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SUGGESTED SOLUTION
IPCC NOVEMBER 2016 EXAM
FINANCIAL MANAGEMENT
Test Code - I N J 1 0 2 0
BRANCH - (Multiple) (Date :28.08.2016)

Head Office : Shraddha, 3rd Floor, Near Chinai College, Andheri (E), Mumbai – 69.
Tel : (022) 26836666

Answer-1:

(i) Schedule of Changes in Working Capital

Particulars	31st March Working Capital			
	2007 Rs.	2008 Rs.	Increase Rs.	Decrease Rs.
A. Current Assets:				
Stock	4,80,000	8,50,000	3,70,000	-
Debtors	6,00,000	7,98,000	1,98,000	-
Prepaid Expenses	50,000	40,000	-	10,000
Cash and Bank	<u>1,40,000</u>	<u>85,000</u>	-	55,000
Total (A)	<u>12,70,000</u>	<u>17,73,000</u>		
B. Current Liabilities:				
Creditors	4,00,000	5,80,000	-	1,80,000
Outstanding Expenses	20,000	25,000	-	5,000
Provision for Taxation	<u>1,00,000</u>	<u>1,20,000</u>	-	20,000
Total (B)	<u>5,20,000</u>	<u>7,25,000</u>		
Working Capital (A – B)	7,50,000	10,48,000	5,68,000	2,70,000
Increase in Working Capital	<u>2,98,000</u>			<u>2,98,000</u>
Total	10,48,000	10,48,000	5,68,000	5,68,000

(3 Marks)

(ii) Funds Flow Statement
for the year ending 31st March, 2008

Sources of Funds	Amount Rs.	Application of Funds	AmountRs.
Funds from operations	10,63,000	Redemption of debentures	2,40,000
Bank loan taken	1,00,000	Purchase of machinery	3,00,000
Sale of Machinery	50,000	Dividend paid	3,00,000
Sale of Investment	45,000	Interim Dividend paid	1,20,000
Increase in working capital	2,98,000		
	12,58,000		12,58,000

(3 Marks)

Workings:

1. Funds from operations:

Adjusted Profit and Loss A/c

	Rs.	Rs.	Rs.	
To General Reserve		33,000	By Balance b/d	2,50,000
To Depreciation			By Funds from operations	10,63,000
On Land and Building	1,00,000		(Balancing figure)	
On Plant & Machinery	<u>2,80,000</u>	3,80,000		
To Loss on Sale of Machine	20,000			
To Premium on Redemption of Debentures	40,000			
To Proposed Dividend	3,60,000			
To Interim Dividend	1,20,000			
To Balance c/d	3,60,000			
	13,13,000			13,13,000

(2 Marks)

2. **Depreciation on Land and Building** = Rs.15,00,000 – Rs.14,00,000
= Rs.1,00,000.
3. **Loss on Sale of Old Machine** = Cost Rs.1,45,000 – Rs.75,000 (Cum-Dep.) –
Rs. 50,000 (Sales value) = Rs.20,000
4. **Depreciation on Plant and Machinery:**
Plant and Machinery A/c

	Dr. Rs.		Cr. Rs.
To Balance b/d	18,00,000	By Bank A/c (Sold)	50,000
To Bank A/c (Purchases)	3,00,000	By Profit and Loss A/c (Loss on Sales)	20,000
		By Depreciation (Balancing figure)	2,80,000
		By Balance c/d	17,50,000
	21,00,000		21,00,000

(2 Marks)

5. **Premium on Redemption of Debentures:**
Amount of Debenture Redeemed = Rs.10,00,000 – Rs.8,00,000
= Rs.2,00,000
Premium = Rs.2,00,000 x 20/100 = Rs.40,000

6. **Profit on sale of investment:**

Investment A/c

	Dr. Rs.		Cr. Rs.
To Balance b/d	4,00,000	By Bank A/c (Sales)	45,000
To General Reserve(Profit on Sales)	17,000	By Balance c/d	3,72,000
	4,17,000		4,17,000

7. **Amount transferred to General Reserve from Profit and Loss A/c:**
General Reserve A/c

	Dr. Rs.		Cr. Rs.
To Balance c/d	4,50,000	By Balance b/d	4,00,000
		By Investment A/c	17,000
		By Profit and Loss A/c	33,000
	4,50,000		4,50,000

Answer–2 :

(Rs. in Crores)

