

**(CA INTERMEDIATE MOCK TEST MAY 2021)**

DATE: 30.03.2021

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)**

Particulars	(Rs.)
Sales	24,00,000
Less: Variable cost	12,00,000
Contribution	12,00,000
Less: Fixed cost	10,00,000
EBIT	2,00,000
Less: Interest	1,00,000
EBT	1,00,000
Less: Tax (50%)	50,000
EAT	50,000
No. of equity shares	10,000
EPS	5

}

**1/2M**

(a) Operating Leverage =  $\frac{12,00,000}{2,00,000} = 6$  times } **1/2M**

(b) Financial Leverage =  $\frac{2,00,000}{1,00,000} = 2$  times } **1M**

(c) Combined Leverage = OL × FL = 6 × 2 = 12 times. } **1M**

(d) R.O.I =  $\frac{50,000}{10,00,000} \times 100 = 5\%$

Here ROI is calculated as ROE i.e.  $\frac{\text{EAT} - \text{Pref.Dividend}}{\text{Equity shareholders' fund}}$  } **1M**

(e) Operating Leverage = 6

$$6 = \frac{\Delta \text{EBIT}}{0.25}$$

$$\Delta \text{EBIT} = \frac{6 \times 1}{4} = 1.5$$

Increase in EBIT = Rs. 2,00,000 × 1.5 = Rs. 3,00,000

New EBIT = 5,00,000

}

**1M**

**Answer:**

- (b) (a) Dividend yield on the equity shares } **1M**  

$$= \frac{\text{Dividend per share}}{\text{Market price per share}} \times 100 = \frac{\text{Rs.2 (= 0.20} \times \text{Rs.10)}}{\text{Rs.40}} \times 100 = 5 \text{ percent}$$
- (b) Dividend coverage ratio
- (i) Preference = 
$$\frac{\text{Profit after taxes}}{\text{Dividend payable to preference shareholders}}$$

$$= \frac{\text{Rs.2,70,000}}{\text{Rs.27,000 (= 0.09} \times \text{Rs.3,00,000)}} = 10 \text{ times}$$
 } **1M**
- (ii) Equity = 
$$\frac{\text{Profit after taxes - Preference share dividend}}{\text{Dividend payable to equity shareholders at current rate of Rs. 2 per share}}$$

$$= \frac{\text{Rs.2,70,000 - Rs.27,000}}{\text{Rs.1,60,000 (80,000 shares} \times \text{Rs.2)}}$$

$$= 1.52 \text{ times}$$
 } **1M**
- (c) Earnings per equity share } **1M**  

$$= \frac{\text{Earnings available to equity shareholders}}{\text{Number of equity shares outstanding}}$$

$$= \frac{\text{Rs.2,43,000}}{80,000} = \text{Rs. 3.04 per share}$$
- (d) Price-earning (P/E) ratio = 
$$\frac{\text{Market price per share}}{\text{Equity per share}} = \frac{\text{Rs.40}}{\text{Rs.3.04}} = 13.2 \text{ times}$$
 } **1M**

**Answer:**

(c)

	<b>Company</b>	
	<b>M Ltd.</b>	<b>N Ltd.</b>
EBIT (NOI)	Rs. 20,000	Rs. 20,000
Debt (D)	Rs. 1,00,000	---
$K_e$	11.50%	10%
$K_d$	7%	---

Value of equity (S) = 
$$\frac{\text{NOI - Interest}}{\text{Cost of equity}}$$

$$S_M = \frac{20,000 - 7,000}{11.50\%} = \text{Rs. 1,13,043}$$

$$S_N = \frac{20,000}{10\%} = \text{Rs. 2,00,000}$$

$$V_M = 1,13,043 + 1,00,000 \{V = S + D\} = \text{Rs. 2,13,043} \quad \textbf{1M}$$

$$V_N = \text{Rs. 2,00,000} \quad \textbf{1M}$$

**Arbitrage Process**

If you have 10% shares of M Ltd., your value of investment in equity shares is 10% of

Rs. 1,13,043 i.e. Rs. 11,304.30 and return will be 10% of (Rs. 20,000 – Rs. 7,000) = Rs. 1,300.

