

# **SUGGESTED SOLUTION**

# INTERMEDIATE

SUBJECT- F.M. AND ECONOMICS

Test Code - PIN 5053

BRANCH - () (Date :)

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## ANSWER-1

## **ANSWER-A**

## Workings:

(i) Cost of Equity (K) = D1/P0 + g

(ii) Cost of Debentures (Kd) = I (1 - t) = 0.09 (1 - 0.4) = 0.054 or 5.4%

## Computation of Weighted Average Cost of Capital (WACC using market value weights)

Source of capital	Market Value of capital (Rs.)	Weig ht	Cost of capital (%)	WACC (%)
9% Debentures	30,00,000	0.30	5.40	1.62
12% Preference Shares	10,00,000	0.10	12.00	1.20
Equity Share Capital	60,00,000	0.60	17.00	10.20
(Rs.30 × 2,00,000 shares)				
Total	1,00,00,000	1.00		13.02

(5 MARKS)

## **ANSWER-B**

## Preparation of Balance Sheet Working Notes:

Sales	= Gross Profit / Gross Profit Margin		
	= 60,000 / 0.2 = Rs. 3,00,000		
Total Assets	= Sales / Total Asset Turnover		
	= 3,00,000 / 0.3 = Rs.10,00,000		
Net Worth	= 0.9 X Total Assets		

= 0.9 X Rs. 10,00,000 = Rs. 9,00,000							
Current Liability	Current Liability = Total Assets – Net Worth						
	= Rs. 10,00,000 - Rs. 9,00,000						
	= Rs. 1,00,000						
Current Assets	= 1.5 x Current Liability						
	= 1.5 x Rs. 1,00,000 = Rs. 1,50,000						
Stock	= Current Assets – Liquid Assets						
	= Current Assets – (Liquid Assets / Current Liabilities =1)						
	= 1,50,000 – (LA / 1,00,000 = 1) = Rs. 50,000						
Debtors	= Average Collection Period X Credit Sales / 360						
	= 60 x 0.8 x 3,00,000 / 360 = Rs. 40,000						
Cash	= Current Assets – Debtors – Stock						
	= Rs. 1,50,000 - Rs. 40,000 - Rs. 50,000						
	=Rs. 60,000						
Fixed Assets	= Total Assets – Current Assets						
	= Rs. 10,00,000 - Rs. 1,50,000						
	= Rs. 8,50,000						

## **Balance Sheet**

Liabilities	Rs.	Assets	Rs.
Net Worth	9,00,000	Fixed	8,50,000
Current	1 00 000	Assets	50 000
Liabilities	1,00,000	Stock	50,000
		Debtors	40,000
		Cash	60,000
Total liabilities	10,00,000	Total Assets	10,00,000

## (5 MARKS)

## **ANSWER-C**

Market Price (P) per share as per Walter's Model is :

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

Where,

P = Price of Share

r = Return on investment or rate of earning

K<sub>e</sub> = Rate of Capitalisation or Cost of Equity

	(i)	(ii)	(iii)
Rate of earning (r)	DP ratio 50%	DP ratio 75%	DP ratio 100%
15%	$\frac{5 + \left(\frac{0.15}{0.10}\right) (10 - 5)}{0.10}$	$\frac{7.5 + \begin{pmatrix} 0.15 \\ 0.10 \end{pmatrix} (10 - 7.5)}{0.10}$	$\frac{10 + \left(\frac{0.15}{0.10}\right) (10 - 10)}{0.10}$
	= 12.5/ 0.10 = Rs. 125	11.25/0.10 = Rs. 112.5	10/0.10 = Rs. 100
10%	$\frac{5+  \left( \frac{0.10}{0.10} \right) (10-5)}{0.10}$	$\frac{7.5 + \left(\frac{0.10}{0.10}\right) (10 - 7.5)}{0.10}$	$\frac{10+\left(\frac{0.10}{0.10}\right)(10-10)}{0.10}$
	= 10/ 0.10 = Rs. 100	= 10/0.10 = Rs. 100	= 10/0.10 = Rs. 100
5%	$\frac{5 + \left(\frac{0.05}{0.10}\right) (10 - 5)}{0.10}$	$\frac{7.5 + \begin{pmatrix} 0.05\\ 0.10 \end{pmatrix} (10 - 7.5)}{0.10}$	$\frac{10 + \left(\frac{0.05}{0.10}\right) (10 - 10)}{0.10}$
	= 7.5/ 0.10 = Rs. 75	= 8.75/ 0.10 = Rs. 87.5	= 10/ 0.10 = Rs. 100

