MOCK TEST PAPER - 2

INTERMEDIATE: GROUP – II

PAPER – 8: FINANCIAL MANAGEMENT & ECONOMICS FOR FINANCE

8A: FINANCIAL MANAGEMENT

Suggested Answers/ Hints

1. (a) Income Statement with required calculations

Particulars	**(₹)**	**(₹)**
Sales in units	2,20,000	2,00,000
Sales Value	22,00,000	20,00,000
Variable Cost	(13,20,000)	(12,00,000)
Contribution	8,80,000	8,00,000
Fixed expenses	(4,00,000)	(4,00,000)
EBIT	4,80,000	4,00,000
Debenture Interest	(1,00,000)	(1,00,000)
EBT	3,80,000	3,00,000
Tax @ 30%	(1,14,000)	(90,000)
Profit after tax (PAT)	2,66,000	2,10,000
No. of shares	20,000	20,000
(i) Financial Leverage $= \frac{EBIT}{EBT}$	$= \frac{₹\,4,80,000}{₹\,3,80,000}$ = 1.26	$= \frac{₹\,4,00,000}{₹\,3,00,000}$ = 1.33
(i) Operating Leverage $= \frac{Contribution}{EBIT}$	$= \frac{₹\,8,80,000}{₹\,4,80,000}$ = 1.83	$= \frac{₹\,8,00,000}{₹\,4,00,000}$ = 2
(iii) Earnings per share (EPS) $= \frac{PAT}{No.\ of\ shares}$	$= \frac{₹\,2,66,000}{20,000}$ = ₹ 13.3	$= \frac{₹\,2,10,000}{20,000}$ = ₹ 10.5
Decrease in EPS	= ₹ 13.3 – ₹ 10.5 = ₹ 2.8	
% decrease in EPS	$= \frac{2.8}{13.3} \times 100$ = 21.05%	

(b) As per Dividend discount model, the price of share is calculated as follows:

$$P= \frac{D_1}{(1+K_e)^1} + \frac{D_2}{(1+K_e)^2} + \frac{D_3}{(1+K_e)^3} + \frac{D_4}{(1+K_e)^4} + \frac{D_5}{(K_e-g)} \times \frac{1}{(1+K_e)^4}$$

Where,

P = Price per share

K_e = Required rate of return on equity

g = Growth rate

$$P = \frac{₹150x1.15}{(1+0.2)^1} + \frac{₹172.5x1.15}{(1+0.2)^2} + \frac{₹198.38x1.15}{(1+0.2)^3} + \frac{₹228.13x1.15}{(1+0.2)^4} + \frac{₹262.35x1.05}{(0.2-0.05)^1} \times \frac{1}{(1+0.2)^4}$$

P = 143.75 + 137.76 + 132.02 + 126.52 + 885.63 = ₹ 1425.68

Intrinsic value of share is ₹ 1425.68 as compared to latest market price of ₹ 2052. Market price of a share is overpriced by ₹ 626.32.

(c)

Computation of cash inflow per annum	**₹**
Net operating income per annum	13,60,000
Less: Tax @ 35%	4,76,000
Profit after tax	8,84,000
Add: Depreciation (₹72,00,000 / 5 years)	14,40,000
Cash inflow	23,24,000

The IRR of the investment can be found as follows:

NPV = – ₹ 72,00,000 + ₹ 23,24,000 ($PVAF_5$, r) = 0

or PVA F_5 r (Cumulative factor) = $\frac{₹72,00,000}{₹23,24,000}$ = 3.09

Computation of Internal Rate of Return (IRR)

Discounting rate	15%	19%
Cumulative factor	3.35	3.06
Total NPV (₹)	77,85,400	71,11,440
	(₹23,24,000 × 3.35)	(₹23,24,000 × 3.06)
Internal outlay (₹)	72,00,000	72,00,000
Surplus (Deficit) (₹)	5,85,400	(88,560)

$$IRR = LR + \frac{NPV\ at\ LR}{NPV\ at\ LR - NPV\ at\ HR} \times (HR - LR)$$

$$= 15\% + \frac{5,85,400}{5,85,400 - (-88,560)} \times (19\% - 15\%)$$

= 15% +3.47 =18.47%

Note: Lower rate can be 18% or less than 18%. However, there will be no change in the final answer.