Alternate Strategy will be:

Sell your 10% share of levered firm for Rs. 11,304.30 and borrow 10% of levered firms debt i.e. 10% of Rs. 1,00,000 and invest the money i.e. 10% in unlevered firms stock: Total resources /Money we have = Rs. 11,304.30 + Rs. 10,000 = Rs. 21,304.3 and you invest

10% of Rs. 2,00,000 = Rs. 20,000

Surplus cash available with you is = Rs. 21,304.3 – Rs. 20,000 = Rs. 1,304.3

Your return = 10% EBIT of unlevered firm – Interest to be paid on borrowed funds i.e. = 10% of Rs. 20,000 – 7% of Rs. 10,000 = Rs. 2,000 – Rs. 700 = Rs. 1,300

i.e. your return is same i.e. Rs. 1,300 which you are getting from N Ltd. before investing in M Ltd. but still you have Rs. 1,304.3 excess money available with you. Hence, you are better off by doing arbitrage

**3M**

**Answer:**

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

Alternative-I By issue of 6,00,000 equity shares of Rs. 10 each amounting to Rs. 60 lakhs. No financial charges are involved.

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

Debt = Rs. 40 lakhs

Equity = Rs. 20 lakhs (2,00,000 equity shares of Rs.10 each)

Interest payable on debt =  $40,00,000 \times \frac{18}{100} = \text{Rs. } 7,20,000$  } **½M**

The difference point between the two alternatives is calculated by:

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

Where,

- EBIT = Earnings before interest and taxes
- I<sub>1</sub> = Interest charges in Alternative-I
- I<sub>2</sub> = Interest charges in Alternative-II
- T = Tax rate
- E<sub>1</sub> = No. of Equity shares in Alternative-I
- E<sub>2</sub> = No. of Equity shares in Alternative-II

**1½M**

Putting the values, the break-even point would be as follows:

$$\frac{(EBIT - 0)(1 - 0.40)}{6,00,000} = \frac{(EBIT - 7,20,000)(1 - 0.40)}{2,00,000}$$

$$\frac{(EBIT)(0.6)}{6,00,000} = \frac{(EBIT - 7,20,000)(0.6)}{2,00,000}$$

$$\frac{(EBIT)(0.6)}{3} = \frac{(0.6)(EBIT - 7,20,000)}{1}$$

**2½M**

$$EBIT = 3EBIT - 21,60,000$$

$$-2EBIT = -21,60,000$$

$$EBIT = \frac{21,60,000}{2}$$

$$EBIT = \text{Rs. } 10,80,000$$

Therefore, at EBIT of Rs. 10,80,000 earnings per share for the two alternatives is equal. } ½M

**Answer 2:**

- (a) (a) Cash cycle = 45 days + 75 days – 30 days = 90 days (3 months) } **1M**  
 Cash turnover = 12 months (360 days)/3 months (90 days) = 4. } **1M**
- (b) Minimum operating cash = Total operating annual outlay/cash turnover, that is, Rs. 120 lakhs/4 = Rs. 30 lakhs. } **1M**
- (c) Cash cycle = 45 days + 45 days – 30 days = 60 days (2 months).  
 Cash turnover = 12 months (360 days)/2 months (60 days) = 6.  
 Minimum operating cash = Rs. 120 lakhs/6 = Rs. 20 lakhs.  
 Reduction in investments = Rs. 30 lakhs – Rs. 20 lakhs = Rs. 10 lakhs.  
 Savings = 0.10 × Rs. 10 lakhs = Rs. 1 lakh. } **2M**

**Answer:**

(b) Navya Ltd.

