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CA INTERMEDIATE

SUBJECT- FM & Economics

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- NOTES: (1) WORKING NOTES SHOULD FORM PART OF ANSWERS.
 (2) INTERNAL WORKING NOTES SHOULD ALSO BE CONSIDERED.
 (3) NEW QUESTION SHOULD BE ON NEW PAGE

PART A : FINANCIAL MANAGEMENT (60 MARKS)

ANSWER 1(A)

Ratios for the year 2019-2020

(a) Inventory turnover ratio

$$= \frac{\text{COGS}}{\text{Average Inventory}} = \frac{\text{₹ 21,100}}{\frac{\text{₹ (2,500 + 2,000)}}{2}} = 9.4$$

(1 MARK)

(b) Financial leverage

$$= \frac{\text{EBIT}}{\text{EBT}} = \frac{\text{₹ 950}}{\text{₹ 650}} = 1.46$$

(1 MARK)

(c) ROCE

$$= \frac{\text{EBIT (1-t)}}{\text{Average Capital Employed}} = \frac{\text{₹ 950 (1-0.3)}}{\frac{\text{₹ (6,000 + 5,500)}}{2}} = \frac{\text{₹ 665}}{\text{₹ 5,750}} \times 100 = 11.56 \%$$

[Here Return on Capital Employed (ROCE) is calculated after Tax]

(1 MARK)

(d) ROE

$$= \frac{\text{Profits after tax}}{\text{Average shareholders' funds}} = \frac{\text{₹ 455}}{\text{₹ 2,500}} \times 100 = 18.2\%$$

(1 MARK)

(e) Average Collection Period

$$\text{Average Sales per day} = \frac{\text{₹ 23,800}}{365} = \text{₹ 65.20 lakhs}$$

$$\text{Average collection period} = \frac{\text{Average Receivables}}{\text{Average sales per day}}$$

$$= \frac{\frac{\text{₹ (1,400 + 1,100)}}{2}}{\text{₹ 65.2}} = \frac{\text{₹ 1,250}}{\text{₹ 65.2}} = 19.17 \text{ days}$$

(1 MARK)

ANSWER 1(B)

- (i) Since, the earnings for the company will remain same for future years and the payout ratio is 100 per cent too. It indicates that the dividend is equal to earnings per share and growth rate is zero per cent.

$$\text{Therefore, the Cost of equity } (K_e) = \frac{\text{Earnings per share (EPS)}}{\text{Market price per share } (P_0)}$$

$$\text{Where, EPS} = \frac{\text{Earnings available to shareholders}}{\text{No. of shares outstanding}} = \frac{\text{Rs.25,00,000}}{1,00,000} = \text{Rs.25}$$

and $P_0 = \text{Rs.450}$

$$\text{Therefore, } K_e = \frac{\text{Rs.25}}{\text{Rs.450}} = 0.055 \text{ or } 5.55\%$$

(2.5 MARKS)

- (ii) In this case pay-out ratio is 70% and the earning rate on investment is 20%, which means the amount retained after payment of dividend can be invested to earn an interest of 20% p.a.

$$\begin{aligned} \text{The Cost of Equity } (K_e) &= \frac{\text{Earnings per share (EPS)} \times \text{payout ratio}}{\text{Market price per share } (P_0)} + \text{growth rate} \\ &= \frac{\text{Rs.25} \times 70\%}{\text{Rs.450}} + (30\% \times 20\%) \\ &= \frac{\text{Rs.17.5}}{\text{Rs.450}} + 0.06 = 0.0988 \text{ or } 9.89\% \end{aligned}$$

(2.5 MARKS)

ANSWER 1(C)

1. Valuation of firms

Particulars	Levered Firm (Rs.)	Unlevered Firm (Rs.)
EBIT	30,000	30,000
Less: interest	10,000	Nil
Earnings available to Equity Shareholder/Ke	20,000	30,000
	12.5%	12.5%
Value of Equity	1,60,000	2,40,000
Debt	1,00,000	Nil
Value of Firm	2,60,000	2,40,000

Value of Levered company is more than that of unlevered company therefore investor will sell his shares in levered company and buy shares in unlevered company. To maintain the level of risk he will borrow proportionate amount and invest that amount also in shares of unlevered company.

