(EBIT - 0)(1-0.30)}{9,00,000} = \frac{(EBIT - 10,80,000)(1-0.30)}{3,00,000}$$

$$\frac{(EBIT)(0.70)}{9,00,000} = \frac{(EBIT - 10,80,000)(0.70)}{3,00,000}$$

$$\frac{EBIT(0.70)}{3} = \frac{0.70(EBIT - 10,80,000)}{1}$$

EBIT = 3EBIT–32,40,000

–2 EBIT = –32,40,000

EBIT = $\frac{32,40,000}{2}$

EBIT = ₹ 16,20,000

Therefore, at EBIT of ₹ 16,20,000, earnings per share for the two alternatives is equal.

(c)

Sales in units	**12,000** **(₹)**	**10,000** **(₹)**
Sales Value	1,44,000	1,20,000
Variable Cost	(96,000)	(80,000)
Contribution	48,000	40,000
Fixed expenses	(20,000)	(20,000)
EBIT	28,000	20,000
Debenture Interest	(10,000)	(10,000)
EBT	18,000	10,000
Tax @ 30%	(5,400)	(3,000)
Profit after tax (PAT)	12,600	7,000
(i) Financial Leverage= $\frac{EBIT}{EBT}$	= $\frac{₹\ 28,000}{₹\ 18,000}$ = 1.56	= $\frac{₹\ 20,000}{₹\ 10,000}$ = 2

(ii) Operating leverage = $\frac{\text{Contribution}}{\text{EBIT}}$	= $\frac{₹\ 48,000}{₹\ 28,000}$ = 1.71	= $\frac{₹\ 40,000}{₹\ 20,000}$ = 2
(iii) Earnings per share (EPS)	= $\frac{₹\ 12,600}{₹\ 1,000}$ = ₹ 12.6	= $\frac{₹\ 7,000}{₹\ 1,000}$ = ₹ 7
Decrease in EPS	= ₹ 12.6 – ₹ 7 = ₹ 5.6	
% decrease in EPS	= $\frac{5.6}{12.6}$ X 100 = 44.44%	

(d) **(i)** The EPS of the firm is ₹ 10 (i.e. ₹ 5,00,000/ 50,000). r = 5,00,000/ 50,00,000 = 10%. The P/E Ratio is given at 12.5 and the cost of capital, K_e, may be taken at the inverse of P/E ratio. Therefore, K_e is 8 (i.e., 1/12.5). The firm is distributing total dividends of ₹ 3,75,000 among 50,000 shares, giving a dividend per share of ₹ 7.50. The value of the share as per Walter's model may be found as follows:

$$P = \frac{D + \frac{r}{K_e}(E - D)}{K_e} = \frac{7.5 + \frac{0.1}{0.08}(10 - 7.5)}{0.08} = ₹\ 132.81$$

The firm has a dividend payout of 75% (i.e., ₹ 3,75,000) out of total earnings of ₹ 5,00,000. Since, the rate of return of the firm, r, is 10% and it is more than the K_e of 8%, therefore, by distributing 75% of earnings, the firm is not following an optimal dividend policy. The optimal dividend policy for the firm would be to pay zero dividend and in such a situation, the market price would be,

$$\frac{0 + \frac{0.1}{0.08}(10 - 0)}{0.08} = ₹\ 156.25$$

So, theoretically, the market price of the share can be increased by adopting a zero payout.

(ii) The P/E ratio at which the dividend policy will have no effect on the value of the share is such at which the K_e would be equal to the rate of return, r, of the firm. The K_e would be 10% (= r) at the P/E ratio of 10. Therefore, at the P/E ratio of 10, the dividend policy would have no effect on the value of the share.

