

SUGGESTED SOLUTION

IPCC May 2017 EXAM

FINANCIAL MANAGEMENT

Test Code - I N J1 0 2 0

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Answer-1:

(i) **Schedule of Changes in Working Capital**

Particulars		319			
		2007	2008	Increase	Decrease
		Rs.	Rs.	Rs.	Rs.
Α.	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	1,40,000	85,000	-	55,000
	Total (A)	12,70,000	17,73,000		
В.	Current Liabilities:				
	Creditors	4,00,000	5,80,000	-	1,80,000
	Outstanding Expenses	20,000	25,000	-	5,000
	Provision for Taxation	1,00,000	1,20,000	-	20,000
	Total (B)	5,20,000	7,25,000		
	Working Capital (A – B)	7,50,000	10,48,000	5,68,000	2,70,000
	Increase in Working Capital	2,98,000			2,98,000
	Total	10,48,000	10,48,000	5,68,000	5,68,000

Funds Flow Statement

(ii) 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)

(3 Marks)

Workings:

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 fromoperations	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 De	ebentures 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 = $Rs.2,00,000 \times 20/100 = Rs.40,000$

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)

		Wo	rking Capital Invest	ment 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

Comp	outation of following for each policy:			
(i)	Rate of return on total assets(in percentages): $[(6)/(3)] \times 100$	17.32	17.69	19.23
(ii)	Net working capital position :(in crores) [(1)-(4)]	5.508	3.978	(2 Marks) 0.663
(iii)	Current assets to fixed assets ratio: [(1) / (2)]	1.73	1.50	(2 Marks) 1.00 (1 Mark)

(iv) 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 thecase of conservative investment policy and maximum in the case of aggressive investmentpolicy. The firm can improve profitability by reducing investment in working capital.

(1

Mark)

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

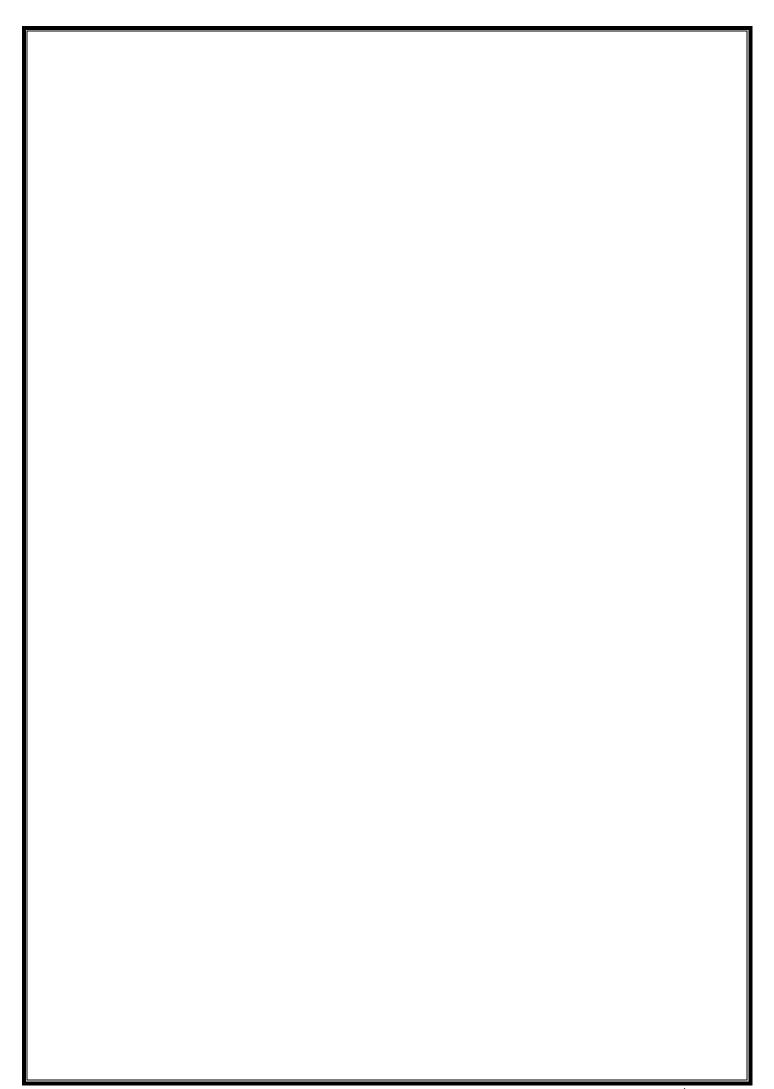
Particulars	June (Rs.)	July (Rs.)	August (Rs.)	September (Rs.)
Opening Balance	45,000	45,500	45,500	45,000
Receipts:				
Cash Sales	1,00,000	98,000	1,08,000	1,22,000
Collection from debtors	3,48,000	3,80,000	3,96,000	4,12,000
Dividends	25,000	-	-	
Total (A)	<u>5,18,000</u>	5,23,500	5,49,500	5,79,000
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	<u>-</u>	-	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	Cash	Credit	Co	llection from	Debtors	
	Sales (Rs.)	Sales (Rs.)	Sales (Rs.)	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		PresentPolicy	Proposed Policy	
—— А.	Expe	cted 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	3,84,731	5,64,273
	(d)	Profit before tax [(a)-(b)-(c)]	67,96,919	73,35,542
	(e)	Less: Tax @ 35%	23,78,922	25,67,440
	(f)	Profit after tax [(d)-(e)]	44,17,997	47,68,102
B.	Oppo	ortunity Cost of investment in Receivables	3,46,258	5,07,845
C.	Net B	Benefits [A-B]	40,71,739	42,60,257