(3 MARKS)

2. Investment & Borrowings

Sell shares in Levered company (1,60,000x15%)	24,000
Borrow money (1,00,000 x15%)	<u>15,000</u>
Buy shares in Unlevered company	39,000

(1 MARK)

3. Change in Return

Income from shares in Unlevered company (39,000 x 12.5%)	4,875
Less: interest on loan (15,000 x 10%)	<u>1,500</u>
Net Income from unlevered firm	3,375
Income from Levered firm (24000 x 12.5%)	<u>3,000</u>
Incremental Income due to arbitrage	375

(1 MARK)

ANSWER 1(D)

Income Statements of Company A and Company B

	Company A (Rs.)	Company B (Rs.)
Sales	91,000	1,05,000
Less: Variable cost	56,000	63,000
Contribution	35,000	42,000
Less: Fixed Cost	20,000	31,500
Earnings before interest and tax (EBIT)	15,000	10,500
Less: Interest	12,000	9,000
Earnings before tax (EBT)	3,000	1,500
Less: Tax @ 30%	900	450
Earnings after tax (EAT)	2,100	1,050

Working Notes:

Company A

(i) Financial Leverage = $\frac{EBIT}{EBT \text{ i.e. } EBIT - \text{Interest}}$

So, 5 = $\frac{EBIT}{EBIT - 12,000}$

Or, 5 (EBIT - 12,000) = EBIT

Or, 4 EBIT = 60,000

Or, EBIT = Rs.15,000

- (ii) Contribution = EBIT + Fixed Cost
= Rs. 15,000 + Rs. 20,000 = Rs. 35,000
- (iii) Sales = Contribution + Variable cost
= Rs. 35,000 + Rs. 56,000
= Rs. 91,000

Company B

- (i) Contribution = 40% of Sales (as Variable Cost is 60% of Sales)
= 40% of 1,05,000 = Rs. 42,000
- (ii) Operating Leverage = $\frac{\text{Contribution}}{\text{EBIT}}$ Or, $4 = \frac{\text{Rs.42,000}}{\text{EBIT}}$
EBIT = $\frac{\text{Rs.42,000}}{4} = \text{Rs.10,500}$
- (iii) Fixed Cost = Contribution – EBIT = 42,000 – 10,500 = Rs. 31,500

(5 MARKS)

ANSWER 2

(i) Calculation of Net Cash Flow

(Rs. in lakhs)					
Year	Profit before dep. and tax	Depreciation (20% on WDV)	PBT	PAT	Net cash flow
(1)	(2)	(3)	(4)	(5)	(3) + (5)
1	320	800 x 20% = 160	160	96	256
2	320	(800 – 160) x 20% = 128	192	115.20	243.20
3	360	(640 – 128) x 20% = 102.4	257.6	154.56	256.96
4	360	(512 – 102.4) x 20% = 81.92	278.08	166.85	248.77
5	300	(409.6 – 81.92) = 327.68*	– 27.68	– 16.61	311.07

*this is treated as a short term capital loss

(3 MARKS)

(ii) Calculation of Net Present Value (NPV)

(Rs. in lakhs)							
Year	Net Cash Flow	12%		16%		20%	
		D.F	P.V	D.F	P.V	D.F	P.V
1	256	0.89	227.84	0.86	220.16	0.83	212.48
2	243.20	0.80	194.56	0.74	179.97	0.69	167.81
3	256.96	0.71	182.44	0.64	164.45	0.58	149.03
4	248.77	0.64	159.21	0.55	136.82	0.48	119.41
5	311.07	0.57	177.31	0.48	149.31	0.40	124.43
			941.36		850.71		773.16
	Less: Initial Investment		800.00		800.00		800.00
		NPV	141.36		50.71		-26.84

(4 MARKS)

- (iii) **Advise:** Since Net Present Value of the project at 12% = 141.36 lakhs, therefore the project should be implemented.