(i) Walter's model is given by -

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

Where, P = Market price per share,

E = Earnings per share = Rs. 20,00,000 ÷ 4,00,000 = Rs. 5

D = Dividend per share = 60% of 5 = Rs. 3

r = Return earned on investment = 15%

K<sub>e</sub> = Cost of equity capital = 12%

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

(ii) According to Walter's model when the return on investment is more than the cost of equity capital, the price per share increases as the dividend pay-out ratio decreases. Hence, the optimum dividend pay-out ratio in this case is Nil. So, at a payout ratio of zero, the market value of the company's share will be:- } **2M**

$$\frac{0 + (5 - 0) \times \frac{0.15}{0.12}}{0.12} = \text{Rs. } 52.08 \quad \left. \vphantom{\frac{0 + (5 - 0) \times \frac{0.15}{0.12}}{0.12}} \right\} \mathbf{1M}$$

**Answer 3:**

(i) Cost of new debt } **1M**

$$K_d = \frac{I(1 - t)}{P_0}$$

$$= \frac{16(1 - 0.5)}{96} = 0.0833$$

(ii) Cost of new preference shares } **1M**

$$K_p = \frac{PD}{P_0} = \frac{1.1}{9.2} = 0.12$$

(iii) Cost of new equity shares

$$\begin{aligned}
 K_e &= \frac{D_1}{P_0} + g \\
 &= \frac{1.18}{23.60} + 0.10 = 0.05 + 0.10 = 0.15
 \end{aligned}$$

Calculation of  $D_1$

$$D_1 = 50\% \text{ of } 2013 \text{ EPS} = 50\% \text{ of } 2.36 = \text{Rs. } 1.18$$

(B) Calculation of marginal cost of capital

Type of Capital (1)	Proportion (2)	Specific Cost (3)	Product (2) × (3) = (4)
Debenture	0.15	0.0833	0.0125
Preference Share	0.05	0.12	0.0060
Equity Share	0.80	0.15	0.1200
Marginal cost of capital			0.1385

(C) The company can spend the following amount without increasing marginal cost of capital and without selling the new shares:  
 Retained earnings = (0.50) (2.36 × 10,000) = Rs. 11,800  
 The ordinary equity (Retained earnings in this case) is 80% of total capital 11,800 = 80% of Total Capital

$$\therefore \text{Capital investment before issuing equity} = \frac{\text{Rs. } 11,800}{0.80} = \text{Rs. } 14,750$$

(D) If the company spends in excess of Rs. 14,750 it will have to issue new shares.

$$\therefore \text{Capital investment before issuing equity} = \frac{\text{Rs. } 1.18}{20} + 0.10 = 0.159$$

The marginal cost of capital will be:

Type of Capital (1)	Proportion (2)	Specific Cost (3)	Product (2) × (3) = (4)
Debentures	0.15	0.0833	0.0125
Preference Shares	0.05	0.1200	0.0060
Equity Shares (New)	0.80	0.1590	0.1272
Marginal cost of capital			0.1457

**Answer 4:**

**Statement showing the requirements of Working Capital**

Particulars	(Rs.)	(Rs.)
<b>A. Current Assets:</b>		
<b>Inventory:</b>		
Stock of Raw material (Rs. 96,600 × 2/12)	<b>(1/2M)</b> 16,100	
Stock of Work-in-progress (As per Working Note)	<b>(1/2M)</b> 16,350	
Stock of Finished goods (Rs. 1,46,500 × 10/100)	<b>(1/2M)</b> 14,650	
Receivables (Debtors) (Rs. 1,27,080 × 2/12)	<b>(1/2M)</b> 21,180	
Cash in Hand	<b>(1/2M)</b> 8,000	