(iii) If the P/E is 8 instead of 12.5, then the Ke which is the inverse of P/E ratio, would be 12.5 and in such a situation k_e> r and the market price, as per Walter's model would be:

$$P = \frac{D + \frac{r}{K_e}(E - D)}{K_e} = \frac{7.5 + \frac{0.1}{0.125}(10 - 7.5)}{0.125} = ₹\ 76$$

2. **(In ₹ '000)**

Ratio	Formula	2018–19	2019–20	2020–21	Industry Average
Current ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	$\frac{1,320}{520}$	$\frac{6,200}{3,456}$	$\frac{8,912}{5,560}$	2.30:1

		= 2.54	= 1.80	= 1.60	
Acid test ratio (quick ratio)	$\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	$\frac{680}{520}$ = 1.31	$\frac{3,200}{3,456}$ = 0.93	$\frac{4,412}{5,560}$ = 0.79	1.20:1
Receivable turnover ratio	$\frac{\text{Credit Sales}}{\text{Average Accounts Receivable}}$	$\frac{3,600}{(600+600)/2}$ = 6	$\frac{8,640}{(600+3,000)/2}$ = 4.80	$\frac{14,400}{(3,000+4,200)/2}$ = 4	7 times
Inventory turnover ratio	$\frac{\text{COGS}}{\text{Average Inventory}}$	$\frac{2,480}{(640+640)/2}$ = 3.88	$\frac{5,664}{(640+3,000)/2}$ = 3.11	$\frac{9,600}{(3,000+4,500)/2}$ = 2.56	4.85 times
Long-term debt to total debt	$\frac{\text{Long term Debt}}{\text{Total Debt}} \times 100$	$\frac{1,472}{1,992} \times 100$ = 73.90%	$\frac{2,472}{5,928} \times 100$ = 41.70%	$\frac{5,000}{10,560} \times 100$ = 47.35%	24%
Debt-to-equity ratio	$\frac{\text{Long term Debt}}{\text{Shareholders' Equity}} \times 100$	$\frac{1,472}{3,128} \times 100$ = 47.06%	$\frac{2,472}{5,272} \times 100$ = 46.89%	$\frac{5,000}{7,752} \times 100$ = 64.50%	35%
Net profit ratio	$\frac{\text{Net Profit}}{\text{Sales}} \times 100$	$\frac{728}{4,000} \times 100$ = 18.2%	$\frac{1,344}{9,600} \times 100$ = 14%	$\frac{1,680}{16,000} \times 100$ = 10.5%	18%
Return on total assets	$\frac{\text{Net Profit after taxes}}{\text{Total assets}} \times 100$	$\frac{728}{5,120} \times 100$ = 14.22%	$\frac{1,344}{11,200} \times 100$ = 12%	$\frac{1,680}{18,312} \times 100$ = 9.17%	10%
Interest coverage ratio (times interest earned)	$\frac{\text{EBIT}}{\text{Interest}}$	$\frac{1,160}{120}$ = 9.67	$\frac{2,236}{316}$ = 7.08	$\frac{3,080}{680}$ = 4.53	10

Conclusion:

In the last two years, the current ratio and quick ratio are less than the ideal ratio (2:1 and 1:1 respectively) indicating that the company is not having enough resources to meet its current obligations. Receivables are growing slower. Inventory turnover is slowing down as well, indicating a relative build-up in inventories or increased investment in stock. High Long-term debt to total debt ratio and Debt to equity ratio compared to that of industry average indicates high dependency on

long term debt by the company. The net profit ratio is declining substantially and is much lower than the industry norm. Additionally, though the Return on Total Asset(ROTA) is near to industry average, it is declining as well. The interest coverage ratio measures how many times a company can cover its current interest payment with its available earnings. A high interest coverage ratio means that an enterprise can easily meet its interest obligations, however, it is declining in the case of Jensen & Spencer and is also below the industry average indicating excessive use of debt or inefficient operations.

On overall comparison of the industry average of key ratios than that of Jensen & Spencer, the company is in deterioration position. The company's profitability has declined steadily over the period. However, before jumping to the conclusion relying only on the key ratios, it is pertinent to keep in mind the industry, the company dealing in with i.e. manufacturing of pharmaceutical drugs. The pharmaceutical industry is one of the major contributors to the economy and is expected to grow further. After the covid situation, people are more cautious towards their health and are going to spend relatively more on health medicines. Thus, while analysing the loan proposal, both the factors, financial and non-financial, needs to be kept in mind.

