SUGGESTED SOLUTION

CA INTERMEDIATE

SUBJECT- FINANCIAL MANAGEMENT AND STRATEGIC MANAGEMENT

Test Code – INP 2406

BRANCH - () (Date :)

MULTIPLE CHOICE QUESTIONS

NO.		ANSWER	MARKS
1	D	All the above	1
2	C	Both 1 and 2	2
3	B	16 times	2
4	A	10 times	2
5	A	Cash flows can be re – invested at the projects IRR.	1
6	A	Rs. 30	2
7	C	Financial management	1
8	D	Prepaid expenses	1
9	B	Tandon Committee	1
10	A	Short – term debt instruments	1
11	B	Lock Box system	1

ANSWER : 1(A)

Cost Structure for 52000 units	
Particulars	**Amount (Rs.)**
Raw Material @ Rs.400	2,08,00,000
Direct Wages @ Rs. 150	78,00,000
Manufacturing Overheads@ Rs. 200	1,04,00,000
Selling and Distribution OH@ Rs. 100	52,00,000
Total Cost	4,42,00,000
Sales@ Rs. 1000	5,20,00,000

Particulars	Calculation	Amount (Rs.)
(A) Current Assets :		
Raw Material Stock	$2,08,00,000 \times \frac{4}{52}$	16,00,000
Work in Progress (WIP) Stock	$2,08,00,000 + \left(\frac{78,00,000+1,04,00,000}{2} \times \frac{4}{50} \right)$	23,00,000
Finished Goods Stock	$4,42,00,000 \times \frac{4}{52}$	34,00,000
Receivables	$5,20,00,000 \times \frac{8}{52}$	80,00,000
Cash		50,000
(B) Current Liabilities		

			16,00,000
Creditors		$2,08,00,000 \times \frac{4}{52}$	
(C) Working Capital Estimates (A – B)			1,37,50,000

ANSWER : 1(B)

Break Even Sales = Rs. 68,00,000 $\times$ 0.75 = Rs. 51,00,000

Income Statement **(Amount in Rs.)**

	Original	Calculation of Interest at BEP (backward calculation)	Now at present level
Sales	68,00,000	51,00,000	68,00,000
Less : Variable Cost	40,80,000	30,60,000	40,80,000
Contribution	27,20,000	20,40,000	27,20,000
Less : Fixed Cost	16,32,000	16,32,000	16,32,000
EBIT	10,88,000	4,08,000	10,88,000
Less : Interest (EBIT – PBT)	?	3,93,714	3,93,714
PBT	?	14,286 (10,000 /70%)	6,94,286
Less : Tax @ 30% (or PBT – PAT)	?	10,000 (Nil + 10,000)	4,86,000
Less : Preference Dividend	10,000	10,000	10,000
Earnings for Equity Share holders	?	Nil (at BEP)	4,76,000
Number of Equity Shares	1,50,000	1,50,000	1,50,000
EPS	?	-	3.1733

So Interest= Rs. 3,93,714, EPS= Rs. 3.1733, Amount of debt= 3,93,714/12%= Rs. 32,80,950

ANSWER : 1(C)

Statement showing the Evaluation of Accounts Receivable Policies

(Amount in Rs.)

	Particulars	Present Policy	Proposed Policy 1	Proposed Policy 2
A	Expected Profit:			
	(a) Credit Sales	55,00,000	65,00,000	70,00,000
	(b) Total Cost other than Bad Debts:			
	(i) Variable Costs (75%)	41,25,000	48,75,000	52,50,000
	(c) Bad Debts	2,00,000	3,50,000	5,00,000
	(d) Expected Profit [(a) – (b) – (c)]	11,75,000	12,75,000	12,50,000
B	Opportunity Cost of Investments in AccountsReceivable (Working Note)	1,23,750	1,82,813	2,62,500
C	Net Benefits (A – B)	10,51,250	10,92,187	9,87,500

Recommendation: The Proposed Policy 1 should be adopted, since the net benefits under this policy are higher as compared to other policies.