(1 MARK)

(iv) Calculation of Internal Rate of Return (IRR)

$$\text{IRR} = 16\% + \frac{50.71 \times 4}{50.71 - (-26.84)}$$

$$= 16\% + \frac{2.03}{77.55} = 16\% + 2.62\% = 18.62\%$$

(2 MARKS)

ANSWER 3

Computation of Expected Cash Flow & Standard deviation - Year 1:

CFAT (x) (Rs.)	Probability (P)	Px	Px ²
12	0.1	1.20	14.40
15	0.2	3.00	45.00
18	0.4	7.20	129.60
32	0.3	9.60	307.20
Expected Cash Flow After Taxes		21.00	496.20

Expected Cash Inflow for Year 1 = Rs. 21.00 Lakhs

Standard Deviation of Cash Inflow =

$$\sqrt{\sum px^2 - (\sum px)^2} = \sqrt{496.20 - (21.00)^2} = \text{Rs.} 7.43 \text{ lakhs}$$

(2.5 MARKS)

2. Computation of Expected Cash Flow and Standard deviation - Year 2:

X	P	Px	Px ²
12	0.10	1.20	14.40
18	0.30	5.40	97.20
30	0.40	12.00	360.00
40	0.20	8.00	320.00
Expected Cash Flow After Taxes		26.60	791.60

Expected Cash Inflow for Year 2 = Rs. 26.60 Lakhs

Standard Deviation of Cash Inflow for Year 2 =

$$\sqrt{\sum px^2 - (\sum px)^2} = \sqrt{791.60 - (26.60)^2} = \text{Rs.} 9.17 \text{ lakhs}$$

(2.5 MARKS)

3. Computation of Expected Cash Flow & Standard deviation - Year 3:

X	P	Px	Px ²
18	0.20	3.60	64.80
20	0.50	10.00	200.00
32	0.20	6.40	204.80
45	0.10	4.50	202.50
Expected Cash Flow After Taxes		24.50	672.10

Expected Cash Inflow for Year 3 = Rs. 24.50 Lakhs

Standard Deviation of Cash Inflow for Year 3 =

$$\sqrt{\sum px^2 - (\sum px)^2} = \sqrt{672.10 - (24.50)^2} = \text{Rs.8.48 Lakhs}$$

(2.5 MARKS)

4. Computation of Expected NPV: (Amount in Rs. Lakhs)

Year	Cash Flow	P.V.F. @ 7%	P.V. of Cash Flow
1	21.00	0.9346	19.6266
2	26.60	0.8734	23.2324
3	24.50	0.8163	19.9994
P.V. of Expected Cash Inflows			62.8584
Less: Initial Investment			(40.0000)
Net Present Value			22.8584

Expected NPV of Project = Rs. 22.86 Lakhs (approx.)

(2.5 MARKS)

ANSWER 4

In case of customer A, there is no increase in sales even if the credit is given. Hence comparative statement for B & C is given below:

Particulars	Customer B				Customer C			
	0	30	60	90	0	30	60	90
1. Credit period (days)	0	30	60	90	0	30	60	90
2. Sales Units	10,000	15,000	20,000	25,000	-	-	10,000	15,000
	` in lakh				` in lakh			
3. Sales Value	1,500	2,250	3,000	3,750	-	-	1,500	2,250
4. Contribution at 50% (A)	750	1,125	1,500	1,875	-	-	750	1,125
5. Receivables:-								
Credit Period × Sales / 360	-	187.5	500	937.5	-	-	250	562.5
6. Debtors at cost		93.75	250	468.75	-	-	125	281.25
	-							
7. Cost of carrying debtors at 20% (B)	-	18.75	50	93.75	-	-	25	56.25
8. Excess of contributions over cost of carrying debtors (A – B)	750	1,106.25	1,406.25	1,781.25	-	-	725	1,068.75

The excess of contribution over cost of carrying Debtors is highest in case of credit period of 90 days in respect of both the customers B and C. Hence, credit period of 90 days should be allowed to B and C.

ANSWER 5

Particulars	For Raw Material	For Other Costs	Total
Cash Operating expenses	$\frac{75}{100} \times 800 = 600$	$\frac{25}{100} \times 800 = 200$	800.00
Raw Material Stock Holding	$\frac{20}{360} \times 600 = 33.33$	-	33.33
WIP Conversion	$\frac{10}{360} \times 600 = 16.67$	$\frac{5}{360} \times 200 = 2.78$	19.45
Finished Goods Stock Holding	$\frac{45}{360} \times 600 = 75$	$\frac{45}{360} \times 200 = 25$	100.00
Receivable Collection Period	$\frac{30}{360} \times 600 = 75$	$\frac{30}{360} \times 200 = 16.67$	66.67
Advance to suppliers	$\frac{5}{360} \times 600 = 8.33$	-	8.33
Credit Period from suppliers	$\frac{60}{360} \times 600 = 100$	-	100.00

