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

DATE: 26.09.2022 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)

(a) $\text{G.P. ratio} = \frac{\text{Gross Profit}}{\text{Sales}} = 25\%$

$\text{Sales} = \frac{\text{Gross Profit}}{25} \times 100 = \frac{₹\,8,00,000}{25} \times 100 = ₹\,32,00,000$ } {1/2 M}

(b) Cost of Sales = Sales – Gross profit

= ₹ 32,00,000 - ₹ 8,00,000 } {1/2 M}

= ₹ 24,00,000

(c) Receivable turnover = $\frac{\text{Sales}}{\text{Receivables}} = 4$

= $\text{Receivables} = \frac{\text{Sales}}{4} = \frac{₹32,00,000}{4} = ₹\,8,00,000$ } {1/2 M}

(d) Fixed assets turnover = $\frac{\text{Cost of Sales}}{\text{Fixed Assets}} = 8$

$\text{Fixed assets} = \frac{\text{Cost of Sales}}{8} = \frac{₹\,24,00,000}{8} = ₹\,3,00,000$ } {1/2 M}

(e) Inventory turnover $= \frac{\text{Cost of Sales}}{\text{Average Stock}} = 8$

Average Stock $= \frac{\text{Cost of Sales}}{8} = \frac{₹24,00,000}{8} = ₹\ 3,00,000$

Average Stock $= \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$

Average Stock $= \frac{\text{Opening Stock} + \text{Opening Stock} + 20,000}{2}$

Average Stock = Opening Stock + ₹ 10,000

Opening Stock = Average Stock - ₹ 10,000

= ₹ 3,00,000 - ₹10,000

= ₹ 2,90,000

Closing Stock = Opening Stock + ₹ 20,000

= ₹ 2,90,000 + ₹ 20,000

= ₹ 3,10,000

{1 M}

(f) Payable turnover $= \frac{\text{Purchases}}{\text{Payables}} = 6$

Purchases = Cost of Sales + Increase in Stock

= ₹ 24,00,000 + ₹ 20,000

= ₹ 24,20,000

Payables $= \frac{\text{Purchase}}{6} = \frac{₹24,20,000}{6} = ₹\ 4,03,333$

{1 M}

(g) Capital turnover $= \frac{\text{Cost of Sales}}{\text{Capital Employed}} = 2$

Capital Employed = $\frac{\text{Cost of Sales}}{2} = \frac{₹24,00,000}{2} = ₹12,00,000$ } {1/2 M}

(h) Share Capital = Capital Employed – Reserves & Surplus
= ₹ 12,00,000 – ₹ 2,00,000 = ₹ 10,00,000 } {1/2 M}

Balance Sheet of Tirupati Ltd as on.....

Liabilities	Amount (₹)	Assets	Amount (₹)
Share Capital	10,00,000	Fixed Assets	3,00,000
Reserve & Surplus	2,00,000	Closing Inventories	3,10,000
Payables	4,03,333	Receivables	8,00,000
		Other Current Assets	1,93,333
	16,03,333		16,03,333

} {2 M}

(Fixed Asset turnover, inventory turnover capital turnover is calculated on cost of sales)

Answer:

(b)

Plan I = Raising Debt of Rs 5 lakh + Equity of Rs 45 lakh.
Plan II = Raising Debt of Rs. 20 lakh + Equity of Rs. 30 lakh.

Calculation of Earnings per share (EPS)

Particulars	Financial Plans			
	Plan I		Plan II	
	Rs.		*Rs.*	
Expected EBIT	10,00,000		10,00,000	
Less: Interest (Working Note 1)	(60,000)	}{1/2 M}	(2,10,000)	}{1/2 M}
Earnings before taxes	9,40,000		7,90,000	
Less: Taxes @ 25%	(2,35,000)		(1,97,500)	
Earnings after taxes (EAT)	7,05,000		5,92,500	
Number of shares (Working Note 2)	15,000	}{1/2 M}	10,000	}{1/2 M}
Earnings per share (EPS)	47	}{$1^{1/2}$ M}	59.25	}{$1^{1/2}$ M}