3. Option I : Cost of travel, in case Video Conferencing facility is not provided

Total Trip = No. of Locations × No. of Persons × No. of Trips per Person = 7×2×2 = 28 Trips

Total Travel Cost (including air fare, hotel accommodation and meals) (28 trips × ₹ 27,000 per trip) **= ₹ 7,56,000**

Option II : Video Conferencing Facility is provided by Installation of Own Equipment at Different Locations

Cost of Equipment at each location (₹ 8,25,000 × 8 locations) = ₹ 66,00,000

Economic life of Machines (5 years). Annual depreciation (66,00,000/5) = ₹ 13,20,000

Annual transmission cost (48 hrs. transmission × 8 locations × ₹ 300 per hour) = ₹ 1,15,200

Annual cost of operation (13,20,000 + 1,15,200) **= ₹ 14,35,200**

Option III : Engaging Video Conferencing Facility on Rental Basis

Rental cost (48 hrs. × 8 location × ₹ 1,500 per hr) = ₹ 5,76,000

Telephone cost (48 hrs.× 8 locations × ₹ 400 per hr.) = ₹ 1,53,600

Total rental cost of equipment (5,76,000 + 1,53,600) **= ₹ 7,29,600**

Analysis: The annual cash outflow is minimum, if video conferencing facility is engaged on rental basis. Therefore, Option III is suggested.

4. Forecast Profit and Loss Account for the period 01.04.2020 to 31.03.2021

Particulars	₹	Particulars	₹
Materials consumed 1,20,000 @ ₹ 3	3,60,000	By Sales 1,20,000 @ ₹ 5	6,00,000
Direct wages : 1,20,000 @ ₹ 0.50	60,000		
Overheads : 1,20,000 @ ₹ 1	1,20,000		

Gross profit c/d	60,000		
	6,00,000		**6,00,000**
Debenture interest (10% of 1,00,000)	10,000	By gross profit b/d	60,000
Net profit c/d	50,000		
	60,000		**60,000**

Working Capital Requirement Forecast for the year 01.04.2020 to 31.03.2021

Particulars	**Period (Months)**	**Total (₹)**	**Current Assets (₹)**				**Current Liabilities (₹)**
			Raw materials	Work-in-progress	Finished goods	Debtors	Creditors
1. Material							
In store	2		60,000				
In work-in-progress	1			30,000			
In finished goods	3				90,000		
Credit to debtors	3					90,000	
	9						
Less : Credit from creditors	2						60,000
Net block period	**7**	**2,10,000**					
2. Wages:							
In work-in-progress	1/2			2,500			
In finished goods	3				15,000		
Credit to debtors	3					15,000	
	6½						
Less : Time lag in payment	1						5,000

Net block period	**5 ½**	**27,500**					
3. Overheads:							
In work-in-progress	½			5,000			
In finished goods	3				30,000		
Credit to debtors	3					30,000	
Net block period	**6½**	**65,000**					
4. Profit							
Credit to debtors	3					15,000	
Net block period	**3**	**15,000**					
Total (₹)		**3,17,500**	**60,000**	**37,500**	**1,35,000**	**1,50,000**	**65,000**

Forecast Balance Sheet as on 31.03.2021

	(₹)			(₹)
Issued share capital	6,00,000	Fixed Assets		4,50,000
Profit and Loss A/c	50,000	Current Assets:		
10% Debentures	1,00,000	Stock:		
Sundry creditors	65,000	Raw materials	60,000	
Bank overdraft-		Work-in-progress	37,500	
Balancing figure	17,500	Finished goods	1,35,000	2,32,500
		Debtors		1,50,000
	8,32,500			**8,32,500**

The Total amount of working capital, thus, stands as follows:	₹
Requirement as per working capital	3,17,500
Less: Bank overdraft as per balance sheet	17,500
Net requirement	3,00,000

Notes:

1. Average monthly production: 1,20,000 ÷ 12 = 10,000 units
2. Average cost per month:

Raw Material	10,000 × (₹ 5 × 0.6) = ₹ 30,000
Direct wages	10,000 × (₹ 5 × 0.1) = ₹ 5,000
Overheads	10,000 × (₹ 5 × 0.2) = ₹ 10,000

3. Average profit per month: 10,000 × (₹ 5 × 0.1) = ₹ 5,000
4. Wages and overheads accrue evenly over the period and, hence, are assumed to be completely introduced for half the processing time.