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

(4 Marks)

Working Note: Opportunity Costs of Average Investments

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

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

Proposed Policy = Rs.2,03,13,810 x
$$\frac{60}{360}$$
 x 15% = 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

Future Value =
$$P(1+i)^n$$

= Rs. 10,000 $(1 + 0.12)^{3\times 1}$
= Rs. 10,000 × 1.404928
= Rs. 14,049.28

(2 Marks)

(ii) Semi Annually

Future Value = Rs.10,000
$$\left(1 + \frac{12}{100x2}\right)^{3x2}$$

= Rs.10,000 $(1 + 0.06)^6$
= Rs.10,000 $(1 + 0.06)^6$
= Rs.10,000 × 1.418519

	Rs. 14,185.19		(2 Ma
(iii) Quarterly			,
Fritzing Value - F	$\frac{12}{3x^4}$		
Future Value = F	Rs.10,000 $\left(1 + \frac{12}{100x4}\right)^{3x4}$		
= F	Rs.10,000 (1 + 0.03) ¹²		
= F	Rs.10,000 × 1.425761		
= F	Rs. 14,257.61		(2 Marks
Answer–6:			
Fund from Operation			(p.)
Particulars			(Rs.)
Closing value of reserves &	ι surplus		6,15,000
Less: Opening value of rese	erves & surplus		(3,57,000)
Profit after depreciation			2,58,000
Add: Depreciation (refer th	ne working note)		37,000
Profit before depreciation			2,95,000
Less: Profit on sale of plant	t		(20,000)
·			2,75,000
Add: Interim dividend			<u>54,000</u>
Fund from Operation			3,29,000
5d fl	be a second and 24 at 14 and	h 2046	(3 Ma
Fund flow statement for th	——————————————————————————————————————	——————————————————————————————————————	
Particulars			(Rs.)
Sources of Fund			
Fund from Operation			3,29,000
Decrease in working capita	al (Balancing Figure)		3,67,000
Sale of plant			<u>48,500</u>
			<u>7,44,500</u>
Application of Fund			
	4,35,000 - Rs.1,98,000)		2,37,000
Long-term Investment (Rs.			
Long-term Investment (Rs. Purchase of Plant (refer the	e working note)	00)	1,83,500
Long-term Investment (Rs. Purchase of Plant (refer the Repayment of Debentures	e working note) (Rs.3,75,000 – Rs.1,05,00	00)	1,83,500 2,70,000
Long-term Investment (Rs. Purchase of Plant (refer the Repayment of Debentures	e working note) (Rs.3,75,000 – Rs.1,05,00	00)	1,83,500
Long-term Investment (Rs. Purchase of Plant (refer the Repayment of Debentures Payment of interim divider	e working note) (Rs.3,75,000 – Rs.1,05,00	00)	1,83,500 2,70,000 <u>54,000</u>
Long-term Investment (Rs. Purchase of Plant (refer the Repayment of Debentures Payment of interim divider	e working note) (Rs.3,75,000 – Rs.1,05,00 nd	ant A/c	1,83,500 2,70,000 <u>54,000</u> 7,44,500
Long-term Investment (Rs. Purchase of Plant (refer the Repayment of Debentures Payment of interim divider Working Note:	e working note) (Rs.3,75,000 – Rs.1,05,00 nd	ant A/c	1,83,500 2,70,000 <u>54,000</u> 7,44,500
Long-term Investment (Rs. Purchase of Plant (refer the Repayment of Debentures Payment of interim divider Working Note: Particulars To Balance b/d	e working note) (Rs.3,75,000 – Rs.1,05,00) nd PI (Rs.)	ant A/c Particulars By Bank A/c (Sale)	1,83,500 2,70,000 <u>54,000</u> 7,44,500
Long-term Investment (Rs. Purchase of Plant (refer the Repayment of Debentures Payment of interim divider Working Note: Particulars To Balance b/d	e working note) (Rs.3,75,000 – Rs.1,05,00) nd PI (Rs.)	ant A/c Particulars By Bank A/c (Sale)	1,83,500 2,70,000 <u>54,000</u> 7,44,500 (3 Ma
Long-term Investment (Rs Purchase of Plant (refer the Repayment of Debentures Payment of interim divider Working Note: Particulars To Balance b/d	e working note) (Rs.3,75,000 – Rs.1,05,00) nd PI (Rs.)	ant A/c Particulars By Bank A/c (Sale)	1,83,500 2,70,000 <u>54,000</u> 7,44,500 (3 Ma
Application of Fund Long-term Investment (Rs Purchase of Plant (refer the Repayment of Debentures Payment of interim divider Working Note: Particulars To Balance b/d To P&L A/c (Profit on sale) To Bank A/c (new purchase (Rs.1,40,000 + Rs.43,500)	e working note) (Rs.3,75,000 – Rs.1,05,00) nd PI: (Rs.) 95,000 20,000	Particulars By Bank A/c (Sale) By Prov. for Depreciation (Balancing figure)	1,83,500 2,70,000 <u>54,000</u> 7,44,500 (3 Ma (Rs.)
Long-term Investment (RsPurchase of Plant (refer the Repayment of Debentures Payment of interim divider Working Note: Particulars To Balance b/d To P&L A/c (Profit on sale) To Bank A/c (new purchase	e working note) (Rs.3,75,000 – Rs.1,05,00) nd PI: (Rs.) 95,000 20,000	Particulars By Bank A/c (Sale) By Prov. for Depreciation (Balancing figure) By Balance c/d	1,83,500 2,70,000 54,000 7,44,500 (3 Ma (Rs.) 48,500 37,000

Answer-7:

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

(2 Marks)

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

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

(2 Marks)