## Calculation of Market price (P) under the following dividend payout ratio and earning rates :

(5 MARKS)

## **ANSWER-D**

## Computation of Earnings Per Share (EPS)

Plans	l (Rs.)	II (Rs.)
Earnings before interest & tax (EBIT)	40,00,000	40,00,000
Less: Interest charges (12% of Rs.75 lakh)		(9,00,000)
Earnings before tax (EBT)	40,00,000	31,00,000
<i>Less:</i> Tax @ 30%	(12,00,000)	(9,30,000)

Earnings after tax (EAT)	28,00,000	21,70,000
No. of equity shares (@ Rs.10+Rs.15)	4,00,000	1,00,000
E.P.S (Rs.)	7.00	21.70

#### **()** Computation of Financial Break-even Points

Plan 'I' = 0 - Under this plan there is no interest payment, hence the financial break- even point will be zero.

Plan 'II' = Rs. 9,00,000 - Under this plan there is an interest payment of Rs.9,00,000, hence the financial break -even point will be Rs.9 lakhs

#### Computation of Indifference Point between Plan I and Plan II:

Indifference point is a point where EBIT of Plan-I and Plan-II are equal. This can be calculated by applying the following formula:

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

## So <u>EBIT(1-0.3)</u>

400000 shares

 $=\frac{(EBIT-Rs. \ 900000)(1-0.3)}{100000 \ shares}$ 

Or, 2.8 EBIT – 25,20,000 = 0.7EBIT

Or, 2.1EBIT = 25,20,000

EBIT =12,00,000

## **ANSWER-2**

## **Calculation of Net Cash Flow**

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

\*this is treated as a short term capital loss.

(5 marks)

#### Calculation of Net Present Value (NPV)

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

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

#### (ii) Calculation of Internal Rate of Return (IRR)

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

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

= 16% + 2.62% = 18.62%.

(10 MARKS)

## **ANSWER-3**

#### (i) Statement showing Working Capital for each policy

(Rs. in crores)

	Working Capital Policy			
	Conservative	Moderate	Aggressive	
Current Assets : (i)	4.50	3.90	2.60	
Fixed Assets : (ii)	2.60	2.60	2.60	
Total Assets : (iii)	7.10	6.50	5.20	
Current Liabilities: (iv)	2.34	2.34	2.34	
Net Worth : $(v) = (iii) - (iv)$	4.76	4.16	2.86	
Total liabilities : (iv) + (v)	7.10	6.50	5.20	
Estimated Sales : (vi)	12.30	11.50	10.00	
EBIT : (vii)	1.23	1.15	1.00	
(a) Net working capital position : (i) – (iv)	2.16	1.56	0.26	
(b) Rate of return : (vii)/(iii)	17.3%	17.7%	19.2%	
(c) Current ratio (i)/(iv)	1.92	1.67	1.11	

# (4 MARKS)

(ii) Statement Showing Effect of Alternative Financing Policy

Financing Policy	Conservative	Moderate	Aggressive
Current Assets : (i)	3.90	3.90	3.90
Fixed Assets : (ii)	2.60	2.60	2.60
Total Assets : (iii)	6.50	6.50	6.50
Current Liabilities : (iv)	2.34	2.34	2.34
Short term Debt : (v)	0.54	1.00	1.50
Long term Debt : (vi)	1.12	0.66	0.16
Equity Capital (vii)	2.50	2.50	2.50
Total liabilities	6.50	6.50	6.50
Forecasted Sales	11.50	11.50	11.50
EBIT : (viii)	1.15	1.15	1.15
Less : Interest short – term debt : (ix)	0.06	0.12	0.18

## (Rs.in crores)

	(12% of Rs.	(12% of Rs.	12% of Rs.
	0.54)	1.00)	1.50)
Long term debt : (x)	0.18	0.11	0.03
	(16% of Rs.	(16% of Rs.	(16% of Rs.
	1.12)	0.66)	0.16)
Earning before tax :	0.91	0.92	0.94
(xi) - (ix + x)			
Tax @ 35%	(0.32)	(0.32)	(0.33)
Earning after tax : (xii)	0.59	0.60	0.61
(a) Net Working Capital Position : (i) –	1.02	0.56	0.06
[(iv) + (v)]			
(b) Rate of return on Equity	23.6%	24%	24.4%
shareholders' capital : (xii)/(vii)			
(c) Current Ratio :	1.35	1.17	1.02
[(i) /(iv) + (v)]			