(d) (i) Calculation of Average Inventory

Since gross profit is 20% of sales, the cost of goods sold should be 80% of the sales.

Cost of goods sold = 12,00,000 x $\frac{80}{100}$ = 9,60,000

$$Inventory\ Turnover = \frac{Cost\ of\ goods\ sold}{Average\ Inventory}$$

$$3 = \frac{9,60,000}{\text{Average Inventory}}$$

$$\text{Average Inventory} = \frac{9,60,000}{3} = 3,20,000$$

(ii) Calculation of Average Collection Period

$$\text{Average Collection Period} = \frac{\text{Average Receivables}}{\text{Credit Sales}} \times 360$$

$$\text{Where, Average Receivables} = \frac{\text{Opening Receivables} + \text{Closing Receivables}}{2}$$

Calculation of Closing balance of Receivables

	₹	₹
Current Assets (2 x 3,00,000)		6,00,000
Less: Inventories	1,00,000	
Less: Marketable Securities	70,000	
Less: Cash	50,000	2,20,000
Receivables (Closing Balance)		**3,80,000**

$$\text{Now, Average Receivables} = \frac{1,20,000 + 3,80,000}{2} = 2,50,000$$

$$\text{So, Average Collection Period} = \frac{2,50,000}{12,00,000} \times 360 = 75 \text{ days}$$

2. Working Notes:

1. Capital employed before expansion plan:

	(₹)
Equity shares (₹10 × 1,00,000 shares)	10,00,000
Debentures {(₹1,00,000/10) × 100}	10,00,000
Retained earnings	20,00,000
Total capital employed	40,00,000

2. Earnings before the payment of interest and tax (EBIT):

	(₹)
Profit (EBT)	7,00,000
Add: Interest	1,00,000
EBIT	8,00,000

3. Return on Capital Employed (ROCE):

$$\text{ROCE} = \frac{\text{EBIT}}{\text{Capital employed}} \times 100 = \frac{\text{Rs.}8,00,000}{\text{Rs.}40,00,000} \times 100 = 20\%$$

4. Earnings before interest and tax (EBIT) after expansion scheme:

After expansion, capital employed = ₹40,00,000 + ₹10,00,000

= ₹ 50,00,000

Desired EBIT = 20% × ₹50,00,000 = ₹10,00,000

(i) Computation of Earnings Per Share (EPS) under the following options:

	Present situation	Expansion scheme Additional funds raised as	
		Debt	Equity
	(₹)	(₹)	(₹)
Earnings before Interest and Tax (EBIT)	8,00,000	10,00,000	10,00,000
Less: Interest - Old capital	1,00,000	1,00,000	1,00,000
- New capital	--	1,00,000 (₹10,00,000 × 10%)	--
Earnings before Tax (EBT)	7,00,000	8,00,000	9,00,000
Less: Tax (40% of EBT)	2,80,000	3,20,000	3,60,000
PAT	4,20,000	4,80,000	5,40,000
No. of shares outstanding	1,00,000	1,00,000	2,00,000
Earnings per Share (EPS)	4.20 $\left(\frac{₹4,20,000}{1,00,000}\right)$	4.80 $\left(\frac{₹4,80,000}{1,00,000}\right)$	2.70 $\left(\frac{₹5,40,000}{2,00,000}\right)$

(ii) Advise to the Company: When the expansion scheme is financed by additional debt, the EPS is higher. Hence, the company should finance the expansion scheme by raising debt.