Financing Plan II (i.e. Raising debt of Rs. 20 lakh and issue of equity share capital of Rs. 30 lakh) is the option which maximises the earnings per share. }{1 M}

Working Notes:

1. **Calculation of interest on Debt.**

Plan I	(**Rs.** 5,00,000 x 12%)		**Rs.** 60,000
Plan II	(**Rs** .5,00,000 x 12%)	**Rs.** 60,000	
	(**Rs.** 15,00,000 x 0%)	**Rs.** 1,50,000	**Rs.** 2,10,000

2. Number of equity shares to be issued

$$\text{Plan I: } \frac{\textbf{Rs.}\,45,00,000}{\textbf{Rs.}\,300\,(\text{Market Price of share})} = 15,000 \text{ shares}$$

$$\text{Plan II: } \frac{\textbf{Rs.}\,30,00,000}{\textbf{Rs.}\,300\,(\text{Market Price of share})} = 10,000 \text{ shares}$$

(*Alternatively, interest on Debt for Plan II can be 20,00,000 X 10% i.e. **Rs.** 2,00,000. accordingly, the EPS for the Plan II will be **Rs.** 60)

Answer:

(c)

Working Note

$$\frac{\text{Net income (NI) for equity - holders}}{K_e} = \text{Market Value of Equity}$$

$$\frac{\text{Net income (NI) for equity holders}}{0.20} = \textbf{Rs.}\ 1,140 \text{ lakhs}$$

{1 M}

Therefore, Net Income to equity–holders = **Rs.** 228 lakhs

EBIT = **Rs.** 228 lakhs / 0.7 = **Rs.** 325.70 lakhs **}{1 M}**

	All Equity (RS. In lakhs)	Debt of Equity (RS. In lakhs)
EBIT	325.70	325.70
Interest on **RS.** 200 lakhs @ 15%	--	30.00
EBT	325.70	295.70
Tax @ 30 %	97.70	88.70
Income available to equity holders	228	207

(i) Market value of levered firm = Value of unlevered firm + Tax Advantage

= **Rs.** 1,140 lakhs + (**Rs.** 200 lakhs x 0.3)

= **Rs.** 1,200 lakhs

{2 M}

The impact is that the market value of the company has increased by **Rs.** 60 lakhs (**Rs.** 1,200 lakhs – **Rs.** 1,140 lakhs)

(ii) Cost of Capital

Components	Amount (RS. In lakhs)	Cost of Capital %	Weight	WACC %
Equity	1000	20.7	83.33	17.25
Debt	200	(15% X 0.7) =10.5	16.67	1.75
	1200			19.00

{2 M}

The impact is that the WACC has fallen by 1% (20% - 19%) due to the benefit of tax relief on debt interest payment.

(iii) Calculation of Cost of Equity

K_e = (Net Income to equity holders / Equity Value) X 100
= (207 lakhs / 1200 lakhs – 200 lakhs) X 100
= (207/ 1000) X 100
= 20.7 %

{1 M}

Answer 2:

Computation of initial cash outlay(COF)

	(RS.in lakhs)
Project Cost	240
Working Capital	30
	270

{2 M}

Calculation of Cash Inflows(CIF):

Years	**1**	**2**	**3-5**	**6-8**
Sales in units	60,000	80,000	1,40,000	1,20,000
	Rs.	***Rs.***	***Rs.***	***Rs.***
Contribution (RS. 200 x 60% x No. of Unit)	72,00,000	96,00,000	1,68,00,000	1,44,00,000
Less: Fixed cost	30,00,000	30,00,000	30,00,000	30,00,000
Less: Advertisement	50,00,000	25,00,000	10,00,000	5,00,000
Less: Depreciation (24000000/8) = 30,00,000	30,00,000	30,00,000	30,00,000	30,00,000
Profit /(loss)	(38,00,000)	11,00,000	98,00,000	79,00,000
Less: Tax @ 25%	NIL	2,75,000	24,50,000	19,75,000
Profit/(Loss) after tax	(38,00,000)	8,25,000	73,50,000	59,25,000
Add: Depreciation	30,00,000	30,00,000	30,00,000	30,00,000
Cash inflow	(8,00,000)	38,25,000	1,03,50,000	89,25,000
	}{1 M}	**}{1 M}**	**}{1 M}**	**}{1 M}**