		Working Capital Investment Policy		
		Conservative	Moderate	Aggressive
1.	Current assets	11.475	9.945	6.630
2.	Fixed assets	6.630	6.630	6.630
3.	Total assets	18.105	16.575	13.26
4.	Current liabilities	5.967	5.967	5.967
5.	Estimated sales	31.365	29.325	25.50
6.	Estimated EBIT	3.1365	2.9325	2.55
7.	Current ratio {(1) / (4)}	1.92	1.67	1.11

Computation of following for each policy:

(i)	Rate of return on total assets(in percentages): [[6)/(3]] x100	17.32	17.69	19.23	
(ii)	Net working capital position :(in crores) [(1)-(4)]	5.508	3.978	0.663	(2 Marks)
(iii)	Current assets to fixed assets ratio: [(1) / (2)]	1.73	1.50	1.00	(2 Marks)
(iv)	<i>Risk-return trade off: The net working capital or current ratio is a measure of risk. Rate of return on total assets is a measure of return. The expected risk and return are minimum in the case of conservative investment policy and maximum in the case of aggressive investment policy. The firm can improve profitability by reducing investment in working capital.</i>				(1 Mark)

Answer-3 :**Preparation of Monthly Cash Budget****Cash Budget for four months from June, 2014 to September, 2014**

Particulars	June (Rs.)	July (Rs.)	August (Rs.)	September (Rs.)
Opening Balance	45,000	45,500	45,500	45,000
Receipts:				
Cash Sales	1,00,000	98,000	1,08,000	1,22,000
Collection from debtors	3,48,000	3,80,000	3,96,000	4,12,000
Dividends	25,000	-	-	-
Total (A)	5,18,000	5,23,500	5,49,500	5,79,000
Payments:				
Creditors for Materials	2,00,000	2,10,000	2,60,000	2,82,000
Wages	1,62,500	1,65,000	1,65,000	1,67,500
Overheads	40,000	38,000	37,500	60,800
Installment for Machine	-	20,000	20,000	20,000
Interest on Debentures	30,000	-	-	-
Advance Tax	-	-	15,000	-
Total (B)	4,32,500	4,33,000	4,97,500	5,30,300
Surplus (A – B)	85,500	90,500	52,000	48,700
Fixed Deposits	40,000	45,000	7,000	3,000
Closing Balance	45,500	45,500	45,000	45,700

(6 Marks)**Working Notes:****(1) Cash Sales and Collection from Debtors:**

Month	Total Sales (Rs.)	Cash Sales (Rs.)	Credit Sales (Rs.)	Collection from Debtors			
				June (Rs.)	July (Rs.)	August (Rs.)	September (Rs.)
April, 2010	4,20,000	84,000	3,36,000	1,68,000	-	-	-
May, 2010	4,50,000	90,000	3,60,000	1,80,000	1,80,000	-	-
June, 2010	5,00,000	1,00,000	4,00,000	-	2,00,000	2,00,000	-
July, 2010	4,90,000	98,000	3,92,000	-	-	1,96,000	1,96,000
Aug., 2010	5,40,000	1,08,000	4,32,000	-	-	-	2,16,000
Sept., 2010	6,10,000	1,22,000	4,88,000	-	-	-	-
Total				3,48,000	3,80,000	3,96,000	4,12,000

(2 Marks)

(2) Payment of Wages

June = 80,000 + 82,500 = 1,62,500;

July = 82,500 + 82,500 = 1,65,000;

Aug. = 82,500 + 82,500 = 1,65,000; and

Sept. = 82,500 + 85,000 = 1,67,500.

(Note: It has been assumed that the company wants to keep minimum cash balance of Rs.45,000.)

Answer-4 :

Statement Showing Evaluation of Debtors Policies

Particulars	Present Policy	Proposed Policy
A. Expected Profit		
(a) Credit Sales	2,56,48,750	2,82,13,625
(b) Less: Total Cost other than Bad Debts	1,84,67,100	2,03,13,810
(c) Less: Bad Debts	<u>3,84,731</u>	<u>5,64,273</u>
(d) Profit before tax [(a)-(b)-(c)]	67,96,919	73,35,542
(e) Less: Tax @ 35%	<u>23,78,922</u>	<u>25,67,440</u>
(f) Profit after tax [(d)-(e)]	<u>44,17,997</u>	<u>47,68,102</u>
B. Opportunity Cost of investment in Receivables	3,46,258	5,07,845
C. Net Benefits [A-B]	40,71,739	42,60,257

Recommendation : Proposed Policy should be implemented since the net benefit under this policy are higher than those under present policy.