Prepaid Expenses:		
Wages & Mfg. Expenses (Rs. 66,250 × 1/12)	<b>(1/2M)</b> 5,521	
Administrative expenses (Rs. 14,000 × 1/12)	<b>(1/2M)</b> 1,167	
Selling & Distribution Expenses (Rs. 13,000 × 1/12)	<b>(1/2M)</b> 1,083	
Advance taxes paid {(70% of Rs.10,000)× 3/12}	<b>(1/2M)</b> 1,750	
Gross Working Capital	85,801	85,801
B. Current Liabilities:		
Payables for Raw materials (Rs. 1,12,700 × 1.5/12)	<b>(1/2M)</b> 14,088	
Provision for Taxation (Net of Advance Tax) (Rs. 10,000 × 30/100)	<b>(1/2M)</b> 3,000	
Total Current Liabilities	17,088	17,088
C. Excess of CA over CL		68,713
Add: 10% for unforeseen contingencies		<b>(1/2M)</b> 6,871
Net Working Capital requirements		<b>(1/2M)</b> 75,584

**Working Notes:**

(i) Calculation of Stock of Work-in-progress

Particulars	(Rs.)	
Raw Material (Rs. 84,000 × 15%)	12,600	}
Wages & Mfg. Expenses (Rs.62,500 × 15% × 40%)	3,750	
Total	16,350	

(ii) Calculation of Stock of Finished Goods and Cost of Sales

Particulars	(Rs.)	
Direct material Cost [Rs. 84,000 + Rs. 12,600]	96,600	}
Wages & Mfg. Expenses [Rs. 62,500 + Rs. 3,750]	66,250	
Depreciation	0	
Gross Factory Cost	1,62,850	
Less: Closing W.I.P	(16,350)	
Cost of goods produced	1,46,500	
Add: Administrative Expenses	14,000	
	1,60,500	
Less: Closing stock	14,650	
Cost of Goods Sold	1,45,850	
Add: Selling and Distribution Expenses	13,000	
Total Cash Cost of Sales	1,58,850	
Debtors (80% of cash cost of sales)	1,27,080	

(iii) Calculation of Credit Purchase

Particulars	(Rs.)	
Raw material consumed	96,600	}
Add: Closing Stock	16,100	
Less: Opening Stock	-	
Purchases	1,12,700	

**Answer 5:**

**Working Notes:**

1. **Annual Depreciation of Machines**

$$\text{Depreciation of Machine 'MX'} = \frac{\text{Rs. } 8,00,000 - \text{Rs. } 20,000}{6} = \text{Rs. } 1,30,000$$

$$\text{Depreciation of Machine 'MY'} = \frac{\text{Rs. } 10,20,000 - \text{Rs. } 30,000}{6} = \text{Rs. } 1,65,000$$

2. **Calculation of Cash Inflows**

Machine 'MX'	Years					
	1	2	3	4	5	6
Income before depreciation & Tax	2,50,000	2,30,000	1,80,000	2,00,000	1,80,000	1,60,000
Less: Depreciation	1,30,000	1,30,000	1,30,000	1,30,000	1,30,000	1,30,000
Profit before Tax	1,20,000	1,00,000	50,000	70,000	50,000	30,000
Less: Tax @ 30%	36,000	30,000	15,000	21,000	15,000	9,000
Profit after Tax (PAT)	84,000	70,000	35,000	49,000	35,000	21,000
Add: Depreciation	1,30,000	1,30,000	1,30,000	1,30,000	1,30,000	1,30,000
Cash Inflows	2,14,000	2,00,000	1,65,000	1,79,000	1,65,000	1,51,000

2M

Machine 'MY'	Years					
	1	2	3	4	5	6
Income before depreciation & Tax	2,70,000	3,60,000	3,80,000	2,80,000	2,60,000	1,85,000
Less: Depreciation	1,65,000	1,65,000	1,65,000	1,65,000	1,65,000	1,65,000
Profit before Tax	1,05,000	1,95,000	2,15,000	1,15,000	95,000	20,000
Less: Tax @ 30%	31,500	58,500	64,500	34,500	28,500	6,000
Profit after Tax (PAT)	73,500	1,36,500	1,50,500	80,500	66,500	14,000
Add: Depreciation	1,65,000	1,65,000	1,65,000	1,65,000	1,65,000	1,65,000
Cash Inflows	2,38,500	3,01,500	3,15,500	2,45,500	2,31,500	1,79,000

