# (GI-10, GI-11, VI-2(A) & AI-2(A), DI-1+2 & Drive)

DATE: 27.02.2024 MAXIMUM MARKS: 100 TIMING: 31/4 Hours

# FINANCIAL MANAGEMENT & STRATEGIC MANAGEMENT

# SECTION – A : FINANCIAL MANAGEMENT

Q. No. 1 & 2 is Compulsory,

Answer any two questions from the remaining three questions

#### Answer 1:

- 1. Ans. d
- 2. Ans. d
- 3. Ans. c
- 4. Ans. a
- 5. Ans. d
- 6. Ans. a
- 7. Ans. b
- 8. Ans. a  $\{1 \text{ M Each}\}$
- 9. Ans. d
- 10. Ans. d
- 11. Ans. d
- 12. Ans. d
- 13. Ans. a
- 14. Ans. b
- 15. Ans. b

#### Answer 2:

#### (a) Preparation of Balance Sheet

#### **Working Notes:**

Sales = Gross Profit / Gross Profit Margin

= 60,000 / 0.2 = Rs. 3,00,000 **1/2 M** 

Total Assets = Sales / Total Asset Turnover

= 3,00,000 / 0.3 = Rs. 10,00,000 {1/2 M}

Net Worth = 0.9 X Total Assets

 $0.9 \times Rs. 10.00.000 = Rs. 9.00.000$  {1/2 M}

Current Liability = Total Assets – Net Worth

Rs. 10,00,000 - Rs. 9,00,000 =

Rs. 1,00,000 }{1/2 M}

Current Assets = 1.5 x Current Liability

 $1.5 \times Rs. 1,00,000 = Rs. 1,50,000$  {1/2 M}

Stock = Current Assets – Liquid Assets

= Current Assets – (Liquid Assets / Current Liabilities =1) = 1,50,000 – (LA / 1,00,000 = 1) = **Rs.** 50,000 **}{1/2 M}** 

Debtors = Average Collection Period X Credit Sales / 360

=  $60 \times 0.8 \times 3.00.000 / 360 =$ Rs. 40.000  $\{1/2 M\}$ 

Cash = Current Assets – Debtors – Stock

Rs. 1,50,000 – Rs. 40,000 – Rs. 50,000

= Rs. 60,000  $\{1/2 M\}$ 

Fixed Assets = Total Assets – Current Assets

= Rs. 10,00,000 - Rs.1,50,000 = Rs. 8,50,000 }{1/2 M}

#### **Balance Sheet**

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

{1/2 M}

#### **Answer:**

# (b) (i) Calculation of Value of Firms 'A Ltd.' and 'B Ltd' according to MM Hypothesis Market Value of 'A Ltd' (Unlevered)

$$V_u = \frac{\text{EBIT } \left(1 - t\right)}{K_e} = \frac{₹2,50,000 \, \left(1 - 0.30\right)}{20\%} = \frac{₹1,75,000}{20\%} = ₹8,75,000 \, \}\{1 \, \text{M}\}$$

Market Value of 'B Ltd.' (Levered)

$$V_g = V_u + TB$$
  
= Rs. 8,75,000 + (Rs. 10,00,000 × 0.30)

= Rs. 
$$8,75,000 + Rs. 3,00,000 = Rs. 11,75,000 \ \{1 M\}$$

# (ii) Computation of Weighted Average Cost of Capital (WACC)

WACC of 'A Ltd.' = 20% (i.e. 
$$K_e = K_o$$
) }{1 M}

### WACC of 'B Ltd.'

	B Ltd. (Rs. )
EBIT	2,50,000
Interest to Debt holders	(1,20,000)
EBT	1,30,000
Taxes @ 30%	(39,000)
Income available to Equity	91,000
Shareholders Total Value of Firm	11,75,000
Less: Market Value of Debt	(10,00,000)
Market Value of Equity	1,75,000
Return on equity (K <sub>e</sub> ) = 91,000 / 1,75,000	0.52

{1 M}

### **Computation of WACC B. Ltd**

Component of Capital	Amount	Weight	Cost of Capital	WACC	])
Equity	1,75,000	0.149	0.52	0.0775	}{1 M}
Debt	10,00,000	0.851	0.084*	0.0715	\\ 11\l
Total	11,75,000			0.1490	])

#### Answer:

### (c) Working Notes:

Net Profit after Tax Tax @ 30% EBT Interest on Debentures	2,80,000 1,20,000 4,00,000 84,000	\right\{ 1 M}
		\{1 M}
		,
EBIT	4,84,000	
Operating Expenses (1.5 times of EBIT)	7,26,000	
Sales	12,10,000	)