(Note: Since variable cost is 40%, Contribution shall be 60% of sales)

Computation of PV of CIF

Year	**CIF**	**PV Factor**	***Rs.***
	Rs.	**@ 10%**	
1	(8,00,000)	0.909	(7,27,200)
2	38,25,000	0.826	31,59,450
3	1,03,50,000	0.751	77,72,850
4	1,03,50,000	0.683	70,69,050
5	1,03,50,000	0.621	64,27,350
6	89,25,000	0.564	50,33,700
7	89,25,000	0.513	45,78,525
8	89,25,000		
Working Capital	30,00,000	0.467	55,68,975
			3,88,82,700
	PV of COF		2,70,00,000
		NPV	**1,18,82,700**

{3 M}

Recommendation*:* Accept the project in view of positive NPV. **}{1 M}**

Answer 3:

Calculation of Expected Value for Project A and Project B

Project A				Project B		
Possible Event	Net Cash Flow (Rs.)	Probability	Expected Value (Rs.)	Cash Flow (Rs.)	Probability	Expected Value (Rs.)
A	80,000	0.10	8,000	2,40,000	0.10	24,000
B	1,00,000	0.20	20,000	2,00,000	0.15	30,000
C	1,20,000	0.40	48,000	1,60,000	0.50	80,000
D	1,40,000	0.20	28,000	1,20,000	0.15	18,000
E	1,60,000	0.10	16,000	80,000	0.10	8,000
ENCF			1,20,000			1,60,000

{2 M} {2 M}

Project A:

Variance (σ^2) = (80,000 – 1,20,000)^2 × (0.1) + (1,00,000 -1,20,000)^2 × (0.2) + (1,20,000 – 1,20,000)^2 × (0.4) + (1,40,000 – 1,20,000)^2 × (0.2) + (1,60,000 – 1,20,000)^2 × (0.1)

= 16,00,00,000 + 8,00,00,000 + 0 + 8,00,00,000 + 16,00,00,000

= 48,00,00,000

{$1^{1/2}$ M}

Standard Deviation (σ) = $\sqrt{\text{Variance}(\sigma^2)}$ = $\sqrt{48,00,00,000}$ = 21,908.90 }{$1^{1/2}$ M}

Project B:

Variance(σ^2) = (2,40,000 – 1,60,000)^2 × (0.1) + (2,00,000 – 1,60,000)^2 × (0.15) + (1,60,000 – 1,60,000)^2 ×(0.5) + (1,20,000 – 1,60,000)^2 × (0.15) + (80,000 – 1,60,000)^2 × (0.1)

= 64,00,00,000 + 24,00,00,000 + 0 + 24,00,00,000 + 64,00,00,000

= 1,76,00,00,000

{$1^{1/2}$ M}

Standard Deviation (σ) = $\sqrt{1,76,00,00,000}$ = 41,952.35 }{$1^{1/2}$ M}

Answer 4:

(a)

	₹ in lakhs
Net Profit	30
Less: Preference dividend	12
Earning for equity shareholders	18
Therefore earning per share	18/3 = ₹ 6.00

{1 M}

Price per share according to Gordon's Model is calculated as follows:

$$P_0 = \frac{E_1(1-b)}{K_e - br}$$

Here, E_1 = 6, K_e = 16%

(i) When dividend pay-out is 25%

$$P_0 = \frac{6\times0.25}{0.16-(0.75\times0.2)} = \frac{1.5}{0.16-0.15} = 150$$ }{2 M}