5. (a) (i) Calculation of Net Present Value (NPV)

Year	Prob. = 0.2		Prob. = 0.7		Prob. = 0.1				
	Cash flow	Probable cash flow	Cash flow	Probable cash flow	Cash flow	Probable cash flow	Total Cash flow	PVF@ 12%	PV of Total cash flow
0							(2,25,00,000)	1.0000	(2,25,00,000)
1 to 5	50,00,000	10,00,000	75,00,000	52,50,000	1,00,00,000	10,00,000	72,50,000	3.6048	2,61,34,800
5	0	0	50,00,000	35,00,000	75,00,000	7,50,000	42,50,000	0.5674	24,11,450
Net Present Value (NPV)									**60,46,250**

(ii) Worst and Best case is the case where expected annual cash inflows are minimum and maximum respectively.

Calculation of Worst Case and Best Case NPV:

Year	PVF@ 12%	Worst case		Best Case	
		Cash flows	PV of Cash flows	Cash flows	PV of Cash flows
0	1.0000	(2,25,00,000)	(2,25,00,000)	(2,25,00,000)	(2,25,00,000)
1 to 5	3.6048	50,00,000	1,80,24,000	1,00,00,000	3,60,48,000
5	0.5674	0	0	75,00,000	42,55,500
NPV			**(44,76,000)**		**1,78,03,500**

Worst case NPV = ₹ (44,76,000)

Best Case NPV = ₹ 1,78,03,500

(iii) The cash flows are perfectly positively correlated over time means cash flow in first year will be cash flows in subsequent years. The cash flow of ₹ 50,00,000 is the worst case cash flow and its probability is 20%, thus, possibility of worst case is 20%.

(b) 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.

6. (a)

Sl. No.	Type of Preference Shares	Salient Features
1	Cumulative	Arrear Dividend will accumulate.
2	Non-cumulative	No right to arrear dividend.
3	Redeemable	Redemption should be done.
4	Participating	Can participate in the surplus which remains after payment to equity shareholders.
5	Non- Participating	Cannot participate in the surplus after payment of fixed rate of Dividend.
6	Convertible	Option of converting into equity Shares.

(b) (i) **Clean packing credit:** This is an advance made available to an exporter only on production of a firm export order or a letter of credit without exercising any charge or control over raw material or finished goods. It is a clean type of export advance. Each proposal is weighed according to particular requirements of the trade and credit worthiness of the exporter. A suitable margin has to be maintained. Also, Export Credit Guarantee Corporation (ECGC) cover should be obtained by the bank.

(ii) **Packing credit against hypothecation of goods:** Export finance is made available on certain terms and conditions where the exporter has pledge able interest and the goods are hypothecated to the bank as security with stipulated margin. At the time of utilising the advance, the exporter is required to submit, along with the firm export order or letter of credit relative stock statements and thereafter continue submitting them every fortnight and/or whenever there is any movement in stocks.

(iii) **Packing credit against pledge of goods:** Export finance is made available on certain terms and conditions where the exportable finished goods are pledged to the banks with approved clearing agents who will ship the same from time to time as required by the exporter. The possession of the goods so pledged lies with the bank and is kept under its lock and key.

(iv) **E.C.G.C. guarantee:** Any loan given to an exporter for the manufacture, processing, purchasing, or packing of goods meant for export against a firm order qualifies for the packing credit guarantee issued by Export Credit Guarantee Corporation.

(v) **Forward exchange contract:** Another requirement of packing credit facility is that if the export bill is to be drawn in a foreign currency, the exporter should enter into a forward exchange contact with the bank, thereby avoiding risk involved in a possible change in the rate of exchange.

(c) (i) **Callable bonds:** A callable bond has a call option which gives the issuer the right to redeem the bond before maturity at a predetermined price known as the call price (Generally at a premium).

(ii) **Puttable bonds:** Puttable bonds give the investor a put option (i.e. the right to sell the bond) back to the company before maturity.