## **ANSWER-4**

## (i) Financial leverage

Combined Leverage = Operating Leverage (OL) x Financial Leverage (FL)

2.5 = 2 x FL Or, FL = 1.25

Financial Leverage = 1.25

## (ii) P/V Ratio and Earning per share (EPS)

Operating leverage =  $\frac{\text{Contribution (C)}}{\text{Contribution - Fixed Cost (FC)}} \times 100$ 

$$2 = \frac{C}{C - 3,40,000} \text{ Or, } C = 2 (C - 3,40,000)$$

Or, C = 2C - 6,80,000 Or, Contribution = Rs.6,80,000

Now, P/V ratio =  $\frac{\text{Contribution (C)}}{\text{Sales(S)}} \ge 100 = \frac{6,80,000}{50,00,000} \ge 13.6\%$ 

Therefore, P/V Ratio = 13.6%

EBT = Sales - Variable Cost - Fixed Cost - Interest

# (6 MARKS)

(1.5 MARKS)

(5 MARKS)

= Rs.50,00,000 - Rs.50,00,000 (1-0.136) - Rs.3,40,000 - (8% x Rs.30,25000)

= Rs.50,00,000 - Rs.43,20,000 - Rs.3,40,000 - Rs.2,42,000

= Rs.98,000

PAT = EBT (1-T)

= Rs.98,000 (1-0.3) = Rs.68,600

$$\mathsf{EPS} = \frac{\mathsf{Profit after tax}}{\mathsf{No. of equity shares}}$$

EPS = 
$$\frac{Rs.68, 600}{3,40,000 \text{ shares}} = Rs.0.202$$

#### (iii) Assets turnover

(2 MARKS)

Assets turnover =  $\frac{\text{Sales}}{\text{Total Assets}^*} = \frac{\text{Rs.50,00,000}}{\text{Rs.34,00,000} + \text{Rs.30,25,000}} = 0.78$ 

0.78 < 1.5 means lower than industry turnover.

\*Total Asset = Equity share capital + 8% Debentures

(iv) EBT zero means 100% reduction in EBT. Since combined leverage is 2.5, sales have to be dropped by 100/2.5 = 40%. Hence new sales will be

Rs. 50,00,000 x (100-40) % = Rs. 30,00,000.

Therefore, at Rs. 30,00,000 level of sales, the Earnings before Tax (EBT) of the company will be zero.

(1.5 MARKS)

#### Alternatively

Required sales when EBT is zero

 $=\frac{\text{Fixed Cost} + \text{Interest} + \text{desired Profit}}{\text{P/V Ratio}}$ 

*Rs*.3, 40, 000 + *Rs*.2, 42, 000 + *Zero* 

13.60%

13.60%

= Rs.42,79,412

**[Note:** The question can also be solved by first calculating EBIT with the help of Financial Leverage. Accordingly answer to the requirement (ii) and (iv) will also vary]

## **ANSWER-5**

- (i) Equipment's initial cost = Rs. 6,00,000 + 80,000 = Rs. 6,80,000
- (ii) Annual straight line depreciation = Rs. 6,00,000/5 = Rs.1,20,000
- (iii) Net cash flows can be calculated as follows:
  - = Before tax CFs  $\times$  (1 Tc) + Tc  $\times$  Depreciation

## (0.5 \*3 = 1.5 MARKS)

(Rs. '000)							
		C s					
	Year	0	1	2	3	4	5
1.	Initial cost	(680)					
2.	Before tax CFs		240	275	210	180	160
3.	Tax @ 35%		84	96.25	73.5	63	56
4.	After tax-CFs		156	178.75	136.5	117	104
5.	Depreciation tax shield						
	(Depreciation × Tc)		42	42	42	42	42
6.	Working capital released		_	-			80
7.	Net Cash Flow (4 + 5 + 6)		198	220.75	178.5	159	226
8.	PVF at 12%	1.00	0. 8929	0.7972	0.7118	0.6355	0.5674
9.	PV (7 × 8)	(680)	176.79	175.98	127.06	101.04	128.23
10.	NPV	29.12					

