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SUGGESTED SOLUTION

CS EXECUTIVE J'19 EXAM

SUBJECT- F.M.

Test Code – CSE 2021

BRANCH - () (Date :)

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ANSWER-1

ANSWER-A

Financial Distress

- Financial distress is a **condition where a company cannot meet, or has difficulty paying off, its financial obligations to its creditors**, typically due to high fixed costs, illiquid assets or revenues sensitive to economic downturns. A company under financial distress can incur costs related to the situation, such as more expensive financing, opportunity costs of projects and less productive employees.
- Employees of a distressed firm usually have **lower morale and higher stress** caused by the **increased chance of bankruptcy**, which would force them out of their jobs.
- Poor profits indicate a company is not experiencing financial health. Struggling to break even indicates a business cannot sustain itself from internal funds and needs to raise capital externally. This raises the company's business risk and lowers its creditworthiness with lenders, suppliers, investors and banks. Limiting access to funds typically results in a company failing.
- Poor sales growth or decline indicates the market is not positively receiving a company's products or services based on its business model. When extreme marketing activities result in no growth, the market may not be satisfied with the offerings, and the company may close down.
- Likewise, if a company offers poor quality in its products or services, consumers start buying from competitors, eventually forcing a business to close its doors.
- When debtors take too much time paying their debts to the company, cash flow may be severely stretched. The business may be unable to pay its own liabilities. The risk is especially enhanced when a company has one or two major customers.

Financial Insolvency

Financial distress leads to Financial insolvency.

Financial insolvency occurs when an individual or a firm is unable to meet their financial obligations. Accounting insolvency happens when total liabilities exceed total assets (negative net worth).

Financial insolvency involves a lack of liquidity to pay debts as they fall due. Insolvency is not a synonym for bankruptcy, which is a determination of insolvency made by a court of law with passing legal orders intended to resolve the insolvency.

(5 MARKS)

ANSWER-B

Management guru Peter Drucker refers to it as a measure of total factor productivity.

- **EVA is the surplus left after making an appropriate charge for the capital employed in the business. i.e. $EVA = NOPAT - (WACC \times \text{Capital Employed})$.**
- EVA will rise if operating efficiency is improved, if value adding investments are made, if uneconomic activities are curtailed, and if the cost of capital is lowered.

- EVA is the **right measure for goal setting and business planning**, performance evaluation, bonus determination, investor communication, capital budgeting, and valuation.
- The **goal** of all companies **is to create value for the shareholder**. EVA is a performance metric that calculates the creation of shareholder value, but it distinguishes itself from traditional financial performance metrics such as net profit and earnings per share (EPS).
- EVA is the **calculation of what profits remain after the costs of a company's capital – both debt and equity - are deducted from operating profit**.
- E.g. X Ltd capital is ' 100 million - including debt and shareholder equity - and the cost of using that capital (interest on debt and the cost of equity) is ' 13 million a year, X Ltd. will add economic value for his shareholders only when profits are more than ' 13 million a year. If X Ltd. earns '20 million, the company's EVA will be '7 million.
- Big corporations, including Coca-Cola, GE and AT&T, employ EVA internally to measure wealth creation performance. In turn, investors and analysts are now scrutinizing company EVA just as in the past they observed EPS and P/E ratios.
- EVA is a **critical driver of a company's stock performance**. If EVA is positive but is expected to become less positive, it is not giving a very good signal. Conversely, if a company suffers negative EVA but is expected to rise into a positive territory, a good buying signal is given.
- Thus **maximizing EVA will maximize wealth of shareholders**.

(5 MARKS)

ANSWER-2

ANSWER-A

No. of units = 7,00,000/ 10 = 70,000 units.

Particulars	ABC Ltd.	PQR Ltd.
Sales	7,00,000	7,00,000
(-) Variable Cost	(4,90,000)	(4,90,000)
Contribution	2,10,000	2,10,000
(-) Fixed costs	(1,70,000)	(1,70,000)
EBIT	40,000	40,000
(-) Interest	-	(20,000)
EBT	40,000	20,000
(-) Tax @ 30%	(12,000)	(6,000)
PAT	28,000	14,000
Operating leverage	5.25	5.25
Financial leverage	1.00	2.00
Combined leverage	5.25	10.5

- (1) High operating leverage shows higher burden of fixed cost consequently higher business risk. As both companies has similar operating leverage hence both has same business risk.

