SUGGESTED SOLUTION

CA INTERMEDIATE N'19

SUBJECT- F.M. AND ECONOMICS

Test Code – CIM 8453

BRANCH - () (Date :)

ANSWER -1

ANSWER -A

(i) **Cost of Equity Share Capital (K$_e$)**

$$K_e = \frac{D_0(1+g)}{P_0} + g = \frac{25\% \text{ of } ₹\,4\,(1+0.10)}{₹\,50} + 0.10 = \frac{₹\,1.10}{₹\,50} + 0.10 = \textbf{0.122 or 12.2\%}$$

(ii) **Cost of Debt (K$_d$)**

$$K_d = \frac{\text{Interest}}{\text{Net Proceeds}} \times 100 \times (1-t)$$

Interest on first ₹ 2,00,000 @ 10% = ₹ 20,000

Interest on next ₹ 2,00,000 @ 15% = ₹30,000

$$K_d = \frac{50,000}{4,00,000} \times (1 - 0.3) = \textbf{0.0875 or 8.75 \%}$$

(iii) **Weighted Average Cost of Capital (WACC)**

Source of capital	Amount (₹)	Weights	Cost of Capital (%)	WACC (%)
Equity shares	6,00,000	0.60	12.20	7.32

| Debt | 4,00,000 | 0.40 | 8.75 | 3.50 |
| Total | 10,00,000 | 1.00 | | **10.82** |

Alternatively Cost of Equity Share Capital (K$_e$) can be calculated as

$$K_e = \frac{D}{P_0} + g = \frac{25\% \text{ of } ₹\,4}{₹\,50} + 0.10 = \frac{₹\,1.00}{₹\,50} + 0.10 = 0.120 \text{ or } 12.00\%$$

Accordingly

Weighted Average Cost of Capital (WACC)

Source of capital	Amount (₹)	Weights	Cost of Capital (%)	WACC (%)
Equity shares	6,00,000	0.60	12.00	7.20
Debt	4,00,000	0.40	8.75	3.50
Total	10,00,000	1.00		**10.70**

(5 MARKS)

ANSWER –B

The possible outcomes of Project x and Project y are as follows

Estimates	Project X				Project Y			
	Estimated Annual Cash inflows (Rs.)	PVF @ 14% for 8 years	PV of Cash flow (Rs.)	NPV (Rs.)	Estimated Annual Cash inflows (Rs.)	PVF @ 14% for 8 years	PV of Cash flow (Rs.)	NPV (Rs.)
Pessimistic	26,000	4.639	1,20,614	**614**	12,000	4.639	55,668	**(-64,332)**
Most likely	28,000	4.639	1,29,892	**9,892**	28,000	4.639	1,29,892	**9,892**
Optimistic	36,000	4.639	2,41,228	**47,004**	52,000	4.639	2,41,228	**1,21,228**

In pessimistic situation project X will be better as it gives low but positive NPV whereas Project Y yield highly negative NPV under this situation. In most likely situation both the project will give same result. However, in optimistic situation Project Y will be better as it will gives very high NPV. So, project X is a risk less project as it gives positive NPV in all the situation whereas Y is a risky project as it will result into negative NPV in pessimistic situation and highly positive NPV in optimistic situation. So acceptability of project will largely depend on the risk taking capacity (Risk seeking/ Risk aversion) of the management.

(5 MARKS)

ANSWER – C

(i) Degree of operating leverage $= \dfrac{\text{\% Change in Operating income}}{\text{\% Change in Revenues}}$

A Ltd. = 0.22 / 0.35 = 0.63

B Ltd. = 0.35 / 0.24 = 1.46

C Ltd. = 0.26 / 0.29 = 0.90

D Ltd. = 0.30 / 0.32 = 0.94

It is level specific.

(ii) High operating leverage leads to high beta. So when operating leverage is lowest i.e. 0.63, Beta is minimum (1) and when operating leverage is maximum i.e. 1.46, beta is highest i.e. 1.65

(5 MARKS)

ANSWER – D

(i) Walter's model is given by

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

Where

P = Market price per share.