	0	1	2	3	4	5
PVF at 15%	1	0.8696	0.7561	0.6575	0.5718	0.4972
PV	(680)	172.18	166.91	117.36	90.92	112.37
NPV	-20.26					

(6.5 MARKS)

#### **Internal Rate of Return**

(2\*1 = 2 MARKS)

IRR =  $12\% + \frac{29.12}{49.38} \times 3\%$ 

= 13.77%

#### **Discounted Payback Period**

Discounted CFs at K = 12% considered = 176.79 + 175.98 + 127.06 + 101.04 + 12  $\times \frac{99.13}{128.24}$ 

= 4 years and 9.28 months

Payback Period (NCFs are considered)

 $= 198 + 220.75 + 178.5 + 12 \times \frac{82.75}{159}$ 

= 3 years and 6.25 months

#### **ANSWER-6**

## **ANSWER-A**

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".

Effect on EPS and ROE:

When, ROI > Interest – Favourable – Advantage When, ROI < Interest – Unfavourable –

Disadvantage

When, ROI = Interest – Neutral – Neither advantage nor disadvantage.

(5 MARKS)

## **ANSWER-B**

The profit maximization is not an operationally feasible criterion." This statement is true because profit maximization can be a short-term objective for any organization and cannot be its sole objective. Profit maximization fails to serve as an operational criterion for maximizing the owner's economic welfare. It fails to provide an operationally feasible measure for ranking alternative courses of action in terms of their economic efficiency. It suffers from the following limitations:

- (i) <u>Vague term:</u> The definition of the term profit is ambiguous. Does it mean short term or long term profit? Does it refer to profit before or after tax? Total profit or profit per share?
- (ii) <u>Timing of Return</u>: The profit maximization objective does not make distinction between returns received in different time periods. It gives no consideration to the time value of money, and values benefits received today and benefits received after a period as the same.
- (iii) <u>It ignores the risk factor.</u>
- (iv) The term maximization is also vague.

(5 MARKS)

#### ANSWER:7

(A)	(i)	Y = C + I + G + (X - M)
		$Y = 0.75 \times \{(1 - 0.30)^*Y\} + 250 + 800 + 600 - 0.15 \times Y$
		Y = 0.375 Y + 1650
		0.625Y = 1650
		Y = 1650/ 0.625

Hence Y = Rs. 2640 Crores

- (ii) Exports (X) = Rs. 600 Crores
  Imports = 0.15 (2640) = Rs. 396 Crores
  Hence current account is in surplus of Rs. 204 Crores
  (iii) Tax revenue = 0.3 (2640) = Rs. 792 Crores
  - Government expenditure = Rs. 800 Crores Hence budget is in deficit of Rs. 8 crores i.e. – 8

(5 MARKS)

**(B)** 

- i Being an intermediate good, electricity sold to a steel plant will not be included in national income calculation. The underlying principle is that only finished goods and services which are directly sold to the consumer for final consumption would be included.
- **ii.** Electric power sold to a consumer household would be included in the calculation of GDP since it is a final good consumed by the end user.
- iii. The value of parts and components procured from the market by a car manufacturer will not be included in national income calculation because these are intermediate goods used in car production.
- iv. The value of the robot bought by a computer producer for use in the production of computers would be included in national income calculation because the computer producer is the "final consumer" of the robot and the robot is not resold in the market after value addition.

(2 Marks)

## (C)

- 1. Regulations: through regulations, the government can-
  - (a) Determine how a private activity may be conducted e.g. 10+ 2 pattern of education , board exams,
  - (b) Prohibit some types of goods and activities e.g. narcotic substances, smuggling,
  - (c) Set standards and issue mandates making others oblige e.g. use of helmets , insurance coverage,
  - (d) Enhance consumption of merit goods i.e consumption of what is socially desirable;
  - (e) Ensure the quality of merit goods supplied to the society
- 2. Subsidies : merit goods may be provided free of cost (100% subsidy) or at subsidized rates, to enhance their consumption.
- 3. Direct government provision : Government produces merit goods, leading to large economies of scale and productive efficiency apart from generating substantial positive externalities.
- 4. Supplementing market provision : government can increase the consumption of merit goods by purchasing them from the open market, and supplying them free or at subsidized rates to the consumers.