(7 MARKS)

Computation of working capital

	Rs. in lakhs
Raw Material Stock	33.33
WIP	19.45
Finished Goods stock	100.00
Receivables	66.67
Advance to Suppliers	8.33
Cash	10.00
	237.78
Less: Payables (Creditors)	100.00
Working capital	133.78

(3 MARKS)

ANSWER 6(A)

Bridge finance refers, normally, to loans taken by the business, usually from commercial banks for a short period, pending disbursement of term loans by financial institutions, normally it takes time for the financial institution to finalise procedures of creation of security, tie-up participation with other institutions etc. even though a positive appraisal of the project has been made. However, once the loans are approved in principle, firms in order not to lose further time in starting their projects arrange for bridge finance. Such temporary loan is normally repaid out of the proceeds of the principal term loans. It is secured by hypothecation of moveable assets, personal guarantees and demand promissory notes. Generally rate of interest on bridge finance is higher as compared with that on term loans.

(3 MARKS)

ANSWER 6(B)

Debt Securitisation: It is a method of recycling of funds. It is especially beneficial to financial intermediaries to support the lending volumes. Assets generating steady cash flows are packaged

together and against this asset pool, market securities can be issued, e.g. housing finance, auto loans, and credit card receivables.

Process of Debt Securitisation

- (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 6(C)

Limitations of Leasing

- (1) The lease rentals become payable soon after the acquisition of assets and no moratorium period is permissible as in case of term loans from financial institutions. The lease arrangement may, therefore, not be suitable for setting up of the new projects as it would entail cash outflows even before the project comes into operation.
- (2) The leased assets are purchased by the lessor who is the owner of equipment. The seller's warranties for satisfactory operation of the leased assets may sometimes not be available to lessee.
- (3) Lessor generally obtains credit facilities from banks etc. to purchase the leased equipment which are subject to hypothecation charge in favour of the bank. Default in payment by the lessor may sometimes result in seizure of assets by banks causing loss to the lessee.
- (4) Lease financing has a very high cost of interest as compared to interest charged on term loans by financial institutions/banks.

(3 MARKS)

PART B : ECONOMICS

ANSWER 7(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]

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

$$= \text{Rs. } 5430 \text{ Crores}$$

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

$$= \text{Rs. } 5430 + (-30) + 80 = 5480 \text{ Crores}$$

$$\text{NDPMP} = \text{GDPMP} - \text{Consumption of fixed capital} = 5430 - 60 = 5370 \text{ Crores}$$

(5 MARKS)

ANSWER 7(B)

An expansionary fiscal policy is designed to stimulate the economy during the contractionary phase of a business cycle or when there is an anticipation of a business cycle contraction. This is accomplished by increasing aggregate expenditure and aggregate demand through an increase in all types of government spending and / or a decrease in taxes.

The objectives of expansionary fiscal policy are reduction in cyclical unemployment, increase in consumer demand and prevention of recession and possible depression. In other words, it aims to close a 'recessionary gap' or a contractionary gap wherein the aggregate demand is not sufficient to create conditions of full employment. This is accomplished by increasing aggregate expenditure and aggregate demand through an increase in all types of government spending and / or a decrease in taxes. Government uses subsidies, transfer payments, welfare programmes, corporate and personal income tax cuts and increased spending on public works such as on infrastructure development to put more money into consumers' hands to give them more purchasing power.

(3 MARKS)

ANSWER 7(C)

Changes in SLR chiefly influence the availability of resources in the banking system for lending. A rise in SLR -during periods of high liquidity - to lock up a rising fraction of a bank's assets in the form of eligible instruments – reduces the credit creation capacity of banks. A reduction in SLR during periods of economic downturn has the opposite effect.

(2 MARKS)

ANSWER 8(A)

An ad valorem tariff is a duty or other charges levied on an import item on the basis of its value and not on the basis of its quantity, size, weight, or any other factor.