3. (i) Computation of Weighted Average Cost of Capital based on existing capital structure

Source of Capital	Existing Capital structure (₹)	Weights (a)	After tax cost of capital (%) (b)	WACC (%) (a) × (b)
Equity share capital (W.N.1)	4,00,00,000	0.588	10.00	5.88
12% Preference share capital	80,00,000	0.118	12.00	1.42
11% Debentures (W.N.2)	2,00,00,000	0.294	7.70	2.26
Total	6,80,00,000	1.000		9.56

Working Notes:

1. Cost of Equity Capital:

$$K_e = \frac{\text{Expected dividend}(D_1)}{\text{Current Market Price}(P_0)} + \text{Growth}(g)$$

$$= \frac{20}{400} + 0.05$$

$$= 10\%$$

2. Cost of 10% Debentures

$$K_d = \frac{\text{Interest}(1-t)}{\text{Net proceeds}}$$

$$= \frac{22,00,000\,(1-0.30)}{2,00,00,000}$$

= 0.077 or 7.7%

(ii) Computation of Weighted Average Cost of Capital based on new capital structure

Source of Capital	New Capital structure (₹)	Weights (a)	After tax cost of capital (%) (b)	WACC (%) (a) x (b)
Equity share capital (W.N.3)	4,00,00,000	0.548	13.33	7.30
12% Preference share capital	80,00,000	0.110	12.00	1.32
11% Debentures (W.N.2)	2,00,00,000	0.274	7.70	2.11
12% Debentures (W.N.4)	50,00,000	0.068	8.40	0.57
Total	7,30,00,000	1.000		11.30

Working Notes:

3. Cost of Equity Capital:

$$K_e = \frac{25}{300} + 0.05$$

= 13.33%

4. Cost of 12% Debentures

$$K_d = \frac{6,00,000\,(1-0.30)}{50,00,000}$$

= 0.084 or 8.4%

4. (i) Calculation of Net Present Value (NPV):

	Year-1	Year-2	Year-3	Year-4	Year-5
Sales volume (Qty. in lakh)	10	10	10	10	10
Contribution per unit (₹) (Selling price – variable cost)	250	250	250	250	250
Total contribution (₹in lakh)	2,500	2,500	2,500	2,500	2,500
Less: Fixed overheads (₹ In lakh)	400	400	400	400	400
PBDT	2,100	2,100	2,100	2,100	2,100
Less: Depreciation (₹ in lakh) (Working note 1)	400	320	256	204.8	163.84
PBT	1,700	1,780	1,844	1,895.2	1936.16
Less: Tax @ 30%	510	534	553.2	568.56	580.85
PAT	1,190	1,246	1,290.8	1,326.64	1,355.31
Add: Depreciation	400	320	256	204.8	163.84
Add: Salvage value of plant & machinery	-	-	-	-	525
Add: Working capital	-	-	-	-	600

Net Cash inflow	1,590	1,566	1,546.8	1,531.44	2,644.15
P.V factor @15%	0.869	0.756	0.657	0.571	0.497
P.V of cash inflows	1,381.71	1,183.90	1,016.24	874.45	1,314.14

Net Present Value = P.V of cash inflows – P.V of cash outflows

= ₹ (1383.71+1183.9+1016.24+874.45+1314.14) – (₹2,000 + ₹ 600)

= 5772.44 – 2600 = ₹3172.44 lakh

The NPV of the project is positive, hence, the project is viable.

Working note 1:

	Year-1 (₹ in lakhs)	**Year-2 (₹ in lakhs)**	**Year-3 (₹ in lakhs)**	**Year-4 (₹ in lakhs)**	**Year-5 (₹ in lakhs)**
Opening balance	2,000	1,600	1,280	1024	819.20
Depreciation @20%	400	320	256	204.8	163.84
Closing WDV	1,600	1,280	1024	819.2	655.36

(ii) Determination of sensitivity of NPV w.r.t.