2M

(i) **Calculation of Payback Period**

**Cumulative Cash Inflows**

	Years					
	1	2	3	4	5	6
Machine 'MX'	2,14,000	4,14,000	5,79,000	7,58,000	9,23,000	10,74,000
Machine 'MY'	2,38,500	5,40,000	8,55,500	11,01,000	13,32,500	15,11,500

**Pay-back Period for 'MX'**

$$= 4 + \frac{(8,00,000 - 7,58,000)}{1,65,000}$$

= 4.25 years or 4 years and 3 months. }1M

**Pay-back Period for 'MY'**

$$= 3 + \frac{(10,20,000 - 8,55,500)}{2,45,500} = 3 + 0.67 = 3.67 \text{ years}$$

Or, 3 years and 8 months. }1M

(ii) **Calculation of Net Present Value (NPV)**

Year	PV Factor	Machine 'MX'		Machine 'MY'	
		Cash Inflows Rs.	Present Value Rs.	Cash Inflows Rs.	Present Value Rs.
0	1.000	(8,00,000)	(8,00,000)	(10,20,000)	(10,20,000)

1	0.909	2,14,000	1,94,526	2,38,500	2,16,797
2	0.826	2,00,000	1,65,200	3,01,500	2,49,039
3	0.751	1,65,000	1,23,915	3,15,500	2,36,941
4	0.683	1,79,000	1,22,257	2,45,500	1,67,677
5	0.621	1,65,000	1,02,465	2,31,500	1,43,762
6	0.564	1,51,000	85,164	1,79,000	1,00,956
Scrap Value	0.564	20,000	11,280	30,000	16,920
Net Present Value (NPV)			4,807	<b>1M</b>	1,12,092

(iii) **Recommendation**

	Machine 'MX'	Machine 'MY'
Ranking according to Pay-back Period	II	I
Ranking according to Net Present Value (NPV)	II	I

**Advise:** Since Machine 'MY' has higher ranking than Machine 'MX' according to both parameters, i.e. Payback Period as well as Net Present Value, therefore, Machine 'MY' is recommended. **1M**

**Answer 6:**

(a) **Global Depository Receipts (GDRs):** These are negotiable certificate held in the bank of one country representing a specific number of shares of a stock traded on the exchange of another country. These financial instruments are used by companies to raise capital in either dollars or Euros. These are mainly traded in European countries and particularly in London. **2½M**

**Answer:**

(b) **Indian Depository Receipts (IDRs):** The concept of the depository receipt mechanism which is used to raise funds in foreign currency has been applied in the Indian Capital Market through the issue of Indian Depository Receipts (IDRs). IDRs are similar to ADRs/GDRs in the sense that foreign companies can issue IDRs to raise funds from the Indian Capital Market in the same lines as an Indian company uses ADRs/GDRs to raise foreign capital. The IDRs are listed and traded in India in the same way as other Indian securities are traded. **2½M**

**Answer:**

(c) **Meaning of Venture Capital Financing :** The venture capital financing refers to financing of new high risky venture promoted by qualified entrepreneurs who lack experience and funds to give shape to their ideas. In broad sense, under venture capital financing venture capitalist make investment to purchase equity or debt securities from inexperienced entrepreneurs who undertake highly risky ventures with a potential of success. **2½M**

**Answer:**

(d) **Plain Vanilla Bond:**

- The issuer would pay the principal amount along with the interest rate. } **½M**
- This type of bond would not have any options. } **1M**
- This bond can be issued in the form of discounted bond or can be issued in the form of coupon bearing bond. } **1M**