It is levied as a constant percentage of the monetary value of one unit of the imported good. For example, a 20% ad valorem tariff on a computer generates Rs.2,000/ government revenue from tariff on each imported computer priced at Rs.10,000/ in the world market. If the price of computer rises to Rs. 20,000, then it generates a tariff of Rs. 4,000/

(3 MARKS)

ANSWER 8(B)

Reserve money has two major components – currency in circulation and reserves. Currency in circulation comprises currency with the public and cash in hand with banks. Reserves are bank deposits with the central bank.

(2 MARKS)

ANSWER 8(C)

Externalities, also referred to as 'spillover effects', 'neighbourhood effects' 'third-party effects' or 'side-effects', occur when the actions of either consumers or producers result in costs or benefits that do not reflect as part of the market price. Externalities cause market inefficiencies because they hinder the ability of market prices to convey accurate information about how much to produce and how much to buy. Since externalities are not reflected in market prices, they can be a source of economic inefficiency. The four possible types of externalities are negative externality initiated in production which imposes an external cost on others, positive production externality, less commonly seen, initiated in production that confers external benefits on others, negative consumption externalities initiated in consumption which produce external costs on others, positive consumption externality initiated in consumption that

confers external benefits on others. Each of the above may be received by another in consumption or in production.

(3 MARKS)

ANSWER 8(D)

Money performs many important functions in an economy.

- (i) Money is a convenient medium of exchange or it is an instrument that facilitates easy exchange of goods and services. Money, though not having any inherent power to directly satisfy human wants, by acting as a medium of exchange, it commands purchasing power and its possession enables us to purchase goods and services to satisfy our wants. By acting as an intermediary, money increases the ease of trade and reduces the inefficiency and transaction costs involved in a barter exchange. By decomposing the single barter transaction into two separate transactions of sale and purchase, money eliminates the need for double coincidence of wants. Money also facilitates separation of transactions both in time and place and this in turn enables us to economize on time and efforts involved in transactions.
- (ii) Money is a 'common measure of value'. The monetary unit is the unit of measurement in terms of which the value of all goods and services is measured and expressed. It is convenient to trade all commodities in exchange for a single commodity. So also, it is convenient to measure the prices of all commodities in terms of a single unit, rather than record the relative price of every good in terms of every other good. A common unit of account facilitates a system of orderly pricing which is crucial for rational economic choices. Goods and services which are otherwise not comparable are made comparable through expressing the worth of each in terms of money.
- (iii) Money serves as a unit or standard of deferred payment i.e. money facilitates recording of deferred promises to pay. Money is the unit in terms of which future payments are contracted or stated. However, variations in the purchasing power of money due to inflation or deflation, reduces the efficacy of money in this function.
- (iv) Like nearly all other assets, money is a store of value. People prefer to hold it as an asset, that is, as part of their stock of wealth. The splitting of purchases and sale into two transactions involves a separation in both time and space. This separation is possible because money can be used as a store of value or store of means of payment during the intervening time. Again, rather than spending one's money at present, one can store it for use at some future time. Thus, money functions as a temporary abode of purchasing power in order to efficiently perform its medium of exchange function. Money also functions as a permanent store of value. Money is the only asset which has perfect liquidity.

(2 MARKS)

ANSWER 9(A)

Aggregate demand is the total quantity of finished goods and services that all sectors (consumers, firms, government and the rest of the world) together wish to buy under different conditions. The components of aggregate demand are consumption demand, investment demand, government spending and net exports at each level of income. While consumption demand is a function of the level of disposable income, the demand for investment, government spending and net exports are autonomous, i.e. these are determined outside the model and are specifically assumed to be independent of income.

The Keynesian aggregate demand schedule is obtained by vertically adding the demand for consumption, investment demand, government spending and net exports at each level of income.

(3 MARKS)

ANSWER 9(B)

Anti –Dumping Duties

An anti-dumping duty is an extra import *duty* that a domestic government imposes on foreign imports that it believes are priced below fair market value causing injury to the competing domestic industry. It is a protectionist tariff equal to the difference between the importing country's FOB price of the goods at the time of their import and the market value of similar goods in the exporting country. An anti-dumping duty increases the price of imports and brings it closer to the domestic price and prevents injury to domestic industry due to unfair competition.