E = Earnings per share = ₹ 5

D = Dividend per share = ₹ 3

R = Return earned on investment = 15%

K_e = Cost of equity capital = 12%

$$P = \frac{3 + \dfrac{0.15}{0.12}(5 - 3)}{0.12} = ₹\,45.83$$

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

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

(5 MARKS)

ANSWER -2

    (i) Computation of EPS under three-financial plans Plan

       I: Equity Financing

	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
EBIT	20,000	40,000	80,000	1,20,000	2,00,000
Interest	0	0	0	0	0
EBT	20,000	40,000	80,000	1,20,000	2,00,000
Less: Tax @ 50%	10,000	20,000	40,000	60,000	1,00,000
PAT	10,000	20,000	40,000	60,000	1,00,000
No. of equity shares	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000

	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
EPS	0.10	0.20	0.40	0.60	1

(2 MARKS)

Plan II: Debt – Equity Mix

	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
EBIT	20,000	40,000	80,000	1,20,000	2,00,000
Less: Interest	40,000	40,000	40,000	40,000	40,000
EBT	(20,000)	0	40,000	80,000	1,60,000
Less: Tax @ 50%	10,000*	0	20,000	40,000	80,000
PAT	(10,000)	0	20,000	40,000	80,000
No. of equity shares	50,000	50,000	50,000	50,000	50,000
EPS	(Rs. 0.20)	0	0.40	0.80	1.60

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

(3 MARKS)

Plan III: Preference Shares – Equity Mix

	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
EBIT	20,000	40,000	80,000	1,20,000	2,00,000
Less: Interest	0	0	0	0	0
EBT	20,000	40,000	80,000	1,20,000	2,00,000
Less: Tax @ 50%	10,000	20,000	40,000	60,000	1,00,000
PAT	10,000	20,000	40,000	60,000	1,00,000
Less: Pref. dividend	40,000*	40,000*	40,000	40,000	40,000
PAT after Pref. dividend.	(30,000)	(20,000)	0	20,000	60,000
No. of Equity shares	50,000	50,000	50,000	50,000	50,000
EPS	(0.60)	(0.40)	0	0.40	1.20

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

(3 MARKS)

(ii) From the above EPS computations tables under the three financial plans we can see that when EBIT is Rs. 80,000 or more, Plan II: Debt-Equity mix is preferable over the Plan I and Plan III, as rate of EPS is more under this plan. On the other hand an EBIT of less than Rs. 80,000, Plan I: Equity Financing has higher EPS than Plan II and Plan III. Plan III Preference share Equity mix is not acceptable at any level of EBIT, as EPS under this plan is lower.

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

(2 MARKS)

ANSWER -3

Statement showing the Evaluation of credit Policies

	Particulars	Proposed Policy Rs.
A.	**Expected Profit:**	
(a)	Credit Sales	30,00,000
(b)	Total Cost	
	(i) Variable Costs	29,00,000
	(ii) Recurring Costs	10,000
		29,10,000
(c)	Bad Debts	60,000
(d)	Expected Profit [(a) – (b) – (c)]	30,000
B.	**Opportunity Cost of Investments in Receivables**	1,00,395
C.	**Net Benefits (A – B)**	(70,395)

Recommendation: The Proposed Policy should not be adopted since the net benefits under this policy are negative

Working Note: Calculation of Opportunity Cost of Average Investments

$$\text{Opportunity Cost} = \text{Total Cost} \times \frac{\text{Collection period}}{360} \times \frac{\text{Rate of Return}}{100}$$

(6 MARKS)

Particulars		20%	30%	30%	18%	Total
A.	Total Cost	5,82,000	8,73,000	8,73,000	5,23,800	28,51,800
B.	Collection period	30/360	60/360	90/360	100/360	
C.	Required Rate of Return	18%	18%	18%	18%	
D.	Opportunity Cost (A × B × C)	8,730	26,190	39,285	26,190	1,00,395

(4 MARKS)

ANSWER -4

(a) Payback Period of Projects

Projects	C0(Rs.)	C1(Rs.)	C2(Rs.)	C3(Rs.)	Payback
A	(10,000)	2000	2000	6,000	2,000+2,000+6,000 =10,000 i.e 3 years
B	(2,000)	0	2,000	NA	0+2,000 = 2,000 i.e 2 years
C	(10,000)	2000	2000	6,000	2,000+2,000+6,000 = 10,000 i.e 3 years

(2 MARKS)

(b) If standard payback period is **2 years**, Project B is the **only acceptable project.**