(ii) When dividend pay-out is 50%

$$P_0 = \frac{6\times0.5}{0.16-(0.5\times0.2)} = \frac{3}{0.16-0.10} = 50$$ }{2 M}

(iii) When dividend pay-out is 100%

$$P_0 = \frac{6\times1}{0.16-(0\times0.2)} = \frac{6}{0.16} = 37.50$$ }{2 M}

Answer:

(b) The optimum cash balance $C = \sqrt{\frac{2 \times Rs.1,26,00,000 \times Rs.20}{0.08}} = Rs.79,372.54$ **}{3 M}**

Answer 5:

1. **Raw Material Storage Period (R)**

$$= \frac{\text{Average Stock of Raw Material}}{\text{Annual Consumption of Raw Material}} \times 365$$

$$= \frac{\frac{₹45,000 + ₹65,356}{2}}{₹3,79,644} \times 365$$

$$= 53 \text{ days.}$$

{1 M}

Annual Consumption of Raw Material = Opening Stock + Purchases - Closing Stock

= ₹ 45,000 + ₹ 4,00,000 – ₹ 65,356

= ₹ 3,79,644

{1 M}

2. **Work-in-Progress (WIP) Conversion Period (W)**

$$\text{WIP Conversion Period} = \frac{\text{Average Stock of WIP}}{\text{Annual Cost of Production}} \times 365$$

$$= \frac{\frac{₹35,000 + ₹51,300}{2}}{₹7,50,000} \times 365$$

= 21 days

{1 M}

3. **Finished Stock Storage Period (F)**

$$= \frac{\text{Average Stock of Finished Goods}}{\text{Cost of Goods Sold}} \times 365$$

$$= \frac{₹\ 65,178}{₹9,15,000} \times 365 \quad = 26 \text{ days.}$$

{1 M}

$$\text{Average Stock} = \frac{₹60,181 + ₹70,175}{2}$$

$$= ₹\ 65,178.$$

4. **Debtors Collection Period (D)**

$$= \frac{\text{Average Debtors}}{\text{Annual Credit Sales}} \times 365$$

$$= \frac{₹\ 1,23,561.50}{₹\ 11,00,000} \times 365$$

$$= 41 \text{ days}$$

{1 M}

$$\text{Average debtors} = \frac{₹1,12,123 + ₹1,35,000}{2} = ₹1,23,561.50$$

5. **Creditors Payment Period (C)**

$$= \frac{\text{Average Creditors}}{\text{Annual Net Credit Purchases}} \times 365$$

$$= \frac{\left\{\frac{₹50,079 + ₹70,469}{2}\right\}}{₹4,00,000} \times 365$$

= 55 davs

{1 M}

(i) Operating Cycle Period

= R + W + F+ D - C

= 53 + 21 + 26 + 41 - 55

= 86 days **{1 M}**

(ii) Number of Operating Cycles in the Year

$$= \frac{365}{\text{Operating Cycle Period}} = \frac{365}{86} = 4.244$$ **{1 M}**

(iii) Amount of Working Capital Required

$$= \frac{\text{Annual Operating Cost}}{\text{Number of Operating Cycles}} = \frac{₹\ 9,50,000}{4.244} = ₹\ 2,23,845.42$$ **{2 M}**

Answer 6:

(i) On one hand when cost of 'fixed cost fund' is less than the return on investment financial leverage will help to increase return on equity and EPS. The firm will also benefit from the saving of tax on interest on debts etc. However, when cost of debt will be more than the return it will affect return of equity and EPS unfavourably and as a result firm can be under financial distress. This is why financial leverage is known as "double edged sword". **{2 M}**

Effect on EPS and ROE:

When, ROI > Interest – Favourable – Advantage

When, ROI < Interest – Unfavourable – Disadvantage

When, ROI = Interest – Neutral – Neither advantage nor disadvantage. **{2 M}**

Answer:

(ii) (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 commencement by negotiation of export bills or receipt of export proceeds in an approved manner. Thus Packing Credit is essentially a short-term advance. **{2 M}**