OR

(c) **Bridge Finance:** Bridge finance refers to loans taken by a company normally from commercial banks for a **short period because of pending disbursement of loans sanctioned by financial institutions**. Though it is of short-term nature but since it is an important step in the facilitation of long-term loan, therefore it is being discussed along with the long term sources of funds. Normally, it takes time for financial institutions to disburse loans to companies. However, once the loans are approved by the term lending institutions, companies, in order not to lose further time in starting their projects, arrange short term loans from commercial banks. The bridge loans are repaid/ adjusted out of the term loans as and when disbursed by the concerned institutions. Bridge loans are normally secured by hypothecating movable assets, personal guarantees and demand promissory notes. Generally, the rate of interest on bridge finance is higher as compared with that on term loans

MOCK TEST PAPER 2

INTERMEDIATE (NEW): GROUP – II

PAPER – 8: FINANCIAL MANAGEMENT & ECONOMICS FOR FINANCE

8B : ECONOMICS FOR FINANCE

SUGGESTED ANSWERS/ HINTS

1. (a) Production taxes are paid in relation to production and are independent of the volume of actual production. Examples of production taxes are land revenues, stamps and registration fees and tax on profession, factory license fee, taxes to be paid to the local authorities, pollution tax etc.

   Product taxes are paid on per unit of product. Examples of product taxes are excise duties, sales tax, service tax and import-export duties.

   (b) Circular flow of income refers to the continuous circulation of production, income generation and expenditure involving different sectors of the economy. There are three different interlinked phases in a circular flow of income, namely: production, distribution, and disposition.

   (i) In the production phase, firms produce goods and services with the help of factor services.

   (ii) In the income or distribution phase, the flow of factor incomes in the form of rent, wages, interest, and profits from firms to the households occurs

   (iii) In the expenditure or disposition phase, the income received by different factors of production is spent on consumption goods and services and investment goods. This expenditure leads to further production of goods and services and sustains the circular flow.

   (c) The multiplier concept is central to Keynes's theory because it explains how shifts in investment caused by changes in business expectations set off a process that causes not only investment but also consumption to vary. The multiplier shows how shocks to one sector are transmitted throughout the economy. Increase in income due to increase in initial investment, does not go on endlessly. If the increased income goes out of the cycle of consumption expenditure, there is a leakage from income stream which reduces the effect of multiplier. The more powerful these leakages are the smaller will be the value of multiplier.

   (d) $Y = C + I$

   $Y = 40 + 0.2Y + 30 + 0.3Y$

   $Y = 70 + 0.5Y$

   $Y = 70 / 0.5$

   $Y = 140$

2. (a) The significance of fiscal policy as a strategy for achieving certain socio-economic objectives was not recognized or widely acknowledged before 1930 due to the faith in the limited role of government advocated by the then prevailing laissez- faire approach. Governments of all countries pursue innumerable policies to accomplish their economic goals such as rapid economic growth, equitable distribution of wealth and income, reduction of poverty, price stability, exchange rate stability, full-employment, balanced regional development etc. Government budget is one among the most powerful instruments of economic policy.

   Fiscal policy 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.

(b) The term money supply denotes the total quantity of money available to the people in an economy. The quantity of money at any point of time is a measurable concept.

Rationale of money supply:

- It facilitates analysis of monetary developments in order to provide deeper understanding of the causes of money growth.
- It is essential from a monetary policy perspective as it provides a framework to evaluate whether the stock of money in the economy is consistent with the standards for price stability and to understand the nature of deviations from this standard. The central banks all over the world adopt monetary policy to stabilise price level and GDP growth by directly controlling the supply of money. This is achieved mainly by managing the quantity of monetary base. The success of monetary policy depends to a large extent on the controllability of the monetary base and the money supply.

(c) GDPmp = Private consumption expenditure + Gross Private (both fixed and inventories) + Gross expenditure (Central & State) + Net Exports

= 5000+ 400 + 200 + 700 + 800 + (1200-900)

= 7400cr

National Income = GDPmp – Net Indirect Taxes

= 7400-6500-600

= 300cr

3 (a) The operating framework relates to all aspects of implementation of monetary policy

- The operating targets refer to the financial variables that can be controlled by the central bank to a large extent through the monetary policy instruments.
- The intermediate targets are variables which the central bank can hope to influence to a reasonable degree through the operating targets. The intermediate targets display a predictable and stable relationship with the goal variables.
- The monetary policy instruments are the various tools that a central bank can use to influence money market and credit conditions and pursue its monetary policy objectives. The day-to-day implementation of monetary policy by central banks through various instruments is referred to as 'operating procedures.