(1 MARK)

(c) Calculation of NPV

Year	PVF @ 10%	Project A		Project B		Project C	
		Cash Flows (Rs.)	PV of cash flows (Rs.)	Cash Flows (Rs.)	PV of cash flows (Rs.)	Cash Flows (Rs.)	PV of cash flows (Rs.)
0	1	(10,000)	(10,000)	(2,000)	(2,000)	(10,000)	(10,000)
1	0.909	2,000	1,818	0	0	2,000	1,818
2	0.826	2,000	1,652	2,000	1,652	2,000	1,652
3	0.751	6,000	4506	4,000	3004	6,000	4,506
4	0.683	0	0	6,000	4,098	10,000	6,830
NPV			(-2,024)		6,754		4,806

So, Projects with positive NPV are Project B and Project C

(5 MARKS)

(d) False. Payback gives no weightage to cash flows after the cut-off date.

(e) True. The payback rule ignores all cash flows after the cutoff date, meaning that future years' cash inflows are not considered. Thus, payback is biased towards short-term projects.

(2*1 = 2 MARKS)

ANSWER -5

(i) Gross profit ratio $= \dfrac{\text{Gross profit}}{\text{Sales}} \times 100 = \dfrac{₹42,18,000}{₹1,96,56,000} \times 100 \quad = 21.46\%$

(ii) Net profit ratio $= \dfrac{\text{Net profit}}{\text{Sales}} \times 100 = \dfrac{₹14,08,600}{₹1,96,56,000} \times 100 = 7.17\%$

(iii) Operating ratio $= \dfrac{\text{Operating cost}}{\text{Sales}} \times 100$

Operating cost = Cost of goods sold + Operating expenses

Cost of goods sold = Sales – Gross profit

$$= 1,96,56,000 - 42,18,000 = 1,54,38,000$$

Operating expenses = Administrative expenses + Selling & distribution expenses

$$= 18,40,000 + 7,56,000 = 25,96,000$$

Therefore, Operating ratio $= \dfrac{1,54,38,000 + 25,96,000}{1,96,56,000} \times 100$

$$= \dfrac{1,80,34,000}{1,96,56,000} \times 100 = 91.75\%$$

(iv) Operating profit ratio $= 100 - \text{Operating cost ratio}$

$$= 100 - 91.75\% = 8.25\%$$

(v) Inventory turnover ratio $= \dfrac{\text{Cost of goods sold}}{\text{Average stock}}$

$$= \dfrac{1,54,38,000}{(14,28,000 + 12,46,000)/2}$$

$$= \dfrac{1,54,38,000}{13,37,000} = 11.55 \text{ times}$$

(vi) Current ratio $= \dfrac{\text{Current assets}}{\text{Current liablities}}$

Current assets = Sundry receivables + Inventory + Cash & Bank balance

Current liabilities = Sundry Payables + Other liabilities

$$= 7,20,000 + 2,80,000 = 10,00,000$$

Current ratio $= \dfrac{32,00,000}{10,00,000} = 3.2$ times

(vii) Quick Ratio $= \dfrac{\text{Current assets} - \text{Inventories}}{\text{Current liablities}}$

$$= \dfrac{32,00,000 - 14,28,000}{10,00,000} = 1.77 \text{ times}$$

(viii) Interest coverage ratio $= \dfrac{\text{EBIDT}}{\text{Interest}} = \dfrac{\text{Net profit} + \text{Interest}}{\text{Interest}}$

$$= \dfrac{14,08,600 + 2,60,000}{2,60,000} = 6.42 \text{ times}$$

(ix) Return on capital employed (ROCE) $= \dfrac{\text{EBIT}}{\text{Capital employed}} \times 100$

Capital employed $=$ Capital + Retained earnings + General reserve + Term loan

$$= 20,00,000 + 42,00,000 + 12,00,000 + 26,00,000$$

$$= 1,00,00,000$$

Therefore, ROCE $= \dfrac{16,68,600}{1,00,00,000} \times 100 = 16.69\%$

(x) Debt to assets ratio $= \dfrac{\text{Debts}}{\text{Total assets}} \times 100 = \dfrac{26,00,000}{1,10,00,000} \times 100 = 23.64\%$

(10*1 = 10 MARKS)

ANSWER -6

ANSWER –A

Steps involved in Sensitivity Analysis

Sensitivity Analysis is conducted by following the steps as below:

1. Finding variables, which have an influence on the NPV (or IRR) of the project
2. Establishing mathematical relationship between the variables.
3. Analysis the effect of the change in each of the variables on the NPV (or IRR) of the project.