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 equestions 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) Role of Government intervention in minimizing the market power: Market power is an important factor that contributes to inefficiency because it results in higher prices than competitive prices. Because of the social cost imposed by monopoly governments intervene by establishing rules and regulations designed to promote competition and prohibit actions that are likely to restrain competition. These legislations differ from country to country. For Eq. in India, we have the Competition Act, 2002 (as amended by the Competition (Amendment) Act, 2007) to promote and sustain competition in markets. The Anti - trust laws in US and the Competition Act, 1998 of UK etc. Such legislations generally aim at prohibiting contracts, combinations and collusions among producers or traders which are in restraint of trade and other anticompetitive actions such as predatory pricing. **{2 M}**

(ii) Narrow Money (M_1) = Currency with Public + Demand deposits with Banks + Other deposits with RBI
= 2,80,000+4,00,000+5,80,000
= Rs. 12,60,000 cr. **{3 M}**

Answer:

(b) Contractionary Fiscal Policy:

Contractionary fiscal policy refers to the deliberate policy of government applied to curtail aggregate demand and consequently the level of economic activity. In other words, it is fiscal policy aimed at eliminating an inflationary gap. This is achieved by adopting policy measure that would result in the aggregate demand curve (AD) shifting to the left so the equilibrium may be established at the full employment level of real GDP. This can be achieved either by: **{1 M}**

- **With decrease in government spending**, the total amount of money available in the economy is reduced which in turn trim down the aggregate demand. **{1/2 M}**
- **An increase in personal income taxes** reduces disposable incomes leading to fall in consumption spending and aggregate demand. An increase in taxes on business profits reduces the surpluses available to businesses, and as a result, firms' investments shrink causing aggregate demand to fall. Increased taxes also dampen the prospects of profits of potential entrants who will respond by holding back fresh investments. **{1 M}**
- **A combination** of decrease in government spending and increase in personal income taxes and/or business taxes. **{1/2 M}**

Answer:

(c) In the foreign exchange market, there are two types of transactions:

(i) **<u>current transactions</u>** which are carried out in the spot market and the exchange involves immediate delivery, and **{1/2 M}**

(ii) **future transactions** wherein contracts are agreed upon to buy or sell currencies for future delivery which are carried out in forward and/or futures markets. **(1/2 M)**

Forward Premium Vs. Forward Discount

A forward premium is said to occur when the forward exchange rate is more than a spot exchange rates. On the contrary, if the forward trade is quoted at a lower rate than the spot rate, then there is a forward discount. **(1 M)**

Answer 8:

(a) By Expenditure method

GDP_{MP} = Private final consumption expenditure + Government final consumption expenditure + Gross domestic capital formation (Net domestic capital formation + depreciation) + Net export **{1 M}**

= 2000 + 1100 + (770+ 130) + 30= 4030 Crores

NNP_{FC} or NI = GDP_{MP} – Depreciation + NFIA – NIT = 4030 – 130 + 20 – 120= 3800 Crores **{2 M}**

By Income method

NNP_{FC} or NI = Compensation of Employees + Operating Surplus + Mixed Income of Self-Employed + NFIA

= 1200+ 1820+ 700+ 20= 3740 Crores **{2 M}**

Answer:

(b) Direct controls prohibit specific activities that explicitly create negative externalities or require that the negative externality be limited to a certain level, for instance limiting emissions.

Government initiatives towards negative externalities may include

1. Direct controls that openly regulate the actions of those involved in generating negative externalities, and
2. Market-based policies that would provide economic incentives so that the self - interest of the market participants would achieve the socially optimal solution. **{1 M}**

Direct controls prohibit specific activities that explicitly create negative externalities or require that the negative externality be limited to a certain level, for instance limiting emissions. Production, advertising, use and sale of many commodities and services may be prohibited. Stringent rules may be established in respect of advertising, packaging and labelling etc. Governments may, through legislation, stipulate stringent standards such as environmental standards, emissions standards non adherence of which will invite monetary penalties or/and criminal liabilities. Another method is to create negative incentives through charging fees on activities creating negative externalities Governments may also form special bodies/ boards to specifically address the problem of negative externality. The market-based approaches (such as environmental taxes and cap-and-trade), operate through price mechanism to create an incentive for change. **{2 M}**

