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SUGGESTED SOLUTION

IPCC NOVEMBER 2016 EXAM

FINANCIAL MANAGEMENT

Test Code - I N J1 1 0 4

BRANCH - (MUMBAI) (Date : 10.07.2016)

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Answer-1 :
Preparation of Financial Statements

Particulars	**%**	**Rs.**
Share capital	50%	1,00,000
Other shareholders funds	15%	30,000
5% Debentures	10%	20,000
Trade creditors	25%	50,000
Total	**100%**	**2,00,000**

Land and Buildings = Rs. 80,000
Total Liabilities = Total Assets
Rs. 2,00,000 = Total Assets
Fixed Assets = 60% of Total Gross Fixed Assets and Current Assets
= Rs. 2,00,000 x60/100
= Rs. 1,20,000

Calculation of Additions to Plant & Machinery

	Rs.
Total Fixed Assets	1,20,000
Less: Land and Building	80,000
Plant and Machinery (after providing depreciation)	40,000
Depreciation on Machinery up to 31-3-2013	15,000
Add: Further Depreciation	5,000
Total	**20,000**

(3 Marks)

Current Assets = Total Assets - Fixed Assets
= Rs. 2,00,000-Rs. 1,20,000 = Rs. 80,000

Calculation of Stock

Quick Ratio = $\frac{\text{Current Assets - Stock}}{\text{Current Liabilities}} = 1$

= $\frac{\text{Rs.80,000 - Stock}}{\text{Rs.30,000}} = 1$

Rs. 50,000 = Rs. 80,000 - Stock
Stock = Rs. 80,000 - Rs. 50,000
= Rs. 30,000
Debtors = 4/5th of Quick Assets
= (Rs. 80,000 - 30,000) x 4/5
= Rs. 40,000

(1 Mark)

Debtors Turnover Ratio

= $\frac{40{,}000 \times 12}{\text{Credit Sales}} = 2$ months

2 Credit Sales = 4,80,000
Credit Sales = 4,80,000/2
= 2,40,000
Gross Profit (15% of Sales)
Rs. 2,40,000 x 15/100= Rs. 36,000

(1 Mark)

Return on Networth (profit after tax)

Networth = Rs. 1,00,000 + Rs. 30,000
= Rs.1,30,000
Net Profit = Rs.1,30,000 x 10/100 = Rs.13,000
Debenture Interest = Rs.20,000 x 5/100 = Rs.1,000

(1 Mark)

Projected Profit and Loss Account for the year ended 31.03.2014

To Cost of Goods sold To Gross Profit	2,04,000 36,000	By Sales	2,40,000
	2,40,000		2,40,000
To Debenture Interest To Administration & Other Expenses To Net Profit	1,000 22,000 13,000	By Gross Profit	36,000
	36,000		36,000

(2 Marks)

Ganesha Limited
Projected Balance Sheet as on 31st March, 2014

Liabilities	Rs.	Assets	Rs.	Rs.
Share Capital	1,00,000	Fixed Assets		
Profit and Loss A/c.	30,000	Land and Buildings		80,000
(17,000 + 13,000)		Plant & Machinery	60,000	
5% Debentures	20,000	Less : Depreciation	20,000	40,000
Current Liabilities		Current Assets :		
Trade Creditors	50,000	Stock	30,000	
		Debtors	40,000	
		Bank	10,000	80,000
Total	**2,00,000**	**Total**		**2,00,000**

(4 Marks)

Answer-2 (a) :

Statement of Existing Profit

Sales	Rs. 10,00,000
Less : Variable Cost	7,00,000
Contribution	3,00,000
Less : Fixed Cost	2,00,000
EBIT	1,00,000
Less : Interest @ 10% on 5,00,000	50,000
Profit before tax (PBT)	50,000

(2 Marks)

Operating Leverage = $\frac{\text{Contribution}}{\text{EPBT}} = \frac{3,00,000}{1,00,000} = 3$

(1 Mark)

Financial Leverage = $\frac{\text{EBIT}}{\text{PBT}} = \frac{1,00,000}{50,000} = 2$

(1 Mark)

Combined Leverage = $\frac{\text{Contribution}}{\text{PBT}} = \frac{3,00,000}{50,000} = 6$

(1 Mark)

Statement of Sales needed to double the EBIT

Operating leverage is 3 times i.e., 33-1/3% increase in sales volume cause a 100% increase in operating profit or EBIT. Thus, at the sales of Rs. 13,33,333, operating profit or EBIT will become Rs. 2,00,000 i.e., double the existing one.