(4 MARKS)

ANSWER – B

Process of Debt Securitization

(i) **The origination function** – A borrower seeks a loan from a finance company, bank, HDFC. The credit worthiness of borrower is evaluated and contract is entered into with

repayment schedule structured over the life of the loan.

 (ii) **The pooling function** – Similar loans on receivables are clubbed together to create an underlying pool of assets. The pool is transferred in favour of Special purpose Vehicle (SPV), which acts as a trustee for investors.

 (iii) **The securitisation function** – SPV will structure and issue securities on the basis of asset pool. The securities carry a coupon and expected maturity which can be asset based/ mortgage based. These are generally sold to investors through merchant bankers. Investors are – pension funds, mutual funds, insurance funds. The process of securitization is generally without recourse i.e. investors bear the credit risk and issuer is under an obligation to pay to investors only if the cash flows are received by him from the collateral. The benefits to the originator are that assets are shifted off the balance sheet, thus giving the originator recourse to off-balance sheet funding.

(4 MARKS)

ANSWER – C

As the name indicates it is the reciprocal of payback period. A major drawback of the payback period method of capital budgeting is that it does not indicate any cut off period for the purpose of investment decision. It is, however, argued that the reciprocal of the payback would be a close approximation of the Internal Rate of Return (later discussed in detail) if the life of the project is at least twice the payback period and the project generates equal amount of the annual cash inflows. In practice, the payback reciprocal is a helpful tool for quick estimation of rate of return of a project provided its life is at least twice the payback period.

The payback reciprocal can be calculated as follows:

$$\text{Payback Reciprocal} = \frac{\text{Average annual cash in flow}}{\text{Initial investment}}$$

(2 MARKS)

ANSWER -7

ANSWER –A

Y = C+I+G+(X-M)

Y = (300+0.75Y) +800+ 0+ (-100)

Y = 300+0.75Y +800 -100 = 0.25 Y =1000

Y= Rs. 4000

(3 MARKS)

ANSWER –B

Under a floating rate system, home currency depreciates when its value falls with respect to the value of another currency or a basket of other currencies i.e there is an increase in the home currency price of the foreign currency. For example, if the Rupee dollar exchange rate in the month of January is $1 = Rs. 70 and Rs. 72 in June, then the Indian Rupee has

depreciated in its value with respect to the US dollar and the value of US dollar has appreciated in terms of the Indian Rupee.

On the contrary, home currency appreciates when its value increases with respect to the value of another currency or a basket of other currencies i.e. there is a decrease in the home currency price of foreign currency. For example, if the Rupee dollar exchange rate in the month of January is $1 = Rs. 72 and Rs. 70 in June, then the Indian Rupee has appreciated in its value with respect to the US dollar and the value of US dollar has depreciated in terms of the Indian Rupee.

(2 MARKS)

ANSWER –C

Calculation of M1

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

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

= 3,76,419.4 Crores

(3 MARKS)

ANSWER –D

Market power is the ability of a price making firm to profitably raise the market price of a good or service over its marginal cost and thus earn supernormal profits or positive economic profits.

Market power is an important cause of market failure. Market failure occurs when the free market outcomes do not maximize net benefits of an economic activity and therefore there is deadweight losses and inefficient allocation of resources. Excess market power causes a single producer or a small number of producers to strategically reduce their supply and charge higher prices compared to competitive market. Market power can cause markets to be inefficient because it keeps price and output away from the equilibrium of supply and demand. Market power thus results in suboptimal outcomes such as deadweight loss, underproduction of goods and services, higher prices and loss of consumer surplus.