(2 MARKS)

ANSWER 9(C)

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 9(D)

Fixed Exchange Rate	Floating Exchange Rate
A fixed exchange rate, also referred to as pegged exchange rate, is an exchange rate regime under which a country’s central bank and/ or government announces or decrees what its currency will be worth in terms of either another country’s currency or a basket of currencies or another measure of value, such as gold.	Under floating exchange rate regime, the equilibrium value of the exchange rate of a country’s currency is market-determined i.e. the demand for and supply of currency relative to other currencies determine the exchange rate.

In order to maintain the exchange rate at the predetermined level, the central bank intervenes in the foreign exchange market

There is no interference on the part of the government or the central bank of the country in the determination of exchange rate. Any interference in the foreign exchange market on the part of the government or central bank would be only for moderating the rate of change

(2 MARKS)

ANSWER 10(A)

A direct effect of monetary policy on the firm's balance sheet comes through an increase in interest rates leading to an increase in the payments that the firm must make to repay its floating rate debts. Logically, as a firm's cost of credit rises, the strength of its balance sheet deteriorates. An indirect effect occurs when the same increase in interest rates works to reduce the capitalized value of the firm's long-lived assets. Reduced net worth of businesses and individuals make it tougher for them to qualify for loans at any interest rate, thus reducing spending and price pressures. Hence, a policy-induced increase in the short-term interest rate not only acts immediately to depress spending through the traditional interest rate channel, it also acts, possibly with a time-lag, to raise each firm's cost of capital through the balance sheet channel. These together aggravate the decline in output and employment.

Conversely, a reduction in interest rates can increase the borrowing capacity of households and businesses. This is because lower interest rates are associated with higher asset prices. In turn, higher asset prices increase the equity (or collateral) of existing assets that a bank can lend against. As a result, borrowers with existing assets may be able to borrow more, which can lead to more spending.

(3 MARKS)

ANSWER 10(B)

The nature of the economic system determines the size and scope of the economic functions of the government. In a centrally planned socialistic economy, the state owns all productive resources and makes all important economic decisions. On the contrary, in a market economy, all important economic decisions are made by individuals and firms who want to maximise self interest and there is only limited role for the government. In a mixed economic system, both markets and government contribute towards resource allocation decisions.

(2 MARKS)

ANSWER 10(C)

$M_3 = M_1 + \text{net time deposits with the banking system}$

$M_1 = \text{Currency notes and coins with the public} + \text{demand deposits of banks} + \text{other deposits with RBI}$

Therefore, Net time deposits with the banking system = $M_3 - M_1$

$$450000 - 3000 - 100000 - 100000 = \text{Rs. } 247000 \text{ Crore}$$

$M_4 = M_3 + \text{total deposits with the post office savings organization (excluding National savings Certificate)}$

$$M_4 = 450000 + 20000$$

$$M_4 = 470000 \text{ Crore.}$$

(3 MARKS)

ANSWER 10(D)

Foreign direct investment takes place when the resident of one country (i.e. home country) acquires ownership of an asset in another country (i.e. the host country) and such movement of capital involves ownership, control as well as management of the asset in the host country. Foreign portfolio investment is the flow of what economists call 'financial capital' rather than 'real capital' and does not involve ownership or control on the part of the investor.

Foreign direct investment (FDI) VS Foreign portfolio investment (FPI)

Foreign direct investment (FDI)	Foreign portfolio investment (FPI)
Investment involves creation of physical assets	Investment is only in financial assets
Has a long term interest and therefore remain invested for long	Only short term interest and generally remain invested for short periods
Relatively difficult to withdraw	Relatively easy to withdraw
Not inclined to be speculative	Speculative in nature
Often accompanied by technology transfer	Not accompanied by technology transfer
Direct impact on employment of labour and wages.	No direct impact on employment of labour and wages
Enduring interest in management and control	No abiding interest in management and control
Securities are held with significant degree of influence by the investor on the management of the enterprise	Securities are held purely as a financial investment and no significant degree of influence on the management of the enterprise