Working Note:

Calculation of Opportunity Cost of Average Investments

Opportunity Cost = Total Cost × Collection period/12 × Rate of Return/100

Present Policy = Rs. 41,25,000 × 2.4/12 × 15% = Rs. 1,23,750

Proposed Policy 1 = Rs. 48,75,000× 3/12 × 15% = Rs. 1,82,813

Proposed Policy 2 = Rs. 52,50,000× 4/12 × 15% = Rs. 2,62,500

(5 MARKS)

ANSWER : 2(A)

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

Particulars	Amount in Rs.
Net Profit	78 lakhs
Less: Preference dividend (120 Lakhs @15%)	18 lakhs
Earnings for equity shareholders	60 lakhs
Earnings Per Share	60 lakhs/6 lakhs = Rs. 10.00

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

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

Here, E_1 = 10, K_e = 16%

(i)   When dividend pay – out is 30%

$$P_0 = \frac{10 \times 0.30}{0.16 - (0.70 \times 0.2)} \quad \frac{3}{0.16 - 0.14} = \text{Rs. } 150$$

(ii)   When dividend pay – out is 50%

$$P_0 = \frac{10 \times 0.5}{0.16 - (0.5 \times 0.2)} = \frac{5}{0.16 - 0.10} = \text{Rs. } 83.33$$

(iii)   When dividend pay – out is 100%

$$P_0 = \frac{10 \times 1}{0.16 - (0 \times 0.2)} = \frac{10}{0.16} = \text{Rs. } 62.5$$

(5 MARKS)

ANSWER : 2(B)

$$\frac{(EBIT - Interest)(1-t)}{No.of\ Equity\ Shares\ (N_1)} = \frac{EBIT\ (1-t) - Preference\ Dividend}{No.of\ Equity\ Shares\ (N_2)}$$

$$\frac{(Rs.4,80,000 - Rs.48,000) \times (1 - 0.30)}{80,00,000\ shares} = \frac{Rs.4,80,000(1 - 0.30) - Preference\ Dividend}{80,00,000\ shares}$$

$$\frac{Rs.3,02,400}{80,00,000 \text{ shares}} = \frac{Rs.3,36,000 - Preference\ Dividend}{80,00,000\ shares}$$

Rs. 3,02,400 = Rs. 3,36,000 − Preference Dividend

Preference Dividend = Rs. 3,36,000 − Rs. 3,02,400 = Rs. 33,600

$$\text{Rate of Dividend} = \frac{Preference\ dividend}{Preference\ Share\ Capital} \times 100$$

$$= \frac{Rs.33,600}{4,00,000} \times 100 = 8.4\%$$

(5 MARKS)

ANSWER : 3

Calculation of Equity Share Capital and Reserves and surplus :

Alternative 1 :

Equity Share Capital = rs. 20,00,000 + $\frac{Rs.2,00,000 \times 100}{133.3333}$ = Rs. 21,50,000

Reserves = Rs. 10,00,000 + $\frac{Rs.2,00,000 \times 33.3333}{133.3333}$ = Rs. 10,50,000

Alternative 2 :

Equity Share Capital = Rs. 20,00,000 + $\frac{Rs.9,00,000 \times 100}{125}$ = Rs. 27,20,000

Reserves = Rs. 10,00,000 + $\frac{Rs.9,00,000 \times 25}{125}$ = Rs. 11,80,000

Capital Structure Plan

Amount in Rs.

Capital	Alternative 1	Alternative 2
Equity Share capital	21,50,000	27,20,000
Reserves and surplus	10,50,000	11,80,000
10% long term debt	15,00,000	15,00,000
14% Debentures	8,00,000	-
8% Irredeemable Debentures	-	1,00,000
Total Capital Employed	55,00,000	55,00,000

Computation of Present Earnings before interest and tax (EBIT)

EPS (Rs.)	21
No. of equity shares	20,000
Earnings for equity shareholders (I x II) (Rs.)	4,20,000
Profit Before Tax (III/75%) (Rs.)	5,60,000

Interest on long term loan (1500000 x 10%) (Rs.)	1,50,000
EBIT (IV + V) (Rs.)	7,10,000

EBIT after expansion = Rs. 7,10,000 +Rs. 2,00,000 = Rs. 9,10,000

Evaluation of Financial Plans on the basis of EPS, MPS and Financial Leverage

(Amount in Rs.)