(4 Marks)

Working Note: Opportunity Costs of Average Investments

$$= \text{Total Cost} \times \frac{\text{Collection period}}{360 \text{ Days}} \times \text{Rate of Return}$$

$$\text{Present Policy} = \text{Rs.} 1,84,67,100 \times \frac{45}{360} \times 15\% = \text{Rs.} 3,46,258$$

$$\text{Proposed Policy} = \text{Rs.} 2,03,13,810 \times \frac{60}{360} \times 15\% = \text{Rs.} 5,07,845$$

(2 Marks)

Answer-5 :

Computation of future value

Principal (P) = Rs. 10,000

Rate of interest (i) = 12% p.a.

Time period (n) = 3 years

Amount if compounding is done:

(i) Annually

$$\begin{aligned} \text{Future Value} &= P(1+i)^n \\ &= \text{Rs.} 10,000 (1 + 0.12)^{3 \times 1} \\ &= \text{Rs.} 10,000 \times 1.404928 \\ &= \text{Rs.} 14,049.28 \end{aligned}$$

(2 Marks)

(ii) Semi Annually

$$\begin{aligned} \text{Future Value} &= \text{Rs.} 10,000 \left(1 + \frac{12}{100 \times 2} \right)^{3 \times 2} \\ &= \text{Rs.} 10,000 (1 + 0.06)^6 \\ &= \text{Rs.} 10,000 (1 + 0.06)^6 \\ &= \text{Rs.} 10,000 \times 1.418519 \end{aligned}$$

= Rs. 14,185.19

(2 Marks)

(iii) Quarterly

$$\begin{aligned} \text{Future Value} &= \text{Rs.}10,000 \left(1 + \frac{12}{100 \times 4}\right)^{3 \times 4} \\ &= \text{Rs.}10,000 (1 + 0.03)^{12} \\ &= \text{Rs.}10,000 \times 1.425761 \\ &= \text{Rs.} 14,257.61 \end{aligned}$$

(2 Marks)

Answer-6 :
Fund from Operation

Particulars	(Rs.)
Closing value of reserves & surplus	6,15,000
Less: Opening value of reserves & surplus	<u>(3,57,000)</u>
Profit after depreciation	2,58,000
Add: Depreciation (refer the working note)	<u>37,000</u>
Profit before depreciation	2,95,000
Less: Profit on sale of plant	<u>(20,000)</u>
	2,75,000
Add: Interim dividend	<u>54,000</u>
Fund from Operation	3,29,000

(3 Marks)

Fund flow statement for the year ended 31st March 2016

Particulars	(Rs.)
Sources of Fund	
Fund from Operation	3,29,000
Decrease in working capital (Balancing Figure)	3,67,000
Sale of plant	<u>48,500</u>
	<u>7,44,500</u>
Application of Fund	
Long-term Investment (Rs.4,35,000 – Rs.1,98,000)	2,37,000
Purchase of Plant (refer the working note)	1,83,500
Repayment of Debentures (Rs.3,75,000 – Rs.1,05,000)	2,70,000
Payment of interim dividend	<u>54,000</u>
	7,44,500

(3 Marks)

Working Note:

Plant A/c

Particulars	(Rs.)	Particulars	(Rs.)
To Balance b/d	95,000	By Bank A/c (Sale)	48,500
To P&L A/c (Profit on sale)	20,000	By Prov. for Depreciation (Balancing figure)	37,000
To Bank A/c (new purchase) (Rs.1,40,000 + Rs.43,500)	1,83,500	By Balance c/d	2,13,000
	2,98,500		2,98,500

(4 Marks)

Answer-7 :

$$(i) \quad PV = \frac{FV}{(1+k)^n} \quad \text{or, } PV = \frac{Rs.1,00,000}{(1+0.06)^{10}}$$

(2 Marks)

$$(ii) \quad FVA(k,n) = A \left[\frac{(1+k)^n - 1}{k} \right]$$

$$A = \frac{FVA(k,n)}{\left[\frac{(1+k)^n - 1}{k} \right]} = \frac{Rs.1,00,000}{13.181} = Rs.7,586.68$$

(2 Marks)