- (2) High financial leverage shows higher burden of interest cost consequently higher financial risk. As PQR Ltd. has higher financial leverage hence it has high financial risk as compared to ABC Ltd.
- (3) High combined leverage shows combined effect of higher burden of fixed and interest cost consequently higher business & financial risk. As PQR Ltd. has higher combined leverage hence it has high business risk & financial risk as compared to ABC Ltd.

[5 Marks]

ANSWER-B

In formulating a firm's working capital policy, an important consideration is the trade – off between profitability and risk. In other words, the level of a firm's Net Working Capital has a bearing on its profitability as well as risk. The term profitability here means profits after expenses. The term risk is defined as the probability that a firm will become technically insolvent so that it will not be able to meet its obligations when they become due for payment.

The risk of becoming technically insolvent is measured using net working capital. It is assumed that the **greater the amount of Net Working Capital, the less risky the firm is, and vice – versa.** The relationship between liquidity, Net Working Capital and risk is such that if either net working capital or liquidity increases, the firm's risk decreases.

What proportion of current assets should be financed by current liabilities and how much by long term sources will depend, apart from liquidity – profitability trade off, on the risk perception of the management. Two broad policy alternatives, in this respect are :

- (a) **A conservative current asset financing policy :** It relies less on short term bank financing and more on long term sources. No doubt it reduces the risk that the firm will be unable to repay its short term debt periodically, but enhances the cost of financing.
- (b) **As aggressive current Asset Financing Policy :** It relies heavily on short term bank finance and seeks to reduce dependence on long term financing. It exposes the firm to a higher degree of risk, but reduces the average cost of financing thereby resulting in higher profits.

[5 Marks]

ANSWER-3

Statement showing working capital estimation :

Particulars	Norms	Calculations	Rs.
Current Assets :			
Raw Material Stock	3 weeks	$\left[28,08,000 \times \frac{3}{52} \right]$	1,62,000
WIP Stock	1 weeks	$\left[32,76,000 \times \frac{1}{52} \right]$	63,000
Finished Goods Stock	2 weeks	$\left[37,44,000 \times \frac{2}{52} \right]$	1,44,000
Debtors (on cost)	4 weeks	$\left[28,08,000 \times \frac{4}{52} \right]$	2,16,000
Cash & Bank	Given		50,000

Current Liabilities :				635000
Creditors	4 weeks	$\left[28,08,000 \times \frac{4}{52} \right]$		2,16,000
Outstanding Wages	2 weeks	$\left[4,68,000 \times \frac{2}{52} \right]$		18,000
Outstanding Overheads	2 weeks	$\left[4,68,000 \times \frac{2}{52} \right]$		18,000
			(B)	2,52,000
Working Capital (A) – (B)				3,83,000

[5 Marks]

Note : 1 Cost Structure : (For 78,000 units)

Selling price per unit = $46,80,000/78,000 = 60$

Particulars	Per unit	Total
Raw Material	36	28,08,000
Labour	6	4,68,000
Variable Overheads	1	78,000
Fixed Overheads (excluding depreciation)		3,90,000
Total Cost		37,44,000

[2 Marks]

Note : 2 Cost Structure for WIP :

Particulars	Degree of completion	Rs.
Raw Material	100%	28,08,000
Wages	50%	2,34,000
Variable Overheads	50%	39,000
Fixed Overheads	50%	1,95,000
Total		32,76,000

[2 Marks]

Note : 3 Calculation of cash cost of sales :

Particulars	Total
Cost of sales i.e. total cost	37,44,000
(-) Cash sales i.e. 25%	(9,36,000)
Cash cost of credit sales	28,08,000

[1 Mark]

ANSWER-4

$$(i) \text{ Average Receivables} = \text{Credit Sales} \times \frac{\text{Credit Period}}{360} = 2,55,00,00,000 \times \frac{45}{360} = 31,87,50,000$$