Particulars	Alternative I	Alternate II
EBIT	9,10,000	9,10,000
Less: Interest: 10% on long term loan	(1,50,000)	(1,50,000)
14% on Debentures	(1,12,000)	Nil
8% on Irredeemable Debentures	Nil.	(8000)
PBT	6,48,000	7,52,000
Less: Tax @25%	(1,62,000)	(1,88,000)
PAT	4,86,000	5,64,000
No. of equity shares	21,500	27,200
EPS	**22.60**	**20.74**
Applicable P/E ratio (Working Note 1)	7	8.5
MPS (EPS X P/E ratio)	**158.2**	**176.29**
Financial Leverage EBIT/PBT	**1.40**	**1.21**

Working Note 1

	Alternative I	Alternative II
Debt:		
Rs. 15,00,000 + Rs. 8,00,000	23,00,000	-
Rs. 15,00,000 + Rs. 1,00,000	-	16,00,000
Total capital Employed (Rs.)	55,00,000	55,00,000
Debt Ratio (Debt/Capital employed)	= 0.4182	=0.2909
	= 41.82%	=29.09%
Change in Equity: 21,50,000 - 20,00,000	1,50,000	
27,20,000 - 20,00,000		7,20,000
Percentage change in equity	7.5%	**36%**
Applicable P/E ratio	**7**	**8.5**

Calculation of Cost of equity and various type of debt

	Alternative I	Alternative II
(A) Cost of equity		
EPS	22.60	20.74
DPS (EPS X 60%)	13.56	12.44
Growth (g)	10%	10%
Po (MPS)	158.2	176.29
Ke= Do (1 + g)/ Po	$\dfrac{13.56(1.1)}{158.2}$	$\dfrac{12.44(1.1)}{176.29}$
	=9.43%	=7.76%
(B) Cost of Debt:		

	Alternative 1	Alternative 2
10% long term debt	10% + (1 - 0.25) = 7.5%	10% + (1 - 0.25) = 7.5%
14% redeemable debentures	$\dfrac{14(1-0.25)+(110-\frac{100}{10})}{110+100/2}$ = 10.5 + 1 / 10.5 = 10.95%	Nil
8% irredeemable debenture	NA	8000 (1-0.25)/1,00,00 = 6%

Calculation of Weighted Average cost of capital (WACC)

	Alternative 1			Alternative 2		
Capital	Weights	Cost (%)	WACC	Weights	Cost (%)	WACC
Equity Share Capital	0.3909	9.43	3.69%	0.4945	7.76	3.84%
Reserves and Surplus	0.1909	9.43	1.80%	0.2145	7.76	1.66%
10% Long term Debt	0.2727	7.50	2.05%	0.2727	7.50	2.05%
14% Debenture	0.1455	10.95	1.59%			
8% Irredeemable Debentures	-			0.0182	6	0.11%
			9.12%			**7.66%**

Calculation Marginal Cost of Capital (MACC)

	Alternative 1			Alternative 2		
Capital	Amount (weight) Rs.	Cost (%)	MACC	Amount (weight) Rs.	Cost (%)	MACC
Equity Share Capital	1,50,000(0.15)	9.43	1.41%	7,20,000(0.72)	7.76	5.59%
Reserves and Surplus	50,000(0.05)	9.43	0.47%	1,80,000(0.18)	7.76	1.40%
14% Debenture	8,00,000(0.80)	10.95	8.76%	-		0.00%
8% Irredeemable Debentures	-			1,00,000(0.10)	6	0.60%
Total Capital Employed	10,00,000		**10.65%**	10,00,000		**7.58%**

Summary of solution:

	Alternate I	Alternate II
Earning per share (EPS)	22.60	20.74
Market price per share (MPS)	158.20	176.29
Financial leverage	1.4043	1.2101
Weighted Average cost of capital (WACC)	9.12%	7.66%
Marginal cost of capital (MACC)	10.65%	7.58%

Alternative 1 of financing will be preferred under the criteria of EPS, whereas Alternative II of financing will be preferred under the criteria of MPS, Financial leverage, WACC and marginal cost of capital.

