

(GI-1, GI-2, GI-3, VI-1, SI-1, VDI-1)

DATE: 14.08.2021

MAXIMUM MARKS: 100

TIMING: 3¼ Hours

FINANCIAL MANAGEMENT

SECTION - A

Q. No. 1 is compulsory.

Candidates are also required to answer any four questions from the remaining five questions.

In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of questions top answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.

Working Notes should form part of the respective answer.

Answer 1:

- (a) We know that as per the realised yield approach, cost of equity is equal to the realised rate of return. Therefore, it is important to compute the internal rate of return by trial and error method. This realised rate of return is the discount rate which equates the present value of the dividends received in the past five years plus the present value of sale price of Rs. 1,128 to the purchase price of Rs. 1,000. The discount rate which equalises these two is 12 percent approximately. Let us look at the table given for a better understanding:

Year	Dividend (Rs.)	Sale Proceeds (Rs.)	Discount Factor @ 12%	Present Value (Rs.)
1	100	-	0.893	89.3
2	100	-	0.797	79.7
3	100	-	0.712	71.2
4	100	-	0.636	63.6
5	100	-	0.567	56.7
6	Beginning	1,128	0.567	639.576
				1,000.076

We find that the purchase price of Alpha Limited's share was Rs. 1,000 and the present value of the past five years of dividends plus the present value of the sale price at the discount rate of 12 per cent is Rs. 1,000.076. Therefore, the realised rate of return may be taken as 12 percent. This 12 percent is the cost of equity.

Answer:

- (b) Plan I= Raising Debt of Rs. 2.5 lakh + Equity of Rs. 22.5 lakh.
 Plan II = Raising Debt of Rs. 10 lakh + Equity of Rs. 15 lakh.
 Plan III = Raising Debt of Rs. 15 lakh + Equity of Rs. 10 lakh.

Calculation of Earnings per share (EPS):

Particulars	FINANCIAL PLANS		
	Plan I	Plan II	Plan III
	Rs.	Rs.	Rs.
Expected EBIT	5,00,000	5,00,000	5,00,000
Less: Interest ^(a)	(25,000)	(1,37,500)	(2,37,500)
Earnings before taxes	4,75,000	3,62,500	2,62,500
Less: Taxes @ 50%	(2,37,500)	(1,81,250)	(1,31,250)
Earnings after taxes (EAT)	2,37,500	1,81,250	1,31,250
Number of shares ^(b)	15,000	10,000	8,000
Earnings per share (EPS)	{1 M} 15.83	{1 M} 18.13	{1 M} 16.41

Financing Plan II (i.e. Raising debt of Rs. 10 lakh and issue of equity share capital of Rs. 15 lakh) is the option which maximises the earnings per share.

Working Notes:

(a) Calculation of interest on Debt.

Plan I	(Rs. 2,50,000 x 10%)		Rs. 25,000	} {1/2 M}
Plan II	(Rs. 2,50,000 x 10%)	Rs. 25,000		
	(Rs. 7,50,000 x 15%)	Rs. 1,12,500	Rs. 1,37,500	
Plan III	(Rs. 2,50,000 x 10%)	Rs. 25,000		
	(Rs. 7,50,000 x 15%)	Rs. 1,12,500		
	(Rs. 5,00,000 x 20%)	Rs. 1,00,000	Rs. 2,37,500	

(b) Number of equity shares to be issued

Plan I :	$\frac{\text{Rs. 22,50,000}}{\text{Rs. 150 (Market price of share)}} = 15,000 \text{ shares}$	} {1/2 M}
Plan II :	$\frac{\text{Rs. 15,00,000}}{\text{Rs. 150}} = 10,000 \text{ shares}$	
Plan III :	$\frac{\text{Rs. 10,00,000}}{\text{Rs. 125}} = 8,000 \text{ shares}$	

Answer:

(c) Workings:

(i)	Financial Leverage	$= \frac{EBIT}{EBIT - \text{Interest}}$	Or,	$2 = \frac{EBIT}{EBIT - \text{Rs. 5,000}}$	} {1/2 M}
	Or, EBIT	$= \text{Rs. 10,000}$			
(ii)	Operating Leverage	$= \frac{\text{Contribution}}{EBIT}$			} {1/2 M}
	Or, 3	$= \frac{\text{Contribution}}{\text{Rs. 10,000}}$			
	Or, Contribution	$= \text{Rs. 30,000}$			
(iii)	Sales	$= \frac{\text{Contribution}}{P/V \text{ Ratio}} = \frac{\text{Rs. 30,000}}{25\%} = \text{Rs. 1,20,000}$			} {1/2 M}
(iv)	Fixed Cost	$= \text{Contribution} - \text{Fixed cost} = \text{EBIT}$			} {1/2 M}
		$= \text{Rs. 30,000} - \text{Fixed cost} = \text{Rs. 10,000}$			
	Or, Fixed cost	$= \text{Rs. 20,000}$			

Income Statement for the year ended 31st March, 20X8

Particulars	Amount (Rs.)	} {3 M}
Sales	1,20,000	
Less: Variable Cost (75% of Rs. 1,20,000)	(90,000)	
Contribution	30,000	
Less: Fixed Cost (Contribution - EBIT)	(20,000)	
Earning Before Interest and Tax (EBIT)	10,000	
Less: Interest	(5,000)	
Earning Before Tax (EBT)	5,000	
Less: Income tax@ 30%	(1,500)	
Earning After Tax (EAT or PAT)	3,500	

Answer:

(d)

Year 1			Year 2			Year 3		
Cash Flow (Rs.)	Probability	Expected Value (Rs.)	Cash Flow (Rs.)	Probability	Expected Value (Rs.)	Cash Flow (Rs.)	Probability	Expected Value (Rs.)
2,000	0.1	200	2,000	0.2	400	2,000	0.3	600
4,000	0.2	800	4,000	0.3	1,200	4,000	0.4	1,600
6,000	0.3	1,800	6,000	0.4	2,400	6,000	0.2	1,200
8,000	0.4	3,200	8,000	0.1	800	8,000	0.1	800
ENCF		6,000	{1 M}		4,800	{1 M}		4,200 {1 M}

The present value of the expected value of cash flow at 10 per cent discount rate has been determined as follows:

$$\begin{aligned}
 \text{Present Value of cash flow} &= \frac{ENCF_1}{(1+k)^1} + \frac{ENCF_2}{(1+k)^2} + \frac{ENCF_3}{(1+k)^3} \\
 &= \frac{6,000}{(1.1)^1} + \frac{4,800}{(1.1)^2} + \frac{4,200}{(1.1)^3}
 \end{aligned}$$

$$\begin{aligned}
 &= (6,000 \times 0.909) + (4,800 \times 0.826) + (4,200 \times 0.751) \\
 &= 12,573
 \end{aligned}$$

$$\begin{aligned}
 \text{Expected Net Present value} &= \text{Present Value of cash flow} - \text{Initial Investment} \\
 &= \text{Rs. } 12,573 - \text{Rs. } 10,000 = \text{Rs. } 2,573. \{2 M\}
 \end{aligned}$$

Answer 2:

Particulars	%	(Rs.)
Share capital (given to be same)	50%	1,00,000
Other shareholders funds	15%	30,000
5% Debentures	10%	20,000
Payables	25%	50,000
Total (1,00,000 / 50%)	100%	2,00,000

Land and Buildings

$$\begin{aligned}
 \text{Total liabilities} &= \text{Total Assets} \\
 \text{Rs. } 2,00,000 &= \text{Total Assets} \\
 \text{Fixed Assets} &= 60\% \text{ of total fixed assets and current assets} \\
 &= \text{Rs. } 2,00,000 \times 60/100 = \text{Rs. } 1,20,000 \{1/2 M\}
 \end{aligned}$$

Calculation of additions to Plant & Machinery

	Rs.
Total fixed assets	1,20,000
Less: Land & Buildings	80,000
Plant and Machinery (after providing depreciation)	40,000
Less: Existing Plant & Machinery	30,000
(after extra depreciation of ₹ 5,000) i.e. 50,000 – 20,000	
Addition to the Plant & Machinery	10,000

$$\begin{aligned}
 \text{Current assets} &= \text{Total assets} - \text{Fixed assets} \\
 &= \text{Rs. } 2,00,000 - \text{Rs. } 1,20,000 = \text{Rs. } 80,000 \{1/2 M\}
 \end{aligned}$$