Verification

Sales	Rs. 13,33,333
Variable Cost (70%)	9,33,333
Contribution	4,00,000
Fixed Costs	2,00,000
EBIT	2,00,000

(1 Mark)

Answer-2 (b) :

Since the amount of revenue generated from each category of customer is not given in thequestion. Let us consider Rs. 100 as the amount of revenue generated from each type ofcustomer. Therefore, Rs. 100 shall be taken as the basis for reappraisal of Company's creditpolicy.

Statement showing the Evaluation of credit Policy

	Particulars	**Classification of Customers 1**	**2**	**3**	**4**
A.	Expected Profit:				
	(a) Revenue	100	100	100	100
	(b) Total Cost other than Bad Debt:				
	(i) Cost of Goods Sold	85	85	85	85
	(ii) Fixed Cost	5	5	5	5
		90	90	90	90
	(c) Bad Debt	0	2.00	10.00	20.00
	(d) Expected Profit [(a)-(b)-(c)]	10	8.00	0	(10.00)
B.	Opportunity Cost of Investment in Receivables	1.66	1.55	1.48	2.96
C.	Net Benefits [A-B]	8.34	6.45	(1.48)	(12.96)

(4 Marks)

Recommendation: The reappraisal of company's credit policy indicates that the companyeither follows a lenient credit policy or it is inefficient in collection of debts. Even though thecompany sells its products on terms of net 30 days, it allows average collection period formore than 30 to all categories of its customers.

The company can continue with customers covered in categories 1 and 2 since net benefitsare favourable. The company either should not continue with customer covered in categories3 and 4 or should reduce the bad debt % by at least 1.48% and 12.96% respectively since netbenefits are unfavourable to the extent of 1.48% and 12.96% of sales respectively. The otherfactors to be taken into consideration before changing the present policy includes (i) pastperformance of the customers and (ii) their credit worthiness.

(1 Mark)

Working Note: Calculation of Opportunity Cost

Opportunity Cost = Total Cost x $\frac{\text{Average collection period}}{365}$ x Rate of interest

For Category 1 = Rs.90 x $\frac{45}{365} \times \frac{15}{100}$ =Rs.1.66

For Category 2 = Rs.90x$\frac{42}{365} \times \frac{15}{100}$=Rs.1.55

For Category 3 = Rs.90x$\frac{40}{365} \times \frac{15}{100}$=Rs.1.48

For Category 4 = Rs.90 x $\frac{80}{365} \times \frac{15}{100}$ =Rs.2.96

(1 Mark)

Answer-3 :

1. Packing of drums of 500g each. It is assumed of 500kg each.
Cost of production per annum (production of chemical x – 250m / t).

		Rs. in lakhs
Imported Raw Material		6.50
Indigenous Raw Material		6.26
Salaries & Wages		1.35
Repairs and Maintenance :		
5% on 12,00,000	0.60	
2% on 8,00,000	0.16	0.76
Depreciation		
7 % on 12,00,000	0.84	
2.5 % on 8,00,000	0.20	1.04

Administration & Other Expenses		0.50
Steam	7000 x 16	1.12
Power		0.06
Packing drums (250 m/t) / 500 kg. = 500 nos. @ 30 each		0.15
Total Cost		17.74
Sales	250 x 8500	21.25
Profit		3.51

(4 Marks)

2. Working Capital requirement

Particulars	**Basis of calculation**	**Amount (Rs.)**
Imported Raw Material stock	(6 / 12) x 6.5	3.25
Indigenous Raw Material and Packing Material	6.26 + 0.15 = 6.41 x (3 / 12)	1.60
Stock of finished goods	At works cost excluding depreciation & admin exp = 17.74 – 1.04 – 0.5 = (16.20/12)	1.35
Credit to customers	17.74 - 1.04 = (16.70 / 12)	1.39
Cash Expenses	Salaries, wages, repairs, admin, steam, power = 3.79 / 12	0.32
Current Assets		7.91
(Less): Credit from suppliers	6.41 / 12	0.53
Working Capital requirement		7.38