a. Decrease in selling price by 10%

	Year-1	**Year-2**	**Year-3**	**Year-4**	**Year-5**
Sales volume (Qty. in lakh)	10	10	10	10	10
New Selling price	450	450	450	450	450
Variable cost	250	250	250	250	250
Contribution per unit (₹) (Selling price – variable cost)	200	200	200	200	200
Total contribution (₹in lakh)	2,000	2,000	2,000	2,000	2,000
Less: Fixed overheads (₹ In lakh)	400	400	400	400	400
PBDT	1,600	1,600	1,600	1,600	1,600
Less: Depreciation (₹ in lakh) (Working note 1)	400	320	256	204.8	163.84
PBT	1,200	1,280	1,344	1,395.2	1,436.16
Less: Tax @ 30%	360	384	403.2	418.56	430.85
PAT	840	896	940.8	976.64	1,005.31
Add: Depreciation	400	320	256	204.8	163.84
Add: Salvage value of plant & machinery	-	-	-	-	525
Add: Working capital	-	-	-	-	600
Net Cash inflow	1,240	1,216	1,196.8	1,181.44	2,294.15
P.V factor @15%	0.869	0.756	0.657	0.571	0.497

P.V of cash inflows	1,077.56	919.30	786.30	674.60	1,140.19

NPV = ₹ (1,077.56+919.30+786.30+674.60+1,140.19) – (₹ 2,000 + ₹ 600)

= ₹ 4,597.95 – ₹ 2,600 = ₹1,997.95 lakh

10% reduction in selling price reduces the NPV by 37.02% (3172.44-1997.95/3172.44)

b. Increase in project cost by 10%

	Year-1	Year-2	Year-3	Year-4	Year-5
PBDT	2,100	2,100	2,100	2,100	2,100
Less: Depreciation (₹ in lakh) (Working note 2)	440	352	281.6	225.28	180.22
PBT	1660	1748	1818.4	1874.72	1919.78
Less: Tax @ 30%	498	524.40	545.52	562.42	575.93
PAT	1162	1223.6	1272.88	1312.30	1343.85
Add: Depreciation	440	352	281.60	225.28	180.22
Add: Salvage value of plant & machinery	-	-	-	-	525
Add: Working capital	-	-	-	-	600
Net Cash inflow	1,602	1,575.6	1,554.48	1,537.58	2,649.07
P.V factor @15%	0.869	0.756	0.657	0.571	0.497
P.V of cash inflows	1,392.14	1,191.15	1,021.29	877.96	1316.59

NPV = ₹ (1,392.14+1,191.15+1,021.29+877.96+1,316.59) – (₹ 2,200 + ₹ 600)

= ₹ 5,799.13 – ₹ 2,800 = ₹2,999.13 lakh

10% increase in project cost reduces the NPV only by 5.46% (3,172.44 - 2,999.13/3172.44)

Working note 2:

	Year-1	Year-2	Year-3	Year-4	Year-5
Opening balance	2,200	1,760	1408	1126.4	901.12
Depreciation @20%	440	352	281.6	225.28	180.22
Closing WDV	1,760	1408	1126.40	901.12	702.90

5 (a) Statement showing Estimate of Working Capital Needs

	(Amount in ₹)	(Amount in ₹)
A. Current Assets		
(i) Inventories:		
Raw material (4 weeks) $\left(\frac{2,40,000\,\text{units}\times₹260}{52\,\text{weeks}}\times 4\,\text{weeks}\right)$	48,00,000	
WIP Inventory (1 week) $\left(\frac{2,40,000\,\text{units}\times₹585}{52\,\text{weeks}}\times 1\text{week}\right)\times 0.75$	20,25,000	

Finished goods inventory (2 weeks) $\left(\frac{2,40,000\,\text{units} \times ₹585}{52\,\text{weeks}} \times 2\,\text{weeks}\right)$	54,00,000	**1,22,25,000**
(ii) Receivables (Debtors) (4 weeks) $\left(\frac{2,40,000\,\text{units} \times ₹585}{52\,\text{weeks}} \times 4\,\text{weeks}\right) \times \frac{4}{5}$		86,40,000
(iii) Cash and bank balance		2,70,000
Total Current Assets		2,11,35,000
B. Current Liabilities:		
(i) Payables (Creditors) for materials (3 weeks) $\left(\frac{2,40,000\,\text{units} \times ₹260}{52\,\text{weeks}} \times 3\,\text{weeks}\right)$		36,00,000
(ii) Outstanding wages (1 week) $\left(\frac{2,40,000\,\text{units} \times ₹125}{52\,\text{weeks}} \times 1\,\text{week}\right)$		5,76,923
(iii) Outstanding overheads (2 weeks) $\left(\frac{2,40,000\,\text{units} \times ₹200}{52\,\text{weeks}} \times 2\,\text{weeks}\right)$		18,46,154
Total Current Liabilities		60,23,077
Net Working Capital Needs (A – B)		1,51,11,923