Calculation of stock

$$\text{Quick ratio :} = \frac{\text{Current assets} - \text{stock}}{\text{Current liabilities}} = 1$$

$$\begin{aligned}
 &= \frac{\text{Rs. 80,000} - \text{stock}}{\text{Rs. 50,000}} = 1 \\
 \text{Rs. 50,000} &= \text{Rs. 80,000} - \text{Stock} \\
 \text{Stock Receivables} &= \text{Rs. 80,000} - \text{Rs. 50,000} \\
 &= \text{Rs. 30,000} \\
 &= \frac{4}{5}^{\text{th}} \text{ of quick assets} \\
 &= (\text{Rs. 80,000} - 30,000) \times \frac{4}{5} \\
 &= \text{Rs. 40,000} \{1 \text{ M}\}
 \end{aligned}$$

Receivable turnover ratio

$$\begin{aligned}
 &= \frac{\text{Receivables}}{\text{Credit Sales}} \times 12 \text{ Months} = 2 \text{ months} \\
 &= \frac{\text{Rs. 40,000} \times 12}{\text{Credit Sales}} = 2 \text{ months} \\
 2 \times \text{credit sales} &= 4,80,000 \\
 \text{Credit sales} &= 4,80,000/2 \\
 &= \text{Rs. 2,40,000} = \text{Total Sales} \{1 \text{ M}\} \\
 &\quad (\text{As there were no cash sales})
 \end{aligned}$$

Gross profit (15% of sales)

$$\text{Rs. 2,40,000} \times \frac{15}{100} = \text{Rs. 36,000} \{1/2 \text{ M}\}$$

Return on net worth (net profit)

$$\begin{aligned}
 \text{Net worth} &= \text{Rs. 1,00,000} + \text{Rs. 30,000} \\
 &= \text{Rs. 1,30,000} \\
 \text{Net profit} &= \text{Rs. 1,30,000} \times \frac{10}{100} = \text{Rs. 13,000} \{1 \text{ M}\} \\
 \text{Debenture interest} &= \text{Rs. 20,000} \times \frac{5}{100} = \text{Rs. 1,000} \{1/2 \text{ M}\}
 \end{aligned}$$

Projected profit and loss account for the year ended 31-3-2020

To cost of goods sold	2,04,000	By sales	2,40,000	{2 M}
To gross profit	36,000			
	2,40,000		2,40,000	
To debenture interest	1,000	By gross profit	36,000	
To administration and other expenses (bal. fig)	22,000			
To net profit	13,000			
	36,000		36,000	

Projected Balance Sheet as at 31st March, 2020

Liabilities	Rs.	Assets		Rs.	{2 M}
Share capital	1,00,000	Fixed assets			
Profit and loss A/c (17,000+13,000)	30,000	Land & buildings		80,000	
5% Debentures	20,000	Plant & machinery	60,000		
Current liabilities		Less: Depreciation	20,000	40,000	
		Current assets			
		Stock	30,000		
Trade creditors	50,000	Receivables	40,000		
		Bank	10,000	80,000	
	2,00,000			2,00,000	

Answer 3:

(a) Statement showing the Evaluation of Two Machines

Machines	A	B
Purchase cost (Rs.) : (i)	1,50,000	1,00,000
Life of machines (years)	3	2
Running cost of machine per year (Rs.) : (ii)	40,000	60,000
Cumulative present value factor for 1-3 years @ 10%: (iii)	2,486	--
Cumulative present value factor for 1-2 years @ 10%: (iv)	--	1.735
Present value of running cost of machines (Rs.): (v)	99,440	1,04,100
	[(ii) x (iii)]	[(ii) x (iv)]
Cash outflow of machines (Rs.) (vi)=(i) + (v)	2,49,440	2,04,100
Equivalent present value of annual cash outflow {2 M}	1,00,338	{2 M} 1,17,637
	[(vi)+(iii)]	[(vi)+(iv)]

Decision: Company X should buy machine A since its equivalent cash outflow is less than machine B. }{2 M}

Answer:

(b) (i) Walter's model is given by

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

Where

P = Market price per share.