(3 MARKS)

## ANSWER:8

(A) NDFC = Compensation of Employees + Operating Surplus + Mixed Income = (viii) + (ix) + (vi) + (v) + (vi) + (vii) = 489 + 50 + 311 + 892 + 81 + 6 = 1829 Crores GDP<sub>MP</sub> = NDP<sub>FC</sub> + Depreciation + Net Indirect Tax = NDP<sub>FC</sub> + (ii) + (i) = 1829 + 42 + 208 = 2079 Crores NNP<sub>FC</sub> = NDP<sub>FC</sub> + Net Factor Income from Abroad = NDP<sub>FC</sub> + (iii) = 2079 + (-40) = 2039 Crores (B)

	Liquidity Adjustment Facility (LAF)	Marginal Standing Facility (MSF)		
Central	RBI, being a Bankers' Bank, provides	RBI, being a Bankers' Bank, acts as a		
Bank's Role	Liquidity to Banks when it faces	Lender of Last Resort to		
	shortage of Liquidity.	Commercial Banks, in suitable		
		situations.		
Objective	Its objective is to assist Banks to adjust	It has been introduced by RBI with		
	their day to day mismatches in	the main aim to		
	Liquidity. Currently, RBI provides	a) reduce Volatility in the		
	Financial Accommodation to the	Overnight Lending Rates in the		
	Commercial Banks through Repos /	Inter – Bank Market, and		
	Reverse Repos under this Facility.	b) enable smooth Monetary		
		Transmission.		

(3 MARKS)

## (C) <u>Voluntary Export Restraints (VERs) refer to a type of informal quota administered by an</u> <u>exporting country voluntarily restraining the quantity of goods that can be exported out</u> <u>of a country during a specified period of time.</u>

#### (2 MARKS)

(D) The 'real exchange rate' incorporates changes in prices and describes 'how many' of a good or service in one country can be traded for 'one' of that good or service in a foreign country.

Real exchange rate = nominal exchange rate x  $\frac{Domestic \ price \ index}{Foreign \ price \ index}$ 

(2 MARKS)

## ANSWER:9

(A) The ratio of  $\Delta Y$  to  $\Delta I$  is called the investment multiplier, k.

$$\mathsf{K} = \frac{change \ in \ income}{change \ in \ investment} \frac{\Delta Y}{\Delta I}$$

Here 
$$\frac{2400}{600} = 4$$
;  $4 = \frac{1}{1 - MPC} = \frac{1}{MPS}$   
 $4 - 4$  MPC = 1  
 $4$  MPC =  $4 - 1 = 3$   
MPC =  $0.75$ 

MPS = 1 - MPC = 0.25

#### (2 marks)

- (B)
- (a) This need reflects people's desire to hold cash, in order to be equipped to exploit any attractive investment opportunity requiring cash expenditure, i.e. to take advantage of favourable business situations.
- (b) It means the proportion of cash in asset portfolio in response to the changes interest rate.
- (c) Higher the interest rate, lower the speculative demand for money and vice-versa.

(3 MARKS)

## (C)

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.

#### (3 MARKS)

(D) A distinction is made between the two concepts of public spending during depression, namely, the concept of <u>'pump priming'</u> and the concept of <u>'compensatory spending'</u>. Pump priming involves a one-shot injection of government expenditure into a depressed economy with the aim of boosting business confidence and encouraging larger private investment. It is a temporary fiscal stimulus in order to set off the multiplier process. The argument is that with a temporary injection of purchasing power into the economy through a rise in government spending financed by borrowing rather than taxes, it is possible for government to bring about permanent recovery from a slump. Pump priming was widely used by governments in the post-war era in order to maintain full employment; however, it became discredited later when it failed to halt rising unemployment and was held responsible for inflation. Compensatory spending is said to be resorted to when the government spending is deliberately carried out with the obvious intention to compensate for the deficiency in private investment. (2 MARKS)

## ANSWER: 10

- (A) <u>Restrictions / Barriers :</u> However, Government intervention in restricting free flow of goods and services is found in many forms in the practical world, which takes the form of Trade Barriers. The main purposes of imposing Trade Barriers are -
  - (a) To protect Domestic Industries from Foreign competition,
  - (b) to conserve the Foreign Exchange Resources of the Country,
  - (c) To make the Balance of Payments Position favourable.
  - (d) To curb Conspicuous Consumption,
  - (e) To mobilise Revenue for the government and,
  - (f) To discriminate against certain countries.