(b) Calculation of Operating Cycle Period and number of Operating Cycle in a Year

Operating Cycle Period = R + W + F + D – C

= 54 + 20 + 22 + 74 – 25 = 145 days

$$\text{Number of Operating Cycle in a Year} = \frac{360}{\text{Operating Cycle Period}}$$

= 360/145 = 2.48 times

6. (a) Different types of packing credit are-

(i) Clean packing credit: This is an advance made available to an exporter only on production of a firm export order or a letter of credit without exercising any charge or control over raw material or finished goods. It is a clean type of export advance. Each proposal is weighed according to particular requirements of the trade and credit worthiness of the exporter. A suitable margin has to be maintained. Also, Export Credit Guarantee Corporation (ECGC) cover should be obtained by the bank.

(ii) Packing credit against hypothecation of goods: Export finance is made available on certain terms and conditions where the exporter has pledgeable interest and the goods are hypothecated to the bank as security with stipulated margin. At the time of utilising the advance, the exporter is required to submit, along with the firm export order or letter of credit relative stock statements and thereafter continue submitting them every fortnight and/or whenever there is any movement in stocks.

(iii) **Packing credit against pledge of goods:** Export finance is made available on certain terms and conditions where the exportable finished goods are pledged to the banks with approved clearing agents who will ship the same from time to time as required by the exporter. The possession of the goods so pledged lies with the bank and is kept under its lock and key.

(iv) **E.C.G.C. guarantee:** Any loan given to an exporter for the manufacture, processing, purchasing, or packing of goods meant for export against a firm order qualifies for the packing credit guarantee issued by Export Credit Guarantee Corporation.

(v) **Forward exchange contract:** Another requirement of packing credit facility is that if the export bill is to be drawn in a foreign currency, the exporter should enter into a forward exchange contact with the bank, thereby avoiding risk involved in a possible change in the rate of exchange.

(b) Risk Adjusted Discount Rate: The use of risk adjusted discount rate (RADR) is based on the concept that investors demands higher returns from the risky projects. The required rate of return on any investment should include compensation for delaying consumption plus compensation for inflation equal to risk free rate of return, plus compensation for any kind of risk taken. If the risk associated with any investment project is higher than risk involved in a similar kind of project, discount rate is adjusted upward in order to compensate this additional risk borne.

A risk adjusted discount rate is a **sum of risk free rate and risk premium.** The Risk Premium depends on the perception of risk by the investor of a particular investment and risk aversion of the Investor.

So Risks adjusted discount rate = Risk free rate+ Risk premium

Risk Free Rate: It is the rate of return on Investments that bear no risk. For e.g., Government securities yield a return of 6 % and bear no risk. In such case, 6 % is the risk-free rate.

Risk Premium: It is the rate of return over and above the risk-free rate, expected by the Investors as a reward for bearing extra risk. For high risk project, the risk premium will be high and for low risk projects, the risk premium would be lower.

(c) Role of Financial Controller: The role of financial controller has undergone changes over the years. Until the middle of this century, its scope was limited to procurement of funds under major events in the life of the enterprise such as promotion, expansion, merger, etc. In the modern times, the role of financial controller includes besides procurement of funds, the three different kinds of decisions as well, namely, investment, financing and dividend.

The financial controller, in a bid to maximize shareholders' wealth, should strive to maximize returns in relation to the given risk; he should seek courses of actions that avoid unnecessary risks. To ensure maximum return, funds flowing in and out of the firm should be constantly monitored to assure that they are safeguarded and properly utilized.