E = Earnings per share = Rs. 5

D = Dividend per share = Rs. 3

R = Return earned on investment = 15%

K_e = Cost of equity capital = 12%

$$P = \frac{3 + \frac{0.15}{0.12} (5 - 3)}{0.12} = \text{Rs. 45.83 } \{2 M\}$$

(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: }{1 M}

$$P = \frac{0 + \frac{0.15}{0.12} (5 - 0)}{0.12} = \text{Rs. 52.08 } \{1 M\}$$

Answer 4:

Statement showing the Working Capital Requirement of the Company

A.	Current Assets :	Rs.	
	Stock of raw materials	10,80,000	{1 M}
	(Rs. 64,80,000 / 12 months) x 2 months		
	Work-in-progress	5,81,538	{1 M}
	[(Rs. 1,51,20,000 x 4) / 52 months] x 50%		
	Finished goods	12,60,000	{1 M}
	(Rs. 1,51,20,000 / 12 months)		
	Debtors	20,16,000	{1 M}

	$(Rs. 1,51,20,000 \times \frac{2}{12} \times 80\%)$	
	Cash balances	1,00,000
		50,37,538
	Current Liabilities:	
	Creditors of raw materials	5,40,000
	(Rs. 64,80,000 / 12 months)	
	Creditors for wages & overheads	2,49,231
	$\left(\frac{Rs. 86,40,000}{52 \text{ weeks}} \times 1.5 \text{ weeks} \right)$	7,89,231
	Net Working capital (CA-CL)	42,48,307

{1 M}

{1 M}

{2 M}

Working Notes:

Calculation of Total Annual Cash Cost of Sales

Annual raw materials requirements (Rs.)	64,80,000
(1,44,000 units x Rs. 45)	
Annual direct labour cost (Rs.)	28,80,000
(1,44,000 units x Rs. 20)	
Annual overhead costs (Rs.)	57,60,000
(1,44,000 units x Rs. 40)	
Total Cash Cost of Sales (Rs.)	1,51,20,000

{2 M}

Answer 5:

Working Notes:

(1) **Calculation of Collection from Trade Receivables:**

Particulars	December	January	February	March
Sales (units)	1,800	1,875	1,950	2,100
Sales (@ Rs. 600 per unit) / Trade Receivables (Debtors) (Rs.)	10,80,000	11,25,000	11,70,000	12,60,000
Collection from Trade Receivables (Debtors) (Rs.)		10,80,000	11,25,000	11,70,000

{1 M}

(2) **Calculation of Payment to Trade Payables:**

Particulars	December	January	February	March
Output (units)	1,875	1,950	2,100	2,250
Raw Material (2 units per output) (units)	3,750	3,900	4,200	4,500
Raw Material (@ Rs. 150 per unit) / Trade Payables (Creditors) (Rs.)	5,62,500	5,85,000	6,30,000	6,75,000
Payment to Trade Payables (Creditors) (Rs.)		5,62,500	5,85,000	6,30,000

{1 M}

(3) **Calculation of Variable Overheads and Wages:**

Particulars	January	February	March
Output (units)	1,950	2,100	2,250
Payment in the same month @ Rs.100 per unit (Rs.)	1,95,000	2,10,000	2,25,000

{1 M}

(a) **Preparation of Cash Budget**

Particulars	January (Rs.)	February (Rs.)	March (Rs.)
Opening Balance	35,000	3,57,500	6,87,500
Receipts:			
Collection from Trade Receivables (Debtors)	10,80,000	11,25,000	11,70,000
Receipt of Long-Term Loan			2,00,000
Total (A)	11,15,000	14,82,500	20,57,500
Payments:			
Trade Payables (Creditors) for Materials	5,62,500	5,85,000	6,30,000
Variable Overheads and Wages	1,95,000	2,10,000	2,25,000
Purchase of Machinery			3,00,000
Total (B)	7,57,500	7,95,000	11,55,000
Closing Balance (A – B)	{1 M} 3,57,500	{1 M} 6,87,500	{1 M} 9,02,500

(b) **Calculation of Current Ratio**

Particulars	March (Rs.)
Output Inventory (i.e. units produced in March) [(2,250 units x 2 units of raw material per unit of output x Rs. 150 per unit of raw material) + 2,250 units x Rs. 100 for variable overheads and wages] or, [6,75,000 + 2,25,000] from Working Notes 2 and 3	9,00,000 {1 M}
Trade Receivables (Debtors)	12,60,000 {1 M}
Cash Balance	9,02,500 {1/2 M}
Current Assets	30,62,500
Trade Payables (Creditors)	6,75,000 {1/2 M}
Current Liabilities	6,75,000
Current Ratio (Current Assets / Current Liabilities)	4.537 approx. {1 M}

Answer 6:

- (i) (a) **Bridge Finance:** 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. {2 M}
- (b) **Floating Rate Bonds:** These are the bonds where the interest rate is not fixed and is allowed to float depending upon the market conditions. These are ideal instruments which can be resorted to by the issuers to hedge themselves against the volatility in the interest rates. They have become more popular as a money market instrument and have been successfully issued by financial institutions like IDBI, ICICI etc. {2 M}
- (c) **Packing Credit:** Packing credit is an advance made available by banks to an exporter. Any exporter, having at hand a firm export order placed with him by his foreign buyer on an irrevocable letter of credit opened in his favour, can approach a bank for availing of packing credit. An advance so taken by an exporter is required to be liquidated within 180 days from the date of its {2 M}

commencement by negotiation of export bills or receipt of export proceeds in }
an approved manner. Thus Packing Credit is essentially a short-term advance. }

- (ii) On one hand when cost of 'fixed cost fund' is less than the return on investment }
financial leverage will help to increase return on equity and EPS. The firm will also }
benefit from the saving of tax on interest on debts etc. However, when cost of debt }
will be more than the return it will affect return of equity and EPS unfavourably and } {2 M}
as a result firm can be under financial distress. This is why financial leverage is }
known as "double edged sword". }
Effect on EPS and ROE:
When, $ROI > \text{Interest}$ – Favourable – Advantage }
When, $ROI < \text{Interest}$ – Unfavourable – Disadvantage } {2 M}
When, $ROI = \text{Interest}$ – Neutral – Neither advantage nor disadvantage. }

ECONOMICS FOR FINANCE

SECTION - B

Q. No. 7 is compulsory.

Answer any three from the rest.

In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.

Working Notes should form part of the respective answer.

Answer 7:

- (a) (i) Government intervenes to ensure price stability and thus regulate aggregate demand with two policy instruments namely, monetary (credit) policy and fiscal (budgetary) policy. Monetary policy attempts to stabilise aggregate demand in the economy by influencing the availability and cost of money, i.e., the rate of interest. Fiscal policy, on the other hand, aims at influencing aggregate demand by altering tax, public expenditure and public debt of the government. When total spending is too low, the government may increase its spending and/or lower taxes to reduce unemployment and the central bank may lower interest rates. When total spending is excessive, the government may cut its spending and/or raise taxes to foster price stability and the central bank may raise interest rates. In addition, the government may initiate regulatory measures such as price ceiling and price floors. {1 M}

- (ii) M4 = Currency and coins with the people + demand deposits with the banks (Current and Saving accounts) + other deposits with the RBI + Net time deposits with the banking system + Total deposits with the Post Office Savings (excluding National Savings Certificates). {1 M}

Components	Rs. in Crores	
Currency with the public	1,12,206.6	
Demand deposits with banks	1,93,300.4	
Other deposits with the RBI	614.8	{2 M}
Net time deposits with the banking system.	2,67,310.2	
Post Office Savings deposits	277.5	
Total	5,73,709.5	

Answer:

- (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 contend that the real expansion of trade in the three key areas of agriculture, textiles and services has been dismal.
- (vii) 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.
- (viii) 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.
- (ix) 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.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) 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.

**(1/2 M
for any 6
points)**

Answer:

- (c)** The Doha Round, formally the Doha Development Agenda, which is the ninth round since the Second World War was officially launched at the WTO's Fourth Ministerial Conference in Doha, Qatar, in November 2001. The round seeks to accomplish major modifications of the international trading system through lower trade barriers and revised trade rules. The negotiations include 20 areas of trade, including agriculture, services trade, market access for nonagricultural products, and certain intellectual property issues. The most controversial topic in the yet to conclude Doha Agenda has been agriculture trade.

{1 M}

{1 M}

Answer 8:

- (a)** The WTO's top level decision-making body is the Ministerial Conference which can take decisions on all matters under any of the multilateral trade agreements. The Ministerial Conference meets at least once every two years. The next level is the General Council which meets several times a year at the Geneva headquarters. The General Council also meets as the Trade Policy Review Body and the Dispute Settlement Body. At the next level, the Goods Council, Services Council and Intellectual Property (TRIPS) Council report to the General Council. These councils are responsible for overseeing the implementation of the WTO agreements in their respective areas of specialisation.