Particulars	Calculations	Amount (Rs.)
Annual Sales		3,00,00,00,000
Annual credit sales	3,00,00,00,000 * 85%	2,55,00,00,000
Average Sales	2,55,00,00,000 * 45/360	31,87,50,000
Factoring Reserve	31,87,50,000 * 1.10%	35,06,250
Factoring Commission	31,85,70,000 * 15%	4,78,12,500
Total		5,13,18,750
Amount to be advanced	31,87,50,000 – 5,13,18,750	26,74,31,250
Less : Interest on above	26,74,31,250 * 15% * 45/ 360	50,14,336
Amount remitted by the factor		26,24,16,914
Net cost of factoring (for 45 days)		
Interest	As calculated above	50,14,336
Commission	As calculated above	35,06,250
Less : Savings		-7,50,000
Net cost		77,70,586
Effective cost of factoring (for 45 days)	77,70,586 / 26,24,16,914 * 100	2.96%
Annual Effective cost	2.96 * 360/ 45	23.69%

[7 Marks]

(ii) Computation of net cost of bank proposal (Annual basis) :

Particulars	Rs.
Costs :	
Interest charges (31,87,50,000 × 85% × 7%)	1,89,65,625
Savings :	
Cost of bad debts & administration of receivables	60,00,000
Net cost of bank proposal to the firm	1,29,65,625

[2 Marks]**Analysis :** It is better to go with bank proposal.**[1 Mark]**

ANSWER-5**ANSWER-A**

In problem statement of profit & loss is not properly presented as no interest is deducted before deduction of tax. Further, interest cannot said to be included in "Operating expenses" as interest on loan is financial expenses and not operating expenses. Thus, profit before interest and tax is taken Rs. 6,14,000 and accordingly problem is solved.

Particulars	Calculations	Rs.
EBIT		6,14,000
Less : Interest	(15,00,000 × 18%)	(2,70,000)
EBT		3,44,000
Less : Tax @ 40%	(3,44,000 × 40%)	(1,37,600)
Profit After Tax (PAT)		2,06,400
Add : Interest (1 – t)	[2,70,000 (1 – 0.4)]	1,62,000
Net Operating Profit After Tax (NOPAT)		3,68,400
Less : Cost of Capital	(See Working note)	(5,24,200)
Economic Value Added		(1,55,800)

Working Note:

Equity share capital	(10,00,000 × 20%)	2,00,000
Long term debt	(15,00,000 × 20%)	3,00,000
Bank overdrafts	(1,21,000 × 20%)	24,200
		5,24,200

[5 Marks]**ANSWER-B**

Particulars	Rs.
Contribution	90,00,000
(-) Fixed cost	(54,00,000)
Earnings before interest & tax (EBIT)	36,00,000
(-) Interest	(24,00,000)
Earnings before tax (EBT)	12,00,000
(-) Tax @ 50%	(6,00,000)
Profit after tax (PAT)	6,00,000

$$EPS = \frac{\text{Profit available for equity shareholder}}{\text{No. of shares}}$$

$$30 = \frac{x}{20,000}$$

$$x = \text{Profit available for equity shareholder} = 6,00,000$$

Tax rate is 50% hence profit before tax will be Rs. 12,00,000.

Financial Leverage = $\frac{EBIT}{EBT}$	Let the Contribution be 'x'
Let the EBIT be 'x'	Operating Leverage = $\frac{Contribution}{EBIT}$
$3 = \frac{x}{12,00,000}$	$2.5 = \frac{x}{36,00,000}$
EBIT = x = 36,00,000	EBIT = x = 90,00,000

Market price per share (MPS) after expansion :

Particulars	Rs.
Contribution	1,12,50,000
(-) Fixed cost	(57,00,000)
Earnings before interest & tax (EBIT)	55,50,000
(-) Interest	(33,00,000)
Earnings before tax (EBT)	22,50,000
(-) Tax @ 50%	(11,25,000)
Profit after tax (PAT)	11,25,000

$$EPS = \frac{\text{Profit available for equity shareholder}}{\text{No. of shares}} = \frac{11,25,000}{20,000} = 56.25$$

[5 Marks]