OR

In dividend price approach, cost of equity capital is computed by dividing the expected dividend by market price per share. This ratio expresses the cost of equity capital in relation to what yield the company should pay to attract investors. It is computed as:

$$K_e = \frac{D_1}{P_0}$$

Where,

D_1 = Dividend per share in period 1

P_0 = Market price per share today.

8B: ECONOMICS FOR FINANCE

1. (a) Regional accounts provide an integrated database on the innumerable transactions taking place in the regional economy and help decision making at the regional level. At present, practically all the states and union territories of India compute state income estimates and district level estimates. State Income or Net State Domestic Product (NSDP) is a measure in monetary terms of the volume of all goods and services produced in the state within a given period of time (generally a year) accounted without duplication. Per Capita State Income is obtained by dividing the NSDP (State Income) by the midyear projected population of the state.

The state level estimates are prepared by the State Income Units of the respective State Directorates of Economics and Statistics (DESs). The Central Statistical Organisation assists the States in the preparation of these estimates by rendering advice on conceptual and methodological problems.

(b) Ideally, all the three methods of national income computation should arrive at the same figure. When national income of a country is measured separately using these methods, we get a three-dimensional view of the economy. Each method of measuring GDP is subject to measurement errors and each method provides a check on the accuracy of the other methods. By calculating total output in several different ways and then trying to resolve the differences, we will be able to arrive at a more accurate measure than would be possible with one method alone. Moreover, different ways of measuring total output give us different insights into the structure of our economy.

(c) Gross Domestic Product at Market Price (GDP_{MP}) = Gross Domestic Product at Factor Cost (GDP_{FC}) + Indirect Taxes- Subsidies

Subsidies = GDP_{FC} + Indirect Taxes- GDP_{MP}

360815+ 454367-779567

= 35615 crore

2. (a) There are many reasons to dispute the validity of GDP as a perfect measure of well- being. In fact, GDP measures our ability to obtain many requirements to make our life better; yet leave out many important aspects which ensure good quality of life for all. GDP measures exclude the following which are critical for the overall wellbeing of citizens.

- Income distributions and, therefore, GDP per capita is a completely inadequate measure of welfare. Countries may have significantly different income distributions and, consequently, different levels of overall well-being for the same level of per capita income.
- Quality improvements in systems and processes due to technological as well as managerial innovations which reflect true growth in output from year to year.
- Productions hidden from government authorities, either because those engaged in it are evading taxes or because it is illegal (drugs, gambling etc.).
- The disutility of loss of leisure time.
- Economic 'bads' for example: crime, pollution, traffic congestion etc which make us worse off.

(b) A free rider is a person who benefits from something without expending effort or paying for it. In other words, free riders are those who utilize goods without paying for their use. Example is Wikipedia, a free encyclopedia which faces a free rider problem. Hundreds of millions of people

use Wikipedia every month but only a small part of users pay to use it. A large majority of Wikipedia users do not pay to use the site but are able to benefit from the information provided by the website. The free-rider problem occurs when everyone enjoys the benefits of a good without paying for it. Since private goods are excludable, free riding mostly occurs in the case of public goods. The free-rider problem leads to under- provision of a good or service and thus causes market failure.

(c) C = 10+0.8Yd

= 10 + 0.8 (Y – 50)

Y = C+I+G+(X-M)

Y = 10 + 0.8(Y-50) +135+60+ (35-0.05Y)

Y – 0.8Y +0.05Y = 10-40+135+60+35

0.25 Y = 200

Y = 800

Net Exports = (X-M) = 35 – 0.05Y

= 35 – (0.05 × 800)

= -5

Thus, trade is in deficit.

3. **(a)** 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.

(b) Given the development needs of developing countries, the monetary policy of such countries incorporates explicit objectives such as:

- Maintenance the economic growth
- Ensuring an adequate flow of credit to the productive sectors
- Sustaining- a moderate structure of interest rates to encourage investments, and
- Creation of an efficient market for government securities.

(c) According to Keynes, people hold money (M) in cash for three motives:

(i) Transactions motive,

(ii) Precautionary motive, and

(iii) Speculative motive.