# (i) Operating Leverage

= 
$$\frac{\text{Contribution}}{\text{EBIT}}$$
 =  $\frac{₹ (12,10,000 - 6,29,200)}{₹ 4,84,000}$  =  $\frac{₹ 5,80,800}{₹ 4,84,000}$  = 1.2 times

Financial Leverage = 
$$\frac{\text{EBIT}}{\text{EBT}} = \frac{4,84,000}{4,00,000} = 1.21 \text{ times } \{1 \text{ M}\}$$

# (ii) Cover for Preference Dividend

# **Cover for Equity Dividend**

$$= \frac{\text{(PAT - Preference Dividend)}}{\text{Equity Share Dividend}} = \frac{₹ (2,80,000 - 50,000)}{₹ 1,20,000}$$

$$= \frac{₹ 2,30,000}{₹ 1,20,000} = 1.92 \text{ times } {1/2 M}$$

# (iii) Earning Yield Ratio

$$= \frac{\text{EPS}}{\text{Market Price}} \times 100$$

$$= \left(\frac{2,30,000}{\frac{80,000}{23}} \times 100\right)$$

$$=\frac{2.875}{23} \times 100 = 12.5\%$$

# Price - Earnings Ratio (PE Ratio)

$$= \frac{\text{Market Price}}{\text{EPS}} = \frac{23}{2.875}$$

= 8 times }{1 M}

# (iv) Net Funds Flow

Net Funds Flow = Rs. 2,06,800 **\{1 M\}** 

#### Answer 3:

### (a) Statement Showing the Evaluation of Two Machines

	Machines	Α	В
(i)	Purchase Cost	₹ 7,50,000	₹ 5,00,000
(ii)	Life of Machine	3 years	2 years
(iii)	Running Cost of Machine per year	₹ 2,00,000	₹ 3,00,000
(iv)	PVIFA 0.09,3	2.5313	
	PVIFA 0.09, 2		1.7591
(v)	PV of Running Cost of Machine	₹ 5,06,260	₹ 5,27,730
(vi)	Cash outflows of Machine {(i) + (v)}	₹ 12,56,260	₹ 10,27,730
(vii)	Equivalent PV of Annual Cash outflow (vi/iv)	₹ 4,96,290	₹ 5,84,236
		}{2 M}	}{2 M}

Recommendation: Company UVW should buy Machine 'A' since equivalent annual cash outflow is less than that of Machine B. **\{1 M\}** 

#### **Answer:**

**(b)** (a) As per **Gordon's Model**, Price per share is computed using the formula:

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

Where,

 $P_0$  = Price per share

 $E_1$  = Earnings per share

b = Retention ratio; (1 - b = Pay-out ratio)

K<sub>e</sub> = Cost of capital

$$r = IRR$$

br = Growth rate (g)

Applying the above formula, price per share

$$\underline{P_0} = \frac{120(1-0.7)}{0.15-0.70\times0.2} = \frac{36}{0.01} = Rs. | 3,600 \} \{2.5 M\}$$

(b) As per Walter's Model, Price per share is computed using the formula:

Price (P) = 
$$\frac{D + \frac{r}{(E-D)}}{\frac{Ke}{K_o}}$$

Where.

P = Market Price of the share.

E = Earnings per share.

D = Dividend per share.

K<sub>e</sub> = Cost of equity/ rate of capitalization/ discount rate.

r = Internal rate of return/ return on investment

Applying the above formula, price per share

$$P = \frac{\frac{36+\frac{0.20}{(120-36)}}{0.15}}{0.15}$$
Or, 
$$P = \frac{\frac{36+112}{0.15}}{0.15}$$
 986.67 }{2.5 M}

#### Answer 4:

(i) Calculation of after tax cost of the followings:

(a) New 14% Debentures 
$$(K_d) = \frac{I(1-t)}{NP} = \frac{\dot{1}4(1-0.5)}{\dot{9}8} = 0.0714 \text{ or } 7.14\%$$
 **(4)** New 12% Preference Shares  $(\underline{K}_p) = \frac{PD}{NP} = \frac{\dot{1}.20}{\dot{9}.80} = 0.1224 \text{ or } 12.24\%$  **(4) M**

(b) Equity Shares (Retained Earnings) (K<sub>e</sub>) = 
$$\frac{\text{Expected dividend}(\underline{D}_1)}{\text{Currentmarketprice}(P_0)} + \text{Growthrate}(G)$$

$$= \frac{50\% \text{ of } 2.773}{27.75} + 0.12 = 0.17 \text{ or } 17\% \text{ } \{1 \text{ M}\}$$