{1 1/2 M}

{1 1/2 M}

Answer:

- (b) 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. For example, in 2016, in order to protect its domestic industry, India imposed 12.5% countervailing duty on Gold jewellery imports from ASEAN.
- {1 M}
- {1 M}

Answer:

- (c) (i) Sanitary and Phytosanitary (SPS) Measures: SPS 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. For example; 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.
- {1½ M}
- (ii) Technical Barriers To Trade (TBT): Technical Barriers to Trade (TBT) which cover both food and non-food traded products refer to mandatory 'Standards and Technical Regulations' that define the specific characteristics that a product should have, such as its size, shape, design, labelling / marking / packaging, functionality or performance and production methods, excluding measures covered by the SPS Agreement. The specific procedures used to check whether a product is really conforming to these requirements (conformity assessment procedures e.g. testing, inspection and certification) are also covered in TBT. This involves compulsory quality, quantity and price control of goods before shipment from the exporting country. Just as SPS, TBT measures are standards-based measures that countries use to protect their consumers and preserve natural resources, but these can also be used effectively as obstacles to imports or to discriminate against imports and protect domestic products. Altering products and production processes to comply with the diverse requirements in export markets may be either impossible for the exporting country or would obviously raise costs hurting the competitiveness of the exporting country. Some examples of TBT are: food laws, quality standards, industrial standards, organic certification, eco-labeling, marketing and label requirements.
- {1½ M}

Answer:

- (d) Mercantilism, which was the policy of Europe's great powers, was based on the premise that national wealth and power are best served by increasing exports and collecting precious metals in return. Mercantilists also believed that the more gold and silver a country accumulates, the richer it becomes. Mercantilism advocated maximizing exports in order to bring in more "specie" (precious metals) and minimizing imports through the state imposing very high tariffs on foreign goods. This view argues that trade is a 'zero-sum game', with winners who win does so only at the expense of losers and one country's gain is equal to another country's loss, so that the net change in wealth or benefits among the participants is zero. The arguments put forth by mercantilists were later proved to have many shortcomings by later economists. Although it is still very important theory which explains policies followed by many big and fast growing economies in Asia.
- {1 M}
- {1 M}

Answer 9:

- (a) The speculative motive reflects people's desire to hold cash in order to be equipped to exploit any attractive investment opportunity requiring cash expenditure. According to Keynes, people demand to hold money balances to take advantage of the future changes in the rate of interest, which is the same as future changes in bond prices. It is implicit in Keynes theory, that the 'rate of interest', i , is really the return on bonds. Keynes assumed that that the expected return on money is zero, while the expected returns on bonds are of two types, namely:
- (i) the interest payment
 - (ii) the expected rate of capital gain.
- The market value of bonds and the market rate of interest are inversely related. A rise in the market rate of interest leads to a decrease in the market value of the bond, and vice versa. Investors have a relatively fixed conception of the 'normal' or 'critical' interest rate and compare the current rate of interest with such 'normal' or 'critical' rate of interest.
- If wealth-holders consider that the current rate of interest is high compared to the 'normal or critical rate of interest', they expect a fall in the interest rate (rise in bond prices). At the high current rate of interest, they will convert their cash balances into bonds because:
- (i) they can earn high rate of return on bonds
 - (ii) they expect capital gains resulting from a rise in bond prices consequent upon an expected fall in the market rate of interest in future.
- Conversely, if the wealth-holders consider the current interest rate as low, compared to the 'normal or critical rate of interest', i.e., if they expect the rate of interest to rise in future (fall in bond prices), they would have an incentive to hold their wealth in the form of liquid cash rather than bonds because:
- (i) the loss suffered by way of interest income forgone is small,
 - (ii) they can avoid the capital losses that would result from the anticipated increase in interest rates, and
 - (iii) the return on money balances will be greater than the return on alternative assets
 - (iv) If the interest rate does increase in future, the bond prices will fall and the idle cash balances held can be used to buy bonds at lower price and can thereby make a capital-gain.

Answer:

- (b) We have been discussing so far about how fiscal policy acts as an effective tool for managing aggregate demand in the short-run to help maintain price stability and employment levels. However, demand-side policies unaccompanied by policies to stimulate aggregate supply cannot produce long-run economic growth. Fiscal policies such as those involving infrastructure spending generally have positive supply-side effects. When government supports building a modern infrastructure, the private sector is provided with the requisite overheads it needs. Government provision of public goods such as education, research and development etc. provide momentum for long-run economic growth. A well designed tax policy that rewards innovation and entrepreneurship, without discouraging incentives will promote private businesses who wish to invest and thereby help the economy grow.