(10 MARKS)

ANSWER : 4

(a) Assuming no tax as per MM Approach.

Calculation of Value of Firms 'A Ltd.' and 'B Ltd.' according to MM Hypothesis

Market Value of 'B Ltd' (Unlevered (u)]

Total Value of Unlevered Firm (V_u) = [NOI/k_e] = 18,00,000/0.18 = Rs. 1,00,00,000

K_e of Unlevered Firm (given) = 0.18

K_o of Unlevered Firm (Same as above = k_e as there is no debt) = 0.18

Market Value of 'A Ltd' [Levered Firm (I)]

Total Value of Levered Firm (V_L) = V_u + (Debt $\times$ Nil)

$$= Rs. 1,00,00,000 + (54,00,000 \times nil)$$

$$= Rs. 1,00,00,000$$

Computation of Equity Capitalization Rate and

Weighted Average Cost of Capital (WACC)

	Particulars	A Ltd.	B Ltd.
A.	Net Operating Income (NOI)	Rs. 18,00,000	Rs. 18,00,000
B.	Less : Interest on Debt (I)	Rs. 6,48,000	-
C.	Earnings of Equity Shareholders (NI)	Rs. 11,52,000	Rs. 18,00,000
D.	Overall Capitalization Rate (k_o)	0.18	0.18
E.	Total Value of Firm (V = NOi/K_o)	Rs. 1,00,00,000	Rs. 1,00,00,000
F.	Less : Market Value of Debt	Rs. 54,00,000	-
G.	Market Value of Equity (S)	Rs. 46,00,000	Rs. 1,00,00,000
H.	Equity Capitalization Rate [k_e = NI/S]	0.2504	0.18
I.	Weighted Average Cost of Capital [WACC (K_o)]$^*k_o$ = ($k_e \times$ S/V) + ($k_d \times$ D/V)	0.18	0.18

* Computation of WACC A Ltd.

Component of Capital	Amount	Weight	Cost of Capital	WACC
Equity	Rs. 46,00,000	0.46	0.2504	0.1152
Debt	Rs. 54,00,000	0.54	0.12*	0.0648
Total	Rs. 1,00,00,000			0.18

*K_d = 12% (since there is no tax)

WACC = 18%

(b) **Assuming 40% taxes as per MM Approach**

Calculation of Value of Firms 'A Ltd'. 'B Ltd.' according to MM Hypothesis

Market Value of 'B Ltd' (Unlevered(u)]

Total Value of unlevered Firm (V_u) = [NOI $(1 - t)/k_e$] = 18,00,000 $(1 - 0.40)/0.18$

$$= Rs. 60,00,000$$

K_e of unlevered Firm (given) = 0.18

K_o of unlevered Firm (Same as above = k_e as there is no debt) = 0.18

Market Value of 'A Ltd.' [Levered Firm (I)]

Total Value of Levered Firm (V_L) = V_u + (Debt $\times$ Tax)

$$= Rs. 60,00,000 + (Rs. 54,00,000 \times 0.4)$$

$$= Rs. 81,60,000$$

Computation of Weighted Average Cost of Capital (WACC) of 'B Ltd.'

= 18% (i.e. K_e = K_o)

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Computation of Equity Capitalization Rate and

Weighted Average Cost of Capital (WACC) of A Ltd.