\* Growth rate (on the basis of EPS) is calculated as below:

$$\frac{\text{EPS incurrent year -EPS in previous year}}{\text{EPS in previous year}} = \frac{2.773 - 2.476}{2.476} = 0.12$$
 **1 M**

(Students may verify the growth trend by applying the above formula to last three or four years)

(ii) Calculation of marginal cost of capital (on the basis of existing capital structure):

Source of capital	Weight (a)	After tax Cost of capital (%) (b)	WACC (%) (a) × (b)	
14% Debenture	0.15	7.14	1.071	11
12% Preference shares	0.05	12.24	0.612	<b>│</b> }{2 M}
Equity shares	0.80	17.00	13.600	
Marginal cost of capital			15.283	7)

(iii) The company can spent for capital investment before issuing new equity shares and without increasing its marginal cost of capital:

Retained earnings can be available for capital investment

- = 50% of 2015 EPS × equity shares outstanding
- = 50% of Rs.  $2.773 \times 2,00,000$  shares = Rs. 2,77,300

Since, marginal cost of capital is to be maintained at the current level i.e. 15.28%, the retained earnings should be equal to 80% of total additional capital for investment.

Thus investment before issuing equity 
$$\frac{Rs. 2,77,300}{80} \times 100 = Rs. 3,46,625$$
 **\{2 M}**

The remaining capital of Rs. 69,325 i.e. Rs. 3,46,625 - Rs. 2,77,300 shall be financed by issuing 14% Debenture and 12% preference shares in the ratio of 3 : 1 respectively.

(iv) If the company spends more than Rs. 3,46,625 as calculated in part (iii) above, it will have to issue new shares at Rs. 20 per share.

The cost of new issue of equity shares will be:

$$K_e = \frac{\text{Expected \underline{dividend}}(D_1)}{\text{Current market price}(P_0)} + \frac{\text{Growthrate}(g)}{\text{Current market price}(P_0)} = \frac{50\% \text{ of } 2.773}{20} + 0.12 = 0.1893 \text{ or } 18.93\%$$
 **\{1 M\}**

Calculation of marginal cost of capital (assuming the existing capital structure will be maintained):

Source of capital	Weight (a)	Cost (%) (b)	WACC (%) (a) × (b)	
14% Debenture	0.15	7.14	1.071	
12% Preference shares	0.05	12.24	0.612	\{1 M
Equity shares	0.80	18.93	15.144	
Marginal cost of capital			16.827	

**Answer 5:** 

# (a) Advantages and disadvantages of Wealth maximization principle. Advantages:

- (i) Emphasizes the long term gains
- (ii) Recognises risk or uncertainty
- (iii) Recognises the timing of returns
- (iv) Considers shareholders' return.

**Disadvantages:** 

(i) Offers no clear relationship between financial decisions and share price. \{2 M}

{2 M}

(ii) Can lead to management anxiety and frustration.

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#### **Answer:**

- Characteristics of Debentures are as follows: (b)
  - Normally, debentures are issued on the basis of a debenture trust deed which lists the terms and conditions on which the debentures are floated.
  - Debentures are either secured or unsecured.
  - May or may not be listed on the stock exchange.
  - The cost of capital raised through debentures is quite low since the interest payable on debentures can be charged as an expense before tax.
  - From the investors' point of view, debentures offer a more attractive prospect than the preference shares since interest on debentures is payable whether or not the company makes profits.
  - Debentures are thus instruments for raising long-term debt capital.
  - The period of maturity normally varies from 3 to 10 years and may also increase for projects having high gestation period.

#### Answer:

Secured Premium Notes: Secured Premium Notes is issued along with a) (c) detachable warrant and is redeemable after a notified period of say 4 to 7 years. The conversion of detachable warrant into equity shares will have to be done within time period notified by the company.

#### OR

Masala bond: Masala (means spice) bond is an Indian name used for Rupee) denominated bond that Indian corporate borrowers can sell to investors in overseas markets. These bonds are issued outside India but denominated in Indian Rupees. \{2 M\} NTPC raised Rs. 2,000 crore via masala bonds for its capital expenditure in the year 2016.