Note : Depending on the economic situation, Trade Barriers may be oriented towards -

- (a) promoting exports, and restricting imports, [general situation] or
- (b) promoting imports, and restricting exports [in certain goods, and in certain situations]

## (5 MARKS)

(B) The main forms of direct investments are: the opening of overseas companies, including the establishment of subsidiaries or branches, creation of joint ventures on a contract basis, joint development of natural resources and purchase or annexation of companies in the country receiving foreign capital. (2 MARKS)

(C) Meaning : <u>Crowding out</u> effect is the negative effect fiscal policy may generate when spending by government in an economy substitutes private spending. For example, if government provides free computers to students, the demand from students for computers may not be forthcoming.

## <u>Mechanism</u>

The interest rates in an economy increase when :

Government increases its spending by borrowing from the loanable funds from market and thus the demand for loans increases.

Government increases the budget deficit by selling bonds or treasury bills and the amount of money with the private sector decreases.

Due to high interest, private investments, especially the ones which are interest – sensitive, will be reduced. Fiscal policy becomes ineffective as the decline in private spending partially or completely offset the expansion in demand resulting from an increase in government expenditure. (3 MARKS)

## ANSWER: 11

## (A)

1. CDR Concept : CDR is ratio of money held by the Public held in Currency, to that they hold in Demand Deposits with Banks. So, CDR =  $\frac{currency \ held \ by \ public}{demand \ deposit \ in \ banks} = C/D$ 

CDR is 0.2, it means for every Rs. 100, an Individual with hold Rs. 20 as Currency with him, and place Rs. 80 in Commercial Banks as Demand Deposits.

## 2. Significance : CDR –

- (a) represents the degree of adoption of banking habits by the people, and is thus a behavioural parameter,
- (b) reflects People's preference for liquidity
- (c) is related to the level of economic activities or the GDP Growth,
- (d) is influenced by the degree of financial sophistication, e.g. (i) ease and access to Financial Services, (ii) availability of a number of Liquid Financial Assets, (iii) Financial Innovations, (iv) Institutional Factors, etc.
- (e) is driven by temporary factors also, e.g. CDR may increase during festive seasons as People convert Deposits into Cash for meeting extra expenditure during that periods.
- 3. Impact : Increase in the Monetary Base that goes into-
  - (a) Currency is not multiplied
  - (b) Demand Deposits is multiplied (by the Banking System, subject to Reserve Requirements.)

#### (5 MARKS)

**(B)** Moral hazard is associated with information failure and refers to a situation that increases the probability of occurrence of a loss or a larger than normal loss, because of a change in the unobservable or hard to observe behaviour of one of the parties in the

transaction after the transaction has been made. Moral hazard is <u>opportunism</u> <u>characterized by an informed person's taking advantage of a less-informed person</u> <u>through an unobserved action.</u> It arises from lack of information about someone's future behaviour. Moral hazard occurs due to <u>asymmetric information i.e., an</u> <u>individual knows more about his or her own actions than other people do.</u> This leads to a distortion of incentives to take care or to exert effort when someone else bears the costs of the lack of care or effort. For example, in the insurance market, the expected loss from an adverse event increases as insurance coverage increases.

(2 MARKS)

### (C) <u>Depreciation vs. Devaluation :</u>

	Depreciation	Devaluation
Meaning	Depreciation is a <u>decrease in a</u>	Devaluation is a <b>deliberate downward</b>
	<u>Currency's Value (relative to</u>	adjustment in the value of a Country's
	<u>another currency)</u> due to market	currency relative to another currency,
	forces in a Floating Exchange Rate	group of currencies or standard.
	Regime.	
<u>Cause</u>	Depreciation is caused due to	Devaluation is caused by the action of
	increase in Demand, with Supply	the Government / Central Bank/
	remaining constant.	Monetary authority policy actions.
<u>Regime</u>	Applicable for a Floating Exchange	Applicable for a relatively fixed
	Rate Regime.	exchange rate regime
<u>Scope</u>	It is due to the interaction of market	It is a monetary policy tool to make an
	forces.	official reduction in the par value of a
		currency.

**Note** : The terms "Appreciation" and "Revaluation" are used to denote the opposite of the above two terms "Depreciation" and "Devaluation" respectively.

(3 MARKS)