Answer:

- (c) Non-discretionary fiscal policy or automatic stabilizers are part of the structure of the economy and are 'built-in' fiscal mechanisms that operate automatically to reduce the expansions and contractions of the business cycle. Personal income taxes, corporate income taxes and transfer payments (unemployment compensation, welfare benefits) are prominent automatic stabilizers.

During recession incomes are reduced; with progressive tax structure, there will be a decline in the proportion of income that is taxed. This would result in lower tax payments as well as some tax refunds. Simultaneously, government expenditures increase due to increased transfer payments like unemployment benefits. These two together provide proportionately more disposable income available for consumption spending to households. In the absence of such automatic responses, household spending would tend to decrease more sharply and the economy would in all probability fall into a deeper recession. {1 M}

On the contrary, when an economy expands, employment increases, with progressive system of taxes people have to pay higher taxes as their income rises. This leaves them with lower disposable income and thus causes a decline in their consumption and therefore aggregate demand. Similarly, corporate profits tend to be higher during an expansionary phase attracting higher corporate tax payments. With higher income taxes, firms are left with lower surplus causing a decline in their consumption and investments and thus in the aggregate demand. Again, during expansion unemployment falls, therefore government expenditure by way of transfer payments falls and with lower government expenditure inflation gets controlled to a certain extent. {1 M}

Answer:

- (d) The key to internalizing an externality (both external costs and benefits) is to ensure that those who create the externalities include them while making decisions. One method of ensuring internalization of negative externalities is imposing pollution taxes. The size of the tax depends on the amount of pollution a firm produces. These taxes are named Pigouvian taxes after A.C. Pigou who argued that an externality cannot be alleviated by contractual negotiation between the affected parties and therefore taxation should be resorted to. These taxes, by 'making the polluter pay', seek to internalize external costs into the price of a product or activity. More precisely, the tax is placed on the externality itself (the amount of pollution emissions) rather than on output (say, amount of steel). {1 M}

Answers 10:

- (a) Adverse selection is a situation in which asymmetric information about quality eliminates high-quality goods from a market. It is a form of market failure which occurs when buyers have better information than sellers due to hidden information, and this can distort the usual market process. For example, in the insurance market adverse selection is the tendency for people with higher risk to obtain insurance coverage to a greater extent than persons with lesser risk because compared to insurance buyers, insurers know less about the health conditions of buyers and are therefore unable to differentiate between high-risk and low-risk persons. If the insurance company charges an average price, and only high-risk consumers buy insurance it will make losses. It is therefore possible that there will be higher overall premium as firms insure themselves against high-risk customers buying insurance. Then the low-risk customers may not want to buy insurance because it is quite expensive. Economic agents end up either selecting a sub-standard product or leaving the market altogether leading to a condition of 'missing market'. If the sellers wish to do business profitably, they may have to incur considerable costs in terms of time and money for identifying the extent of risk for different buyers. {2 M}

Answer:

- (b) 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 determines the exchange rate. {2 M}

Answer:

- (c) Trade is distorted if quantities of commodities produced, bought, and sold and their prices are higher or lower than levels that would usually exist in a competitive market. For example, barriers to imports such as tariffs, domestic subsidies and quantitative restrictions can make agricultural products more costly in a market of a country. The higher prices will result in higher production of crop. Then export subsidies are needed to sell the surplus output in the world markets, where prices are low. Thus, the subsidising countries can be producing and exporting considerably more than what they normally would. {2 M}
- {1 M}

Answer:

- (d) Perfect information which implies that both buyers and sellers have complete information about anything that may influence their decision making is an important element of an efficient competitive market. Information failure occurs when lack of information can result in consumers and producers making decisions that do not maximize welfare. Information failure is widespread in numerous market exchanges due to complex nature of goods and services that are transacted, inaccurate and incomplete data, and non-availability of correct information. {1 M}
- {1 M}

Answer 11:

- (a) The principal objective of the WTO is to facilitate the flow of international trade smoothly, freely, fairly and predictably. To achieve this, the WTO endeavors:
- (i) to set and enforce rules for international trade,
 - (ii) to provide a forum for negotiating and monitoring further trade liberalization
 - (iii) to resolve trade disputes
 - (iv) to increase the transparency of decision-making processes
 - (v) to cooperate with other major international economic institutions involved in global economic management, and
 - (vi) to help developing countries benefit fully from the global trading system.
- When a country enjoys the best trade terms given by its trading partner it is said to enjoy the Most Favored Nation (MFN) status. Originally formulated as Article 1 of GATT, this principle of non discrimination states that any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be extended immediately and unconditionally to the like product originating or destined for the territories of all other contracting parties . Under the WTO agreements, countries cannot normally discriminate between their trading partners. If a country improves the benefits that it gives to one trading partner, (such as a lower a trade barrier, or opens up a market), it has to give the same best treatment to all the other WTO members too in respect of the same goods or services so that they all remain 'most-favoured'. As per the WTO agreements, each member treats all the other members equally as "most-favoured" trading partners. {2 M}
- {1 M}

Answer:

- (b) Foreign direct investment is defined as a process whereby 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. Direct investments are real investments in factories, assets, land, inventories etc. and have three components, viz., equity capital, reinvested earnings and other direct capital in the form of intra-company loans. Foreign direct investment also includes all subsequent investment transactions between the investor and the enterprise and among affiliated enterprises, both incorporated and unincorporated. FDI involves long term relationship and reflects a lasting interest and control. According to the IMF and OECD {1 M}

definitions, the acquisition of at least ten percent of the ordinary shares or voting power in a public or private enterprise by non-resident investors makes it eligible to be categorized as FDI. FDI may be categorized as horizontal, vertical, conglomerate and two- way direct foreign investments which are reciprocal investments.

Benefits of Foreign Direct Investment

Following are the benefits ascribed to foreign investments:

(i) Entry of foreign enterprises usually fosters competition and generates a competitive environment in the host country. The domestic enterprises are compelled to compete with the foreign enterprises operating in the domestic market. This results in positive outcomes in the form of cost-reducing and quality-improving innovations, higher efficiency and increasing variety of better products and services at lower prices ensuring wider choice and welfare for consumers.

(ii) International capital allows countries to finance more investment than can be supported by domestic savings resulting in higher productivity and enhanced output.

From the perspective of emerging and developing countries, FDI can accelerate growth and foster economic development by providing the much needed capital, technological know-how, management skills and marketing methods and critical human capital skills in the form of managers and technicians. The spill -over effects as the new technologies usually spread beyond the foreign corporations. In addition, the new technology can clearly enhance the recipient country's production possibilities.

{2 M}

Answer:

(c) A recession is said to occur when overall economic activity declines, or in other words, when the economy 'contracts'. A recession sets in with a period of declining real income, as measured by real GDP, simultaneously with a situation of rising unemployment. If an economy experiences a fall in aggregate demand during a recession, it is said to be in a demand-deficient recession. Economic depression is a condition of the economy resulting from an extended period of negative economic activity as measured by GDP. It is an extremely severe form of recession that leads to extended unemployment, increased credit defaults, extensive decline in output and income and a deflationary economy.

{1 M}

Taxation, though less effective compared to public expenditure, is a powerful instrument of fiscal policy in the hands of governments to combat recession and depression. Reduction in corporate and personal income taxation is a useful measure to overcome contractionary tendencies in the economy. A tax cut increases disposable incomes of households. Their inclination to spend a portion of the additional disposable income determined by their marginal propensity to consume and the multiplier effect of spending would set out a chain reaction of spending, increased incomes, and consequent increased output. Reduction in the rates of commodity taxes like excise duties, sales tax and import duty promote consumption and ultimately boost investments. Moreover, tax measures can provide incentives, or reduce disincentives, for firms and households to engage in investment and consumer spending.

{1 M}

Answer:

- (d) The money multiplier approach to money supply considers the ratio of deposit to reserve, $e = \{ER/D\}$ which represent the behaviour of commercial banks as one of the determinants of money supply. The commercial banks are required to keep only a part or fraction of their total deposits in the form of cash reserves. For the commercial banking system as a whole, the actual reserves ratio may be greater than the required reserve ratio since the banks keep with them a higher than the statutorily required percentage of their deposits in the form of cash reserves. The additional units of high- powered money that goes into 'excess reserves' of the commercial banks do not lead to any additional loans, and therefore, these excess reserves do not lead to creation of money. Therefore, if the central bank injects money into the banking system and these are held as excess reserves by the banking system, there will be no effect on deposits or currency and hence no effect on money multiplier and therefore on money supply. {1 M}
- {1 M}

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