(2 MARKS)**ANSWER 11(A)**

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

- (i) At the extreme, the government may enforce complete ban on a demerit good; e.g. intoxicating drugs. In such cases, the possession, trading or consumption of the good is made illegal.
- (ii) Impose unusually high taxes on producing or purchasing the demerit goods making them very costly and unaffordable to many.
- (iii) Through persuasion which is mainly intended to be achieved by negative advertising campaigns which emphasize the dangers associated with consumption of demerit goods and granting of subsidies for such advertisements.
- (iv) Through legislations that prohibit the advertising or promotion of demerit goods in whatsoever manner.
- (v) Strict regulations of the market for the good may be put in place so as to limit access to the good, especially by vulnerable groups such as children and adolescents. Restrictions in terms of a minimum age maybe stipulated at which young people are permitted to buy cigarettes and alcohol.
- (vi) Regulatory controls in the form of spatial restrictions e.g. smoking in public places, sale of tobacco to be away from schools, and time restrictions under which sale at particular times during the day is banned.

ANSWER 11(B)

In recent years, apprehensions have been raised in respect of the WTO and its ability to maintain and extend a system of liberal world trade. The major issues are:

- (i) The progress of multilateral negotiations on trade liberalization is very slow and the requirement of consensus among all members acts as a constraint and creates rigidity in the system. As a result, countries find regionalism a plausible alternative. Moreover, contemporary trade barriers are much more complex and difficult to negotiate in a multilateral forum. Logically, these issues are found easier to discuss on bilateral or regional level.
- (ii) The complex network of regional agreements introduces uncertainties and murkiness in the global trade system.
- (iii) While multilateral efforts have effectively reduced tariffs on industrial goods, the achievement in liberalizing trade in agriculture, textiles, and apparel, and in many other areas of international commerce has been negligible.
- (iv) The latest negotiations, such as the Doha Development Round, have run into problems, and their definitive success is doubtful.
- (v) Most countries, particularly developing countries are dissatisfied with the WTO because, in practice, most of the promises of the Uruguay Round agreement to expand global trade has not materialized.
- (vi) The developing countries have raised a number of concerns and a few are presented here:
 1. The developing countries contend that the real expansion of trade in the three key areas of agriculture, textiles and services has been dismal.
 2. Protectionism and lack of willingness among developed countries to provide market access on a multilateral basis has driven many developing countries to seek regional alternatives.
 3. The developing countries have raised a number of issues in the Doha Agenda in respect of the difficulties that they face in implementing the present agreements.
 4. The North-South divide apparent in the WTO ministerial meets has fuelled the apprehension of developing countries about the prospect of trade expansion under the WTO regime.
 5. Developing countries complain that they face exceptionally high tariffs on selected products in many markets and this obstructs their vital exports. Examples are tariff peaks on textiles, clothing, and fish and fish products.
 6. Another major issue concerns 'tariff escalation' where an importing country protects its processing or manufacturing industry by setting lower duties on imports of raw materials and components, and higher duties on finished products.
 7. There is also possible erosion of preferences i.e. the special tariff concessions granted by developed countries on imports from certain developing countries have become less meaningful because of the narrowing of differences between the normal and preferential rates.

8. The least-developed countries find themselves disproportionately disadvantaged and vulnerable with regard to adjustments due to lack of human as well as physical capital, poor infrastructure, inadequate institutions, political instabilities etc.

(2 MARKS)

ANSWER 11(C)

The Heckscher-Ohlin theory of trade, also referred to as Factor-Endowment Theory of Trade or Modern Theory of Trade, states that comparative advantage in cost of production is explained exclusively by the differences in factor endowments.

A country tends to specialize in the export of a commodity whose production requires intensive use of its abundant resources and imports a commodity whose production requires intensive use of its scarce resources.

Accordingly, a capital abundant country will produce and export capital intensive goods relatively more cheaply and a labour-abundant country will produce and export labour intensive goods relatively more cheaply than another country.

(3 MARKS)

ANSWER 11(D)

The GATT lost its relevance by 1980s because:

- It was obsolete to the fast evolving contemporary complex world trade scenario characterized by emerging globalization
- International investments had expanded substantially
- Intellectual property rights and trade in services were not covered by GATT
- World merchandise trade increased by leaps and bounds and was beyond its scope
- The ambiguities in the multilateral system could be heavily exploited
- Efforts at liberalizing agricultural trade were not successful
- There were inadequacies in institutional structure and dispute settlement system
- It was not a treaty and therefore terms of GATT were binding only insofar as they are not incoherent with a nation's domestic rules

(2 MARKS)