{1 M Each

for Any 4

Points}

# SECTION - B : STRATEGIC MANAGEMENT

Q. No. 6 & 7 is Compulsory,
Answer any three questions from the remaining four questions

#### Answer 6:

- 1. Ans. a
- 2. Ans. d
- 3. Ans. a
- 4. Ans. b
- 5. Ans. b
- 6. Ans. c
- 7. Ans. c
- 8. Ans. d  $\{1 \text{ M Each}\}$
- 9. Ans. b
- 10. Ans. c
- 11. Ans. b
- 12. Ans. d
- 13. Ans. b
- 14. Ans. d
- 15. Ans. c

#### Answer 7:

- To ensure unanimity of purpose within the organisation.
- To develop a basis, or standard, for allocating organisational resources.
- To provide a basis for motivating the use of the organisation's resources.
- To establish a general tone or organisational climate, to suggest a business- like operation.
- To serve as a focal point for those who can identify with the organisation's purpose and direction.
- To facilitate the translation of objective and goals into a work structure involving the assignment of tasks to responsible elements within the organisation.
- To specify organisational purposes and the translation of these purposes into goals in such a way that cost, time, and performance parameters can be assessed and controlled.

#### Answer 8:

(a) The Ansoff's product market growth matrix (proposed by Igor Ansoff) is a useful tool that helps businesses decide their product and market growth strategy.



Figure: Ansoff's Product Market Growth Matrix

{1 M Each for Any 5 Points} Market Penetration: Market penetration refers to a growth strategy where the business focuses on selling existing products into existing markets. It is achieved by making more sales to present customers without changing products in any major way. Penetration might require greater spending on advertising or personal selling. Overcoming competition in a mature market requires an aggressive promotional campaign, supported by a pricing strategy designed to make the market unattractive for competitors. Penetration is also done by effort on increasing usage by existing customers.

Market Development: Market development refers to a growth strategy where the business seeks to sell its existing products into new markets. It is a strategy for company growth by identifying and developing new markets for current company products. This strategy may be achieved through new geographical markets, new product dimensions or packaging, new distribution channels or different pricing policies to attract different customers or create new market segments.

{1 M Each}

**Product Development:** Product development refers to a growth strategy where business aims to introduce new products into existing markets. It is a strategy for company growth by offering modified or new products to current markets. This strategy may require the development of new competencies and requires the business to develop modified products which can appeal to existing markets.

**Diversification:** Diversification refers to a growth strategy where a business markets new products in new markets. It is a strategy by starting up or acquiring businesses outside the company's current products and markets. This strategy is risky because it does not rely on either the company's successful product or its position in established markets. Typically, the business is moving into markets in which it has little or no experience.

#### **Answer:**

(b) Glassware Ltd. is currently in the 'unfreezing' stage, where management is attempting to explain the need for change in an attempt to maximize buy-in by employees and reduce the amount of resistance.

Unfreezing the situation: The process of unfreezing simply makes the individuals aware of the necessity for change and prepares them for such a change. Lewin proposes that the changes should not come as a surprise to the members of the organization.

Sudden and unannounced change would be socially destructive and morale lowering. The management must pave the way for the change by first "unfreezing the \1 M\ situation", so that members would be willing and ready to accept the change.

Unfreezing is the process of breaking down the old attitudes and behaviours, customs and traditions so that they start with a clean slate. This can be achieved by making announcements, holding meetings and promoting the new ideas throughout the organization.

#### Answer 9:

- According to Porter, strategies allow organizations to gain competitive advantage (a) from three different bases: cost leadership, differentiation, and focus. Porter called these base generic strategies. These strategies have been termed generic, because they can be pursued by any type or size of business firm and even by not-for-profit organisations.
  - Cost leadership emphasizes on producing standardized products at a very low per-unit cost for consumers who are price-sensitive.

- Differentiation is a strategy aimed at producing products and services considered unique industry-wide and directed at consumers who are relatively price-insensitive.
- Focus means producing products and services that fulfil the needs of small groups of consumers with very specific taste.

Best-cost provider strategy involves providing customers more value for the money by emphasizing on lower cost and better-quality differences. It can be done through:

offering products at lower price than what is being offered by rivals for) products with comparable quality and features

charging similar price as by the rivals for products with much higher quality (b) and better features.

{1 M Each}

{1 M

{1 M

Each}

#### Answer:

- (b) Managers have five leadership roles to play in pushing for good strategy execution:
  - Staying on top of what is happening, closely monitoring progress, solving out issues, and learning what obstacles lie in the path of good execution.
  - 2. Promoting a culture of esprit de corps that mobilizes and energizes organizational members to execute strategy in a competent fashion and perform at a high level.
  - 3. Keeping the organization responsive to changing conditions, alert for new opportunities, bubbling with innovative ideas, and ahead of rivals in Each developing competitively valuable competencies and capabilities.
  - 4. Exercising ethical leadership and insisting that the company conduct its affairs like a model corporate citizen.
  - 5. Pushing corrective actions to improve strategy execution and overall strategic performance.

#### Answer 10:

Racers Ltd. has adopted Turnaround strategy. This involves Racers Ltd. repositioning  $\{1 M\}$ (a) itself in the market in an attempt to once again gain competitive advantage.