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Particulars	A Ltd. (Rs.)
Net Operating Income (NOI)	18,00,000
Less : Interest on Debt (I)	6,48,000
Earning Before Tax (EBT)	11,52,000
Less : tax @ 40%	4,60,800
Earnings for equity shareholders (NI)	6,91,200
Total Value of Firm (V) as calculated above	81,60,000
Less : Market value of Debt	54,00,000
Market Value of Equity (S)	27,60,000
Equity Capitalization Rate (k_e = NI/S]	0.2504
Weighted Average Cost of Capital (k_o)* $k_o = (k_e \times S/V) + (k_d + D/V)$	13.23

* Computation of WACC A Ltd.

Components of Capital	Rs.	Weight	Cost of Capital	WACC
Equity	27,60,000	0.338	0.2504	0.0846
Debt	54,00,000	0.662	0.072*	0.0477
Total	81,60,000			0.1323

*K_d = 12% $(1 - 0.4)$ = 12% $\times$ 0.6 = 7.2%

WACC = 13.23%

(10 MARKS)

Section B

MULTIPLE CHOICE QUESTIONS :

NO.	ANSWER	MARKS
1	A	2
2	B	2
3	B	2
4	D	2
5	D	2
6	D	1
7	A	2
8	C	1
9	C	1

DESCRIPTIVE ANSWERS:

ANSWER : 1(A)

Functional managers provide most of the information that makes it possible for business and corporate level managers to formulate realistic and attainable strategies.

This is so because functional managers like Dharam Singh are closer to the customers/ suppliers/ operations than the typical general manager is. A functional manager may generate important ideas that subsequently may become major strategies for the company. Thus, it is important for general managers to listen closely to the ideas of their functional managers and invoice them in decision making.

An equally great responsibility for managers at the operational level is strategy implementation the execution of corporate and business level plans, and if they are involved in formulation, the clarity of thoughts while implementation can benefit too.

Thus, the approach of Cylcix Corporate management is not right. They should involve Dharam Singh, as well as other functional managers too in strategic management.

(5 MARKS)

ANSWER : 1(B)

To gain a deep understanding of a company's industry and competitive environment, managers do not need to gather all the information they can find and waste a lot of time digesting it. Rather, the task is much more focused. A powerful and widely used tool for systematically diagnosing the significant competitive pressures in a market and assessing the strength and importance of each is the Porter's five – forces model of competition. This model holds that the state of competition in an industry is a composite of competitive pressures operating in five areas of the overall market :

➢ Competitive pressures associated with the market manoeuvring and jockeying for buyer patronage that goes on among rival sellers in the industry.
➢ Competitive pressures associated with the threat of new entrants into the market.

- Competitive pressures coming from the attempts of companies in other industries to win buyers over to their own substitute products.
- Competitive pressures steaming from supplier bargaining power and supplier – seller collaboration.
- Competitive pressures steaming from buyer bargaining power and seller – buyer Collaboration.

(5 MARKS)

ANSWER : 1(C)

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. This matrix further helps to analyse different strategic directions. According to Ansoff there are four strategies that orgnisation might follow.

(i) **Market Penetration:** A leading producer of toothpaste, advises its customers to brush teeth twice a day to keep breath fresh. It refers to a growth strategy where the business focuses on selling existing products into existing markets.

(ii) **diversification :** A business giant in hotel industry decides to enter into dairy business. It refers to a growth strategy where a business markets new products in new markets.

(iii) **Market Development :** One of India's premier utility vehicles manufacturing company ventures to foray into foreign markets. It refers to a growth strategy where the business seeks to sell its existing products into new markets.

(iv) **Product Development :** A renowned auto manufacturing company launches ungeared scooters in the market. It refers to a growth strategy where business aims to introduce new products into existing markets.

(5 MARKS)

ANSWER : 2(A)

A core competence is a unique strength of an organization which may not be shared by others. Core competencies are those capabilities that are critical to a business achieving competitive advantage. In order to qualify as a core competence, the competency should differentiate the business from any other similar businesses. A core competency for a firm is whatever it does is highly beneficial to the organization.

'Value for Money' is the ledger on account of its ability to keep costs low. The cost advantage that 'Value for Money' has created for itself has allowed the retailer to price goods lower than competitors. The core competency in this case is derived from the company's ability to generate large sales volume, allowing the company to remain profitable with low profit margin.