The transaction motive for holding cash is directly related to the level of in- come and relates to 'the need for cash for the current transactions for personal and business exchange.

The amount of money demanded under the precautionary motive is to meet unforeseen and unpredictable contingencies involving money payments and depends on the size of the income, prevailing economic as well as political conditions and personal characteristics of the individual such as optimism/ pessimism, farsightedness etc.

The speculative motive reflects people's desire to hold cash in order to be equipped to exploit any attractive investment opportunity requiring cash expenditure. The speculative demand for money and interest are inversely related.

(d) Government intervention in resource allocation is necessary and justified to ensure social welfare through optimal allocation of resources. Government should perform the allocation function in an economy because it is the responsibility of the governments to initiate suitable corrective action when private markets fail to provide the right and desirable combination of goods and services. Government intervention in resource allocation is also warranted in the case of goods which we cannot produce on our own or buy at a price from the market and in the case of merit goods and goods which involve externalities.

4. (a) Common access resources or common pool resources are a special class of impure public goods which are non-excludable as people cannot be excluded from using them. These are rival in nature and their consumption lessens the benefits available for others. This rival nature of common resources is what distinguishes them from pure public goods, which exhibit both non-excludability and non-rivalry in consumption. They are generally available free of charge. Some important natural resources fall into this category.

(b) Under the Market Stabilisation Scheme (MSS) the Government of India borrows from the RBI (such borrowing being additional to its normal borrowing requirements) and issues treasury-bills/dated securities that are utilized for absorbing from the market excess liquidity of a more enduring nature arising from large capital inflows.

(c) Potential problems of foreign direct investment include use of inappropriate capital- intensive methods in a labour-abundant country, increase in regional disparity, crowding-out of domestic investments, diversion of capital resulting in distorted pattern of production and investment, instability in the balance of payments and exchange rate and indiscriminate repatriation of the profits.

(d) Increase in Income = 7500 Crore

Increase in Investment = 2500 Crore

K = Increase in Income/Increase in Investment

= 7500/2500

K = 3

Multiplier = K = 1/1-MPC

3 = 1/1-MPC

3-3MPC =1

3MPC = 2

MPC = 0.66

5. **(a)** The Factor Price equalisation theorem postulates that if the prices of the output of goods are equalized between countries engaged in free trade, then the price of the input factor will also be equalized between countries. This Implies that the wages and rent will converge across the countries with free trade or in other words, trade in goods is a perfect substitute for trade in factors.

(b) The Monetary Policy Committee was constituted in September 2016. The Committee is required to meet four times a year and decision taken in the meeting is published after conclusion of the meeting. Based on the review of the macroeconomic and monetary developments in the economy, the monetary policy will determine the Policy rate required to achieve the inflation target. The fixing of the benchmark policy interest rate (repo rate) is made through debate and majority vote by the panel of experts of the committee.

(c) Gross Investment is that part of country's total expenditure which is not consumed but added to the nation's fixed tangible assets and stocks. It consists of the acquisition of fixed assets and the accumulation of stocks. The stock accumulation is in the form of changes in stock of raw materials, fuels, finished goods and semi-finished goods awaiting completion. Thus, gross investment includes final expenditure on machinery and equipment and own account production of machinery and equipment, expenditure on construction, expenditure on changes in inventories, and expenditure on the acquisition of valuables such as, jewellery and works of art.

(d) The SLR is also a powerful tool for controlling liquidity in the domestic market by means of manipulating bank credit. Changes in the SLR chiefly influence the availability of resources in the banking system for lending. A rise in the SLR which is resorted to during periods of high liquidity, tends to lock up a rising fraction of a bank's assets in the form of eligible instruments, and this reduces the credit creation capacity of banks. A reduction in the SLR during periods of economic downturn has the opposite effect. The SLR requirement also facilitates a captive market for government securities.

OR

An Outcome that occurs when government's intervention is ineffective causing wastage of resources extended for the intervention and/or when government intervention in the economy to correct a market failure creates inefficiency and leads to mis allocation of scarce resources.