In general, the direct instruments comprise of:

(a) the required cash reserve ratios and liquidity reserve ratios prescribed from time to time.

(b) directed credit which takes the form of prescribed targets for allocation of credit to preferred sectors

(c) administered interest rates wherein the deposit and lending rates are prescribed by the central bank.

The indirect instruments mainly consist of:

(a) Repos

(b) Open market operations

(c) Standing facilities, and

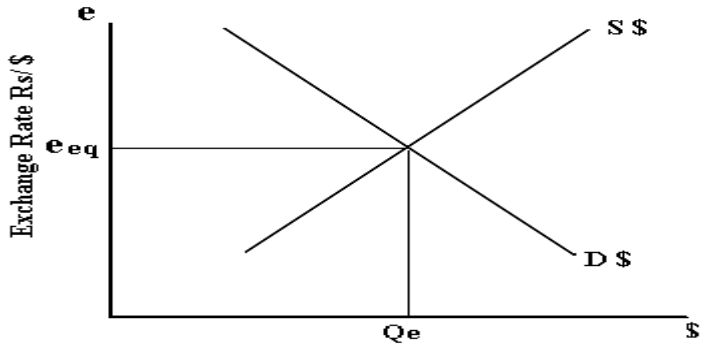
(d) Market-based discount window.

(b) **As** you already know, the key framework for analyzing prices is the operation of forces of supply and demand in markets. Usually, the supply of and demand for foreign exchange in the domestic foreign exchange market determine the external value of the domestic currency, or in other words, a country's exchange rate.

Individuals, institutions, and governments participate in the foreign exchange market for a number of reasons. On the demand side, people desire foreign currency to:

- purchase goods and services from another country
- for unilateral transfers such as gifts, awards, grants, donations or endowment.
- to make investment income payments abroad
- to purchase financial assets, stocks, or bonds abroad
- to open a foreign bank account
- to acquire direct ownership of real capital, and
- for speculation and hedging activities related to risk-taking or risk- avoidance activity

Determination of Nominal Exchange Rate



The equilibrium rate of exchange is determined by the interaction of the supply and demand for a particular foreign currency. In figure the demand curve (D$) and supply curve (S$) of dollars intersect to determine equilibrium exchange rate.

(c) There are four major reasons for market failure. They are:

- Market power,
- Externalities,
- Public goods, and
- Incomplete information

Market Power: Market power is the ability of a firm to profitably raise the market price of a good or service over its marginal cost.

Externalities: The unique feature of an externality is that it is initiated and experienced not through the operation of the price system, but outside the market. Since it occurs outside the price mechanism, it has not been compensated for, or in other words it is uninternalized or the cost of it is not borne by the parties.

Public Goods: A public good is defined as one which all enjoy in common in the sense that everyone's consumption of such a good lead to no subtraction from any other individuals' consumption of that good.

Incomplete information: Information failure is widespread in numerous market exchanges. When this happens misallocation of scarce resources takes place and equilibrium price, and quantity is not established through price mechanism. This results in market failure.

(d) Foreign portfolio investment (FPI) is not concerned with either manufacture of goods or with provision of services. Such investors 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 sole intention of a foreign portfolio investor is to earn a remunerative return through investment in foreign securities and is primarily concerned about the safety of their capital, the likelihood of appreciation in its value, and the return generated.

- Portfolio capital moves to a recipient country which has revealed its potential for higher returns and profitability.
- Investment is only in financial assets
- Only short-term interest and generally remain invested for short periods
- Relatively easy to withdraw
- Not accompanied by technology transfer
- No direct impact on employment of labour and wages
- No abiding interest in management and control
- Securities are held purely as a financial investment and no significant degree of influence on the management of the enterprise

4 (a) Countervailing duties are tariffs that aim to offset the artificially low prices charged by exporters who enjoy export subsidies and tax concessions offered by the governments in their home country. If a foreign country does not have a comparative advantage in a particular good and a government subsidy allows the foreign firm to be an exporter of the product, then the subsidy generates a distortion from the free-trade allocation of resources. In such cases, CVD is charged in an importing country to negate the advantage that exporters get from subsidies to ensure fair and market-oriented pricing of imported products and thereby protecting domestic industries and firms.