Turnaround is needed when an enterprise's performance deteriorates to a point that it needs a radical change of direction in strategy, and possibly in structure and culture as well. It is a highly targeted effort to return an organization to profitability \{2 M} and increase positive cash flows to a sufficient level. It is used when both threats and weaknesses adversely affect the health of an organization so much that its basic survival is difficult.

The overall goal of turnaround strategy is to return an underperforming or distressed company to normalcy in terms of acceptable levels of profitability, solvency, liquidity and cash flow. To achieve its objectives, turnaround strategy must reverse causes of distress, resolve the financial crisis, achieve a rapid improvement in financial performance, regain stakeholder support, and overcome internal constraints and unfavourable industry characteristics.

{2 M}

#### **Answer:**

- The primary activities of the organization are grouped into five main areas: inbound (b) logistics, operations, outbound logistics, marketing and sales, and service.
  - Inbound logistics are the activities concerned with receiving, storing and distributing the inputs to the product/service. This includes materials handling, stock control, transport etc. Like, transportation and warehousing.
  - Operations transform these inputs into the final product or service: (Each) machining, packaging, assembly, testing, etc. convert raw materials in finished goods.

{1 M

- Outbound logistics collect, store and distribute the product to customers. For tangible products this would be warehousing, materials handling, transport, etc. In the case of services, it may be more concerned with arrangements for bringing customers to the service, if it is a fixed location (e.g. sports events).
- Marketing and sales provide the means whereby consumers/users are made aware of the product/service and are able to purchase it. This would include sales administration, advertising, selling and so on. In public services, communication networks which help users' access a particular service are often important.
- Service are all those activities, which enhance or maintain the value of a product/service, such as installation, repair, training and spares.

#### Answer 11:

- The sustainability of competitive advantage and a firm's ability to earn profits from (a) its competitive advantage depends upon four major characteristics of resources and capabilities:
  - Durability: The period over which a competitive advantage is sustained depends in part on the rate at which a firm's resources and capabilities deteriorate. In industries where the rate of product innovation is fast, product patents are quite likely to become obsolete. Similarly, capabilities which are  $\{1^{1/2} M\}$ the result of the management expertise of the CEO are also vulnerable to his or her retirement or departure. On the other hand, many consumer brand names have a highly durable appeal.

Transferability: Even if the resources and capabilities on which a ii. competitive advantage is based are durable, it is likely to be eroded by competition from rivals. The ability of rivals to attack position of competitive advantage relies on their gaining access to the necessary resources and \{1 M} capabilities. The easier it is to transfer resources and capabilities between companies, the less sustainable will be the competitive advantage which is based on them.

iii. **Imitability:** If resources and capabilities cannot be purchased by a would-be imitator, then they must be built from scratch. How easily and quickly can the competitors build the resources and capabilities on which a firm's competitive advantage is based? This is the true test of imitability. For example, In financial services, innovations lack legal protection and are easily copied.  $\{1 M\}$ Here again the complexity of many organizational capabilities can provide a degree of competitive defense. Where capabilities require networks of organizational routines, whose effectiveness depends on the corporate culture, imitation is difficult.

**Appropriability:** Appropriability refers to the ability of the firm's owners to iv. appropriate the returns on its resource base. Even where resources and capabilities are capable of offering sustainable advantage, there is an issue as to who receives the returns on these resources. This means, that rewards are directed to from where the funds were invested, rather than creating an advantage with no actual reward to people to invested capital.

#### **Answer:**

(b) PLC is an S-shaped curve which exhibits the relationship of sales with respect of time for a product that passes through the four successive stages of introduction, growth, {1 M} maturity and decline. If businesses are substituted for product, the concept of PLC could work just as well.

The first stage of PLC is the introduction stage with slow sales growth, in which competition is almost negligible, prices are relatively high, and markets are limited. The growth in sales is at a lower rate because of lack of awareness on the part of customers.

{1 M}

The second phase of PLC is growth stage with rapid market acceptance. In the growth stage, the demand expands rapidly, prices fall, competition increases, and market expands. The customer has knowledge about the product and shows interest in purchasing it.

{1 M}

The third phase of PLC is maturity stage where there is slowdown in growth rate. In this stage, the competition gets tough, and market gets stablised. Profit comes down because of stiff competition. At this stage, organisations have to work for \{1 M} maintaining stability.

In the fourth stage of PLC is declines with sharp downward drift in sales. The sales and profits fall down sharply due to some new product replaces the existing product. So, a combination of strategies can be implemented to stay in the market either by diversification or retrenchment.

{1 M}

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