(3 Marks)

Requirement of Total Capital:

	(Rs.)
Land	1.00
Building	8.00
Plant and Machinery	12.00
Working Capital	7.38
	28.38

(1 Mark)

i. percentage of yield on investment = Profit / Investment x 100
= (3.51 / 28.38) x 100= 12.37 %

(0.5 Mark)

ii. percentage of profit on sales = Profit / Sales x 100
= (3.51 / 21.25) x 100 = 16.52 %

(0.5 Mark)

iii. cash generation per annum before tax :

	(Rs.)
PBT	3.51
Add. Depreciation	1.04
Cash generation before tax	4.55

(1 Mark)

Answer-4 :

(1) Working Capital of X Ltd. during 2011-12, 2012-13 and 2013-14

Current Assets :

	2011-12	**2012-13**	**2013-14 (Rs. in Lacs)**
Stock	15,00	15,00	20,00
Debtors	5,00	5,50	5,00
Cash at Bank	5,00	3,00	3,25
	25,00	23,50	28,25

Less : Current Liabilities :

Cash Credit	5,00	7,00	12,00
Creditors	12,00	14,00	18,00
	17,00	21,00	30,00
Working Capital	8,00	2,50	(1,75)
Decrease in Working Capital	—	5,50	4,25

(4 Marks)

So working capital decreased by Rs. 550 lacs in 2008-09 and Rs. 425 lacs in 2013-14.

(2) Profit earned and funds from operations

Profit during the year :	**2012-13**	**(Rs. in Lacs)** **2013-14**
Increase in Profit & Loss A/c	1,00	2,00
Increase in Reserve	4,00	9,00
Tax provision	17,00	28,00
Proposed Dividend	22,50	26,25
	44,50	65,25
Less : Profit on sale of Investment	(10)	—
Add : Depreciation	7,00	7,75
Fund from operations	51,40	73,00

(4 Marks)

X Ltd. earned Rs. 44,50 lacs profit and Rs. 51,40 Lacs fund in 2012-13. It earned Rs. 62,25lacs profit and Rs.73,00 lacs fund in 2013-14.

(3) Fund Flow Statements **(Rs. in Lacs)**

	2012-13	**2013-14**
Sources:		
Fund from operations	51,40	73,00
Issue of 12% debentures	—	5,00
Sale of investments	5,10	
	56,50	78,00
Applications:		
Purchase of Plant and Machinery	37,00	27,75
Purchase of Investments	—	15,00
Tax payment	11,00	17,00
Dividend payment	14,00	22,50
	62,00	82,25
Decrease in Working Capital	5,50	4,25

(6 Marks)

Comments:

(1) It appears (Rs. 25,00 lacs) that 48.64% (Rs. 51,40 lacs) „e 100 of the fund generatedduring 2012-13 were used to pay tax and dividend. The percentage became stillhigher (54.11%)

$\frac{Rs.39,50}{Rs.73,00}$ x 100 in 2013-14

(2) In 2012-13 the balance of the fund generated was 51.36% (100 – 48.64%) which isused to finance purchase of plant and machinery. Sources of finance for long-terminvestment were:

Fund from Operations 71.35% (Rs. 26,40 lacs/Rs. 37,00 lacs) x 100
Sale of Investments 13.78% (Rs. 5,10 lacs / Rs. 37,00 lacs) x 100
Working Capital 14.87% (Rs. 5,50 lacs / Rs. 37,00 lacs) x 100

Thus inadequate long-term fund to finance purchase of plant and machinerydeteriorated working capital position. Also the management proposed 30% dividend in2012-13.

So, liquidity deterioration in 2012-13 was due to (a) deployment of working capital inlong term investment and (b) high rate of dividend.

(3) In 2013-14, fund generation was 42.02% more. But dividend was increased from 20% to30% which absorbed about 30.83% of funds generated. Tax paid to fund generated wasalso increased from 21.40% to 23.29%, Investment in Plant & Machinery (net ofcollection by issue of debentures) was 31.16% of the fund generated. Thus, margin of14.73 would remain had there been no investment outside business. This amounts toRs. 10.75 lacs. So outside investment caused liquidity deterioration in 2013-14.

(2 Marks)