(b) The crowding out view is that a rapid growth of government spending leads to a transfer of scarce productive resources from the private sector to the public sector where productivity might be lower. 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 economic growth. Crowding out effect is the negative effect fiscal policy may generate when money from the private sector is 'crowded out' to the public sector.

During deep recessions, crowding-out is less likely to happen as private sector investment is already minimal and therefore there is only insignificant private spending to crowd out. Moreover, during a recession phase the government would be able to borrow from the market without increasing interest rates.

(c) Economists use the term to describe the problem which occurs when rivalrous but non excludable goods are overused to the disadvantage of the entire world. The term "commons" is derived from the traditional English legal term of "common land" where farmers/peasants would graze their livestock, hunt, and collect wild plants and other produce. Everyone has access to a commonly held pasture; there are no rules about sustainable numbers for grazing. The outcome of the individual rational economic decisions of cattle owners was market failure because these actions resulted in degradation, depletion or even destruction of the resource leading to welfare loss for the entire society.

(d) The estimates of national income show the composition and structure of national income in terms of different sectors of the economy, the periodical variations in them and the broad sectoral shifts in an

economy over time. It is also possible to make temporal and spatial comparisons of the trend and speed of economic progress and development. Using this information, the government can fix various sector-specific development targets for different sectors of the economy and formulate suitable development plans and policies to increase growth rates.

5 (a) New Trade Policy helps in understanding why developed and big countries trade partners are when they are trading similar goods and services. These countries constitute more than 50% of world trade. This is particularly true in key economic sectors such as electronics, IT, food, and automotive. NTT argues that, because of substantial economies of scale and network effects, it pays to export phones to sell in another country. Those countries with the advantages will dominate the market, and the market takes the form of monopolistic competition.

According to NTT, two key concepts give advantages to countries that import goods to compete with products from the home country:

Economies of Scale: As a firm produces more of a product, its cost per unit keeps going down. So, if the firm serves domestic as well as foreign market instead of just one, then it can reap the benefit of large scale of production consequently the profits are likely to be higher.

Network effects refer to the way one person's value for a good or service is affected by the value of that good or service to others. The value of the product or service is enhanced as the number of individuals using it increases. This is also referred to as the 'bandwagon effect'. Consumers like more choices, but they also want products and services with high utility, and the network effect increases utility obtained from these products over others.

(b) Demerit goods are goods which are believed to be socially undesirable. The consumption of demerit goods imposes significant negative externalities on the society as a whole and therefore the private costs incurred by individual consumers are less than the social costs experienced by the society. The production and consumption of demerit goods are likely to be more than optimal under free markets. The government should therefore intervene in the marketplace to discourage their production and consumption. Imposing unusually high taxes on producing or purchasing the good making them very costly and unaffordable to many is perhaps the most commonly used method for reducing the consumption of a demerit good.

(c) 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 vice versa. The imitation of fiscal policy is :-

- There are difficulties in instantaneously changing governments' spending and taxation policies.
- 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 already midway.
- 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.
- Due to uncertainties, there are difficulties of forecasting when a period of inflation or deflation may set in and promptly determining the accurate policy to be undertaken.
- There are possible conflicts between different objectives of fiscal policy such that a policy designed to achieve one goal may adversely affect another.
- Supply-side economists are of the opinion that certain fiscal measures will cause disincentives
- Deficit financing increases the purchasing power of people.
- Increase is government borrowing creates perpetual burden on even future generations as debts have to be repaid.

(d) Trade Policy encompasses all instruments that government may use to promote or restrict imports and exports.

Export related measures are:

1. Ban on export.
2. Export Taxes.
3. Export Subsidies and incentives.
4. Voluntary Export Restraints

Over the past few decades, significant transformations are happening in terms of growth as well as terms of flows and pattern of global trade. The increasing importance of developing countries has been a salient feature of the shitting global trade patterns.