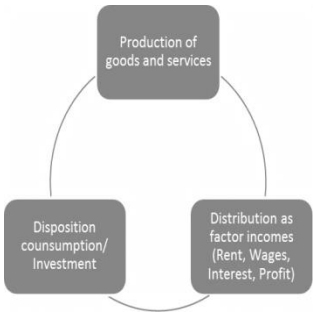
Answer:

(c) A recessionary gap, also known as a contractionary gap, is said to exist if the existing levels of aggregate production is less than what would be produced with full employment of resources. It is a measure of output that is lost when actual national income falls short of potential income, and represents the difference between the actual aggregate demand and the aggregate demand which is required to establish the equilibrium at full employment level of income. This gap occurs during the contractionary phase of business-cycle and results in higher rates of unemployment. **{1 M}**

In other words, a recessionary gap occurs when the aggregate demand is not sufficient to create conditions of full employment. **{1 M}**

Answer 9:

(a) Circular flow of income refers to the continuous circulation of production, income generation and expenditure involving different sectors of the economy. There are three different interlinked phases in a circular flow of income, namely: production, distribution and disposition as can be seen from the following figure*. **{1 M}**



Circular Flow of Income

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

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

(iii) In the expenditure or disposition phase, the income received by different factors of production is spent on consumption goods and services and investment goods. This expenditure leads to further production of goods and services and sustains the circular flow. **{2 M}**

It is clear from the figure that income is first generated in production unit, then it is distributed to households in the form of wages, rent, interest and profit. This increases the demand for goods and services and as a result there is increase in consumption expenditure. This leads to further production of goods and services and thus make the circular flow complete. These processes of production, distribution and disposition keep going on simultaneously.

Answer:

(b) The principal objective of the WTO is to facilitate the flow of international trade smoothly, freely, fairly and predictably. The WTO agreement aims to increase world trade by enhancing market access by the following:

(i) The agreement specifies the conduct of trade without discrimination. The Most-favoured-nation (MFN) principle holds that if a country lowers a trade barrier or opens up a market, it has to do so for the same goods or services from all other WTO members.

(ii) The National Treatment Principle requires that a country should not discriminate between its own and foreign products, services or nationals. With respect to internal taxes, internal laws, etc. applied to imports, treatment not less favourable than that which is accorded to like domestic products must be accorded to all other members.

(iii) The principle of general prohibition of quantitative restrictions

(iv) By converting all non- tariff barriers into tariffs which are subject to country specific limits.

(v) The imposition of tariffs should be only legitimate measures for the protection of domestic industries, and tariff rates for individual items are being gradually reduced through negotiations 'on a reciprocal and mutually advantageous' basis.

(vi) In major multilateral agreements like the Agreement on Agriculture (AOA), specific targets have been specified for ensuring market access.

{ Any 4 Points each 1/2 Mark}

Answer:

(c) Discretionary fiscal policy for stabilization refers to the deliberate policy actions on the part of a government to change the levels of expenditure, taxes and borrowing to influence the level of national output, employment and prices. Governments aim to correct the instabilities in the economy by changing:

(i) the level and types of taxes,
(ii) the extent and composition of spending, and
(iii) the quantity and form of borrowing. **{1 M}**

During inflation, or during the expansionary phase of the business cycle when there is excessive aggregate spending and excessive level of utilization of resources, contractionary fiscal policy is adopted to close the inflationary gap. This measure involves:

(i) decrease in government spending,
(ii) increase in personal and business taxes, and introduction of new taxes
(iii) a combination of decrease in government spending and increase in personal income taxes and/or business taxes
(iv) a smaller government budget deficit or a larger budget surplus
(v) a reduction in transfer payments
(vi) increase in government debt from the domestic economy **{1 M}**