(5 MARKS)

ANSWER : 2(B)

Strategy is partly proactive and partly reactive. In proactive strategy, organizations will analyze possible environmental scenarios and crate strategic framework after proper planning and set procedures and work on these strategies in a predetermined manner. However, in reality no

company can forecast both internal and external environment exactly. Everything cannot be planned in advance. It is not possible to anticipate moves of rival firms, consumer behavior, evolving technologies and so on.

There can be significant deviations between what was visualized and what actually happens. Strategies need to be attuned or modified in the light of possible environmental changes. There can be significant or major strategic changes when the environment demands. Reactive strategy is triggered by the changes in the environment and provides ways and means to cope with the negative factors or take advantage of emerging opportunities.

(5 MARKS)

ANSWER : 3(A)

Organo is a large supermarket chain. By opting backward integration and purchase a number of farms, it will have greater control over its supply chain. Backward integration is a step towards, creation of effective supply by entering business of input providers. Strategy employed to expand profits and gain greater control over production of a product whereby a company will purchase or build a business that will increase its own supply capability or lessen its cost of production.

(5 MARKS)

ANSWER : 3(B)

Ramesh is a follower of transactional leadership style that focuses on designing systems and controlling the organization's activities. Such a leader believes in using authority of its office to exchange rewards, such as pay and status. They prefer a more formalized approach to motivation , setting clear goals with explicit rewards or penalties for achievement or non – achievement. Transactional leaders try to build on the existing culture and enhance current practices. The style is better suited in persuading people to work efficiently and run operations smoothly.

On the other hand, Yashpal is follower of transformational leadership style. The style uses charisma and enthusiasm to inspire people to exert them for the goo of the organization. Transformational leaders offer excitement, vision, intellectual stimulation and personal satisfaction. They inspire involvement in a mission, giving followers a 'dream' or 'vision' of a higher calling so as to elicit more dramatic changes in organizational performance. Such a leadership motivates followers to do more than originally affected to do by stretching their abilities and increasing their self – confidence, and also promote innovation throughout the organization.

(5 MARKS)

ANSWER : 4(A)

Steps to understand the competitive landscape :

(i) **Identify the competitor :** The first step to understand the competitive landscape is to identify the competitors in the firm's industry and have actual data about their respective market share.

(ii) **Understand the competitors :** Once the competitors have been identified, the strategist can use market research report, internet, newspapers, social media, industry reports, and

various other sources to understand the products and services offered by them in different markets.

(iii) **Determine the strengths of the competitors :** What is the strength of the competitors ? What do they do well ? Do they offer great products ? Do they utilize marketing in a way that comparatively reaches out to more consumers ? Why do customers give them their business ?

(iv) **Determine the weaknesses of the competitors :** Weaknesses (and strengths) can be identified by going through consumer reports and reviews appearing in various media. After all, consumers are often willing to give their opinions, especially when the products or services are either great or very poor.

(v) **Put all of the information together :** At this stage, the strategist should put together all information about competitors and draw inference about what they are not offering and what the firm can do to fill in the gaps. The strategist can also know the areas which need to be strengthen by the firm.

(5 MARKS)

ANSWER : 4(B)

Managers implement strategy by converting major plans into concrete, sequential actions that form incremental steps. Implementation control is directed towards assessing the need for changes in the overall strategy in light of unfolding events and results associated with incremental steps and actions.

Strategic implementation control is not a replacement to operational control. Strategic implementation control, unlike operational controls continuously monitors the basic direction of the strategy. The two basic forms of implementation control are :

(i) **Monitoring strategic thrusts :** Monitoring strategic thrusts help managers to determine whether the overall strategy is progressing as desired or whether there is need for readjustments.

(ii) **Milestone Reviews :** All key activities necessary to implement strategy are segregated in terms of time, events or major resource allocation. It normally involves a complete reassessment of the strategy. It also assesses the need to continue or refocus the direction of an organization.

(5 MARKS)