(2 MARKS)

ANSWER -8

ANSWER –A

A variety of allocation instruments are available by which governments can influence resource allocation in the economy. They are -

    i.   government may directly produce the economic good (for example, electricity and public transportation services)

    ii.   government may influence private allocation through incentives and disincentives (for example, tax concessions and subsidies may be given for the production of goods that promote social welfare and higher taxes may be imposed on goods such as cigarettes and alcohol)

    iii.   government may influence allocation through its competition policies, merger policies etc. which will affect the structure of industry and commerce (for

example, the Competition Act in India promotes competition and prevents anti-competitive activities).

   iv. governments' regulatory activities such as licensing, controls, minimum wages, and directives on location of industry influence resource allocation.

   v. government sets legal and administrative frameworks, and

   vi. any of a mixture of intermediate techniques may be adopted by governments.

(5 MARKS)

ANSWER –B

Yes, prohibition of import of poultry from countries affected by avian flu, meat and poultry processing standards to reduce pathogens, residue limits for pesticides in foods etc. are the examples of Sanitary and Phytosanitary (SPS) measures. These measures are applied to protect human, animal or plant life from risks arising from additives, pests, contaminants, toxins or disease-causing organisms and to protect biodiversity. These include ban or prohibition of import of certain goods, all measures governing quality and hygienic requirements, production processes, and associated compliance assessments.

(3 MARKS)

ANSWER –C

A horizontal direct investment is one under which the investor establishes the same type of business operation in a foreign country as it operates in its home country, for example, a cell phone service provider based in the United States moving to India to provide the same service. On the other hand, vertical investment is one under which the investor establishes or acquires a business activity in a foreign country which is different from the investor's main business activity yet in some way supplements its major activity. For example; an automobile manufacturing company may acquire an interest in a foreign company that supplies parts or raw materials required for the company.

(2 MARKS)

ANSWER -9

ANSWER –A

GDPMP = Personal consumption expenditure + Government purchase of goods and services + gross public investment + inventory investment +gross residential construction investment + Gross business fixed investment + [export – import]

   = 2900 + 1100 + 500 + 170+450 + 410 + (200-300)

   = Rs. 5430 Crores

GNPFC = GDPMP + Net Factor Income from Abroad - Net Indirect Taxes

   = Rs. 5430 + (-30) +80 = 5480 Crores

NDPMP = GDPMP - Consumption of fixed capital = 5430- 60 = 5370 Crores

(5 MARKS)

ANSWER –B

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

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

(3 MARKS)

ANSWER – C

Real Exchange Rate = Nominal exchange rate*Domestic price index/ Foreign price index

$$= 70*200/100$$

$$= 140$$

(2 MARKS)

ANSWER -10

ANSWER –A

Empirical analysis of money supply is important for two reasons:

1. It facilitates analysis of monetary developments in order to provide a deeper understanding of the causes of money growth.
2. 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 money supply and the monetary base.

(3 MARKS)

ANSWER –B

Yes, cable television is an example of impure public good. Impure public goods only partially satisfy two characteristics of public goods namely, non-rivalry in consumption and non-excludability.

Cable television is non-rivalrous because the use of cable television by other individuals will in no way reduce your enjoyment of it. The good is excludable since the cable TV service providers can refuse connection if you do not pay for set top box and recharge it regularly.

(2 MARKS)

ANSWER –C

The law of comparative advantage states that even if one nation is less efficient than (has an absolute disadvantage with respect to) the other nation in the production of both commodities, there is still scope for mutually beneficial trade. The first nation should specialize in the production and export of the commodity in which its absolute disadvantage is smaller (this is the commodity of its comparative advantage) and import the commodity in which its absolute disadvantage is greater (this is the commodity of its comparative disadvantage). Labour differs in its productivity internationally and different goods have different labour requirements, so comparative labor productivity advantage was Ricardo's predictor of trade.

The theory can be explained with a simple example Output per Hour of Labour

Commodity	Country A	Country B
Wheat (bushels/hour)	6	1
Cloth (yards/hour)	4	2

Country B has absolute disadvantage in the production of both wheat and cloth. However, since B's labour is only half as productive in cloth but six times less productive in wheat compared to country A, country B has a comparative advantage in cloth. On the other hand, country A has an absolute advantage in both wheat and cloth with respect to the country B, but since its absolute advantage is greater in wheat (6:1) than in cloth (4:2), country A has a comparative advantage in wheat. According to the law of comparative advantage, both nations can gain if country A specialises in the production of wheat and exports some of it in exchange for country B's cloth. Simultaneously, country B should specialise in the production of cloth and export some of it in exchange for country A's wheat.