During deflation or during a recessionary/contractionary phase of the business cycle, with sluggish economic activity when the rate of utilization of resources is less, expansionary fiscal policy aims to compensate the deficiency in effective demand by boosting aggregate demand. The recessionary gap is set right by:

(i) increased government spending,
(ii) decrease in personal and business taxes,
(iii) a combination of increase in government spending and decrease in personal income taxes and/or business taxes
(iv) a larger government budget deficit or a lower budget surplus
(v) an increase in transfer payments
(vi) repayment of public debt to people **{1 M}**

Answer:

(d) **{**'Reverse repo operation' is a monetary policy instrument and in effect it absorbs the liquidity from the system. This operation takes place when the RBI borrows money from commercial banks by selling them securities (which RBI permits) with an agreement to repurchase the securities on a mutually agreed future date at an agreed price which includes interest for the funds borrowed.**} {1 M} {**The interest rate paid by the RBI for such borrowings is called the "Reverse Repo Rate". Thus, reverse repo rate is the rate of interest paid by the RBI on its borrowings from commercial banks.**} {1 M}**

Answer 10:

(a) Market Stabilization Scheme for monetary management was introduced in 2004 following a MoU between the Reserve Bank of India (RBI) and the Government of India (GoI) with the primary aim of aiding the sterilization operations of the RBI. **{1 M}**

(Sterilization is the process by which the monetary authority sterilizes the effects of significant foreign capital inflows on domestic liquidity by off-loading parts of the stock of government securities held by it). Under this scheme, the Government of India borrows from the RBI (such borrowing being additional to its normal borrowing requirements) and issues treasury-bills/dated securities for absorbing excess liquidity from the market arising from large capital inflows. **{2 M}**

Answer:

(b) The GATT lost its relevance by 1980s because-

(i) It was obsolete to the fast evolving contemporary complex world trade scenario characterized by emerging globalization.
(ii) International investments had expanded substantially.
(iii) Intellectual property rights and trade in services were not covered by GATT.
(iv) World merchandise trade increased by leaps and bounds and was beyond its scope.
(v) The ambiguities in the multilateral system could be heavily exploited.
(vi) Efforts at liberalizing agricultural trade were not successful.
(vii) There were inadequacies in institutional structure and dispute settlement system.
(viii) 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.

{Any 4 Points each 1/2 Mark}

Answer:

(c) GDP measures what is produced or created over the current time period and excludes all non-production transactions. Only incomes earned by owners of primary factors of production for services rendered in production are included in national income. **{1 M}**

Transfer payments, both private and government, are made without goods or services being received in return. These payments do not correspond to return for contribution to production because they do not directly absorb resources or create output. Therefore, transfer incomes such as pensions and other social security payments are excluded from national income. **{1 M}**

Answer:

(d) Pollution tax is imposed on the polluting firms in proportion to their pollution output to ensure internalization of externalities. Following are the problems in administering an efficient pollution tax:

1. Pollution taxes are complex to determine and administer because it is difficult to discover the right level of taxation that would ensure that the private cost plus taxes will exactly equate with the social cost.
2. If the demand for the good on which pollution tax is imposed is inelastic, the tax may only have an insignificant effect in reducing demand. The producers will be able to easily shift the tax burden in the form of higher product prices. This will have an inflationary effect and may reduce consumer welfare.
3. Imposition of pollution tax involves the use of complex and costly administrative procedures for monitoring the polluters.
4. Pollution tax does not provide any genuine solutions to the problem. It only establishes an incentive system for use of methods which are less polluting.
5. Pollution taxes also have potential negative consequences on employment and investments because high pollution taxes in one country may encourage producers to shift their production facilities to those countries with lower pollution taxes.

{ Any 3 Points each 1 Mark}

Answers 11:

(a) Adverse selection is a situation in which asymmetric information about quality eliminates high-quality goods from a market. It 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 **{2 M}**

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. **{1 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 **{2 M}**
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. **{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 **{1 M}**
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}**

__**__