**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) 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) Local content requirements (LCRs) are conditions imposed by a host country government that require investing firms to purchase and use domestically manufactured goods or domestically supplied services in order to operate in an economy. The fraction of a final good to be procured locally may be specified either in value terms (e.g. 25% of the value of a product must be locally produced), by requiring that some minimum share of the value of a good represent home value added, or in physical units (eg. 50% of component parts for a product must be locally produced). {2 M}
- From the viewpoint of domestic producers of inputs, local content requirement provides greater demand which is not necessarily associated to their competitiveness and for components/ parts manufacturers gives protection in the same way that an import quota would. Local content requirement benefits producers and not consumers because such requirements may raise the prices. {1 M}

**Answer:**

- (c) 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:**

- (d) 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. 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}
- {1 M}

**Answer 8:**

- (a)  $NNP_{FC}$  or NI = Compensation of employees + Operating Surplus (rent + interest + profit) + Mixed Income of Self-employed + Net Factor Income from Abroad = 3,000 + (1,020 + 2,010 + 980) + 1,050 + 370 = Rs. 8,430 Crores {2 M}
- {1 M}

**Answer:**

- (b) The credit multiplier is the reciprocal of the required reserve ratio. {1 M}
- $$\text{Credit Multiplier} = \frac{1}{\text{Required Reserve Ratio}}$$
- For RRR = 0.10 i.e. 10% the Credit Multiplier =  $1/0.10 = 10$   
 For RRR = 0.125 i.e. 12.5% Credit Multiplier =  $1/0.125 = 8$   
 Credit Creation = Initial Deposit  $\times 1/RRR$   
 For RRR = 0.10, Credit creation will be  $1,00,000 \times 1/0.10 = \text{Rs. } 10,00,000$   
 For RRR = 0.125, Credit creation will be  $1,00,000 \times 1/0.125 = \text{Rs. } 8,00,000$  {1 M}

**Answer:**

- (c) The Neo classical Approach or the cash balance approach put forth by Cambridge economists holds that money increases utility in the following two ways: {2 M}
1. for transaction motive, i.e. for enabling the possibility of split-up of sale and purchase to two different points of time rather than being simultaneous
  2. as a temporary store of wealth i.e. for a hedge against uncertainty
- Since demand for money also involves a precautionary motive in this approach and money gives utility in its store of wealth and precautionary modes, money is demanded for itself. How much money will be demanded depends:
- (i) partly on income which points to transactions demand, such that higher the income, the greater the quantity of purchases and as a consequence greater will be the need for money as a temporary abode of value to overcome transactions costs, and
  - (ii) partly on other factors of which important ones are wealth and interest rates.

The Cambridge equation is stated as:

$$M_d = k PY$$

Where

$M_d$  = is the demand for money

$Y$  = real national income

$P$  = average price level of currently produced goods and services

$PY$  = nominal income

$k$  = proportion of nominal income ( $PY$ ) that people want to hold as cash balances

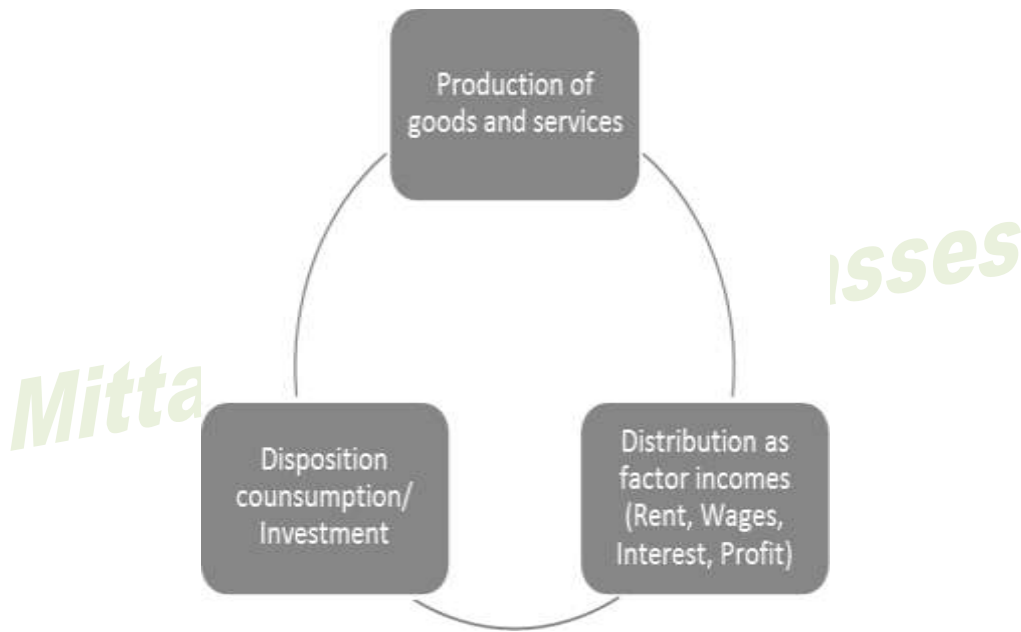
The term 'k' in the above equation is called 'Cambridge k'. The equation above explains that the demand for money ( $M$ ) equals k proportion of the total money income. The neoclassical theory changed the focus of the quantity theory of money to money demand and hypothesized that demand for money is a function of money income. {1 M}