If country A could exchange 6W for 6C with country B, then, country A would gain 2C (or save one-half hour of labour time) since the country A could only exchange 6W for 4C domestically. The 6W that the country B receives from the country A would require six hours of labour time to produce in country B. With trade, country B can instead use these six hours to produce 12C and give up only 6C for 6W from the country A. Thus, the country B would gain 6C or save three hours of labour time and country A would gain 2C. However, the gains of both countries are not equal.

Country A would gain if it could exchange 6W for more than 4C from country B; because 6W for 4 C is what it can exchange domestically (both require the same one hour labour time). The more C it gets, the greater would be the gain from trade. Conversely, in country B, 6W = 12C (in the sense that both require 6 hours to produce). Anything less than 12C that country B must give up to obtain 6W from country A represents a gain from trade for country B. To summarize, country A gains to the extent that it can exchange 6W for more than 4C from the country B. country B gains to the extent that it can give up less than 12C for 6W from the country A. Thus, the range for mutually advantageous trade is 4C < 6W < 12C.

ANSWER -11

ANSWER –A

According to Milton Friedman, Demand for money is affected by the same factors as demand for any other asset, namely

1. Permanent income.
2. Relative returns on assets. (which incorporate risk)

Friedman maintains that it is permanent income – and not current income as in the Keynesian theory – that determines the demand for money. Permanent income which is Friedman's measure of wealth is the present expected value of all future income. To Friedman, money is a good as any other durable consumption good and its demand is a function of a great number of factors.

Friedman identified the following four determinants 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 in the monetarist theory world, namely money, bonds, 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.
- rises, if the opportunity costs of money holdings (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 costs of money holdings.

(3 MARKS)

ANSWER –B

Mixed tariffs are expressed either on the basis of the value of the imported goods (an ad valorem rate) or on the basis of a unit of measure of the imported goods (a specific duty) depending on which generates the most income (or least income at times) for the nation. For example, duty on cotton: 5 per cent ad valorem 0r Rs. 3000/ per tonne, whichever is higher.

(2 MARKS)

ANSWER –C

Under a floating exchange rate system, 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 nominal exchange rate. Similar to any standard market, the exchange market also faces a downward-sloping demand curve and an upward-sloping supply curve
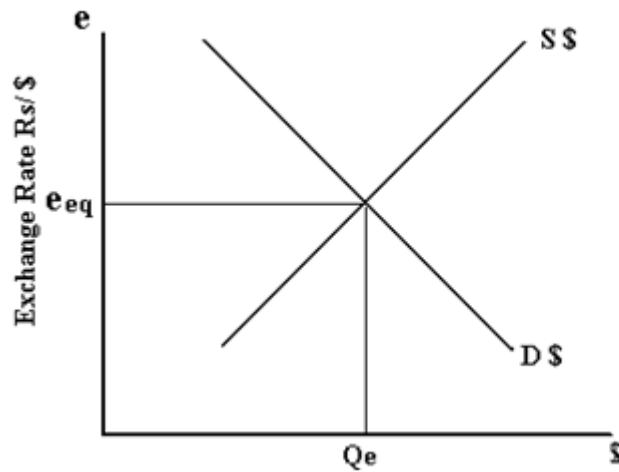
Determination of Nominal Exchange Rate

The equilibrium rate of exchange is determined by the interaction of the supply and demand for a particular foreign currency. In the figure above, the demand curve (D$) and supply curve (S$) of dollars intersect to determine equilibrium exchange rate eeq with Qe as the equilibrium quantity of dollars exchanged.

(3 MARKS)

ANSWER –D

A quasi-public good or near-public good has many but not all the characteristics of a public good. These are goods which have an element of non-excludability and non- rivalry.

Quasi public goods are:

(i) Not completely non rival. For example, public roads wi-fi networks and public parks do not get congested so as to reduce the space available for others when extra consumers use them only up to an optimal point. When more people use it beyond that, the amount others can benefit from these is reduced to some extent, because there will be increased congestion.

(ii) It is easy to keep people away from quasi public goods by charging a price or fee. For example, it is possible to exclude some users by building toll booths to charge for road usage on congested routes. Other examples are education, and health services. 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. This particular characteristic namely, the combination of virtually infinite benefits and the ability to charge a price results in some quasi-public goods being sold through markets and others being provided by government.

(2 MARKS)