**Answer:**

- (d) 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. 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.
- 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
- 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}

{1 M}

{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) 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.
  - (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:
    - The real expansion of trade in the three key areas of agriculture, textiles and services has been dismal.
    - 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.
    - 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.
    - 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.
    - Developing countries complain that they face exceptionally high tariffs on selected products in many markets and this obstructs their vital exports.
    - 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.
    - 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.
    - 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.

{ Any 6 Points each 1/2 Mark}

**Answer:**

- (b) Yes, there is still scope for mutually beneficial trade. } {1 M}  
 The first step is that nation should specialize in the production and export of the commodity in which its absolute disadvantage is smaller and import the commodity in which its absolute disadvantage is greater. This can be explained with the help of an example (Theory of Comparative Advantage). } {2 M}

**Answer:**

- (c) 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:**

- (d) 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. } {1 M}  
 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. } {1 M}

**Answer 11:**

- (a) Gross Domestic Product at Market Price ( $GDP_{MP}$ ) = Gross Domestic Product at Factor Cost ( $GDP_{FC}$ ) + (Indirect Taxes - Subsidies) } {1 M}  
 $\therefore$  Subsidies =  $GDP_{FC} + \text{Indirect tax} - GDP_{MP}$  } {2 M}  
 $= 360815 + 454367 - 779567$   
 $= \text{Rs. } 35,615 \text{ Crores}$

**Answer:**

- (b) Global Public Goods are those public goods with benefits /costs that potentially extend to everyone in the world. These goods have widespread impact on different countries and regions, population groups and generations throughout the entire globe. Global Public Goods may be: } {1 M}
- final public goods which are 'outcomes' such as ozone layer preservation or climate change prevention, or
  - intermediate public goods, which contribute to the provision of final public goods. e.g. International health regulations.
- The distinctive characteristic of global public goods is that there is no mechanism (either market or government) to ensure an efficient outcome. } {1 M}  
 The World Bank identifies five areas of global public goods which it seeks to address: namely, the environmental commons (including the prevention of climate change and biodiversity), communicable diseases (including HIV/AIDS, tuberculosis, malaria, and avian influenza), international trade, international financial architecture, and global knowledge for development.

**Answer:**

- (c) 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 }

**Answer:**

- (d)** Open Market Operations (OMO) is a general term used for monetary policy involving market operations conducted by the Reserve Bank of India by way of sale/ purchase of government securities to/ from the market with an objective to adjust the rupee liquidity conditions in the market on a durable basis. {1 M}
- When the Reserve Bank of India feels that there is excess rupee liquidity in the market, it resorts to sale of government securities for absorption of the excess liquidity. Similarly, when the liquidity conditions are tight, the RBI will buy securities from the market, thereby injecting liquidity into the market. {1 M}

Mittal Commerce Classes

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