CHAPTER 3

Solutions to the alternate questions have been provided. You are required to work on the unsolved problems. This exercise will help you to gain holistic understanding of the concepts discussed in this chapter

Exercise

1) Fill in the Blanks
   - 1.1 Revenues, Expense
   - 1.2 …………..
   - 1.3 Expenses, Realized Revenues of the Period
   - 1.4 …………..
   - 1.5 Increases
   - 1.6 ………….
   - 1.7 Revenues, Cost Expiration
   - 1.8 ………….
   - 1.9 Cost of Goods Sold
   - 1.10 ………….

2) Match the Following (we pick the best fit)

Column A ➔ Column B

1 ➔ …..
2 ➔ E
3 ➔ …..
4 ➔ B
5 ➔ …..
6 ➔ F
7 ➔ …..

3) Classifying the Items

Column A	Column B
Raw material consumed	…..
Interest received	B
Dividends received	…..
Wages paid to manufacturing workers	C
Carriage on goods sold	…..
Carriage on goods purchased	B
Salary of clerical staff	…..
Rent for office	E
Power and fuel	…..
Selling agents commission	D
Advertising	…..
Auditors fees	E
Sales tax	…..
Municipal rates on office premises	E

Column A	Column B
Profit on sale of fixed assets	…..
Power used in administrative office	E
Sales discount	…..
Purchase returns and allowances	C
Dividends paid	…..
Interest expense on loans	Financial Expense

4) **Shyam's Enterprise** : A part of the problem has been solved for you

Year →	1	2	3	4	5
Sales		1500		?	
Cost of goods sold			2000		
Gross Profit	500				2000
Administrative expenses		400			400
Selling and distribution			?		
Operating Profit	?			600	
Other Income		100		?	
Net Profit before tax	400		?		?
Provision for Corporate tax		?		500	
Profit after tax	200		300		?
Retained earnings	200	?	700	?	1950

5) <u>Shantanu Real Estate Brokers</u>

Possible transactions:

i. Shantanu contributed Rs 100000 as capital to his business. So, the cash position has increased
ii. …………………………………
iii. Office furniture worth Rs 250000 has been purchased, but only Rs 50000 has been paid through cash. Rest Rs 200000 is on credit
iv. …………………………………...
v. Rs 100000 have been paid to the creditors. So, the cash position has decreased
vi. ……………………………………
vii. The firm purchased something worth Rs 200000 on credit
viii. ……………………………………
ix. Rs 150000 of accounts receivables have been realized. So, the cash position has increased
x. ……………………………………
xi. Rs 100000 worth account payable have been settled, so equivalent cash balance has reduced

CHAPTER 3
Review Questions

1. **Ani Initiatives**

This problem is simple. You have worked on the same problem for balance sheet purpose in chapter-2. Prepare the P&L a/c after each month. Allocate the depreciation properly. You can also prepare a comprehensive P&L a/c to appreciate the difference.

(a) The final solution of Ani Initiatives is put in the next page.

It has to be noted that depreciation expenses have been taken for 3 months, though registered transactions’ are for slightly more than 3 months. Internet installation charges have been considered as expenditure. But as this expenditure is going to provide benefit over longer period of time, it can also be considered as deferred expenditure. No interest charges have been considered as that was the agreement.

(b) Realization principle has been applied where Ani initiatives “accepts business from Avinash, takes an advance of Rs 9000 for research data tabulation”. This amount has not been considered as revenue as it will come as unearned revenue in the balance sheet.

We used matching principle in depreciation calculation. Here only the expired amount for the relevant time period has been considered.

(c) Apparently the health of the business looks poor as during the first two months it is showing negative net profit. But here the reality creeps in. We need to understand that it takes time for any business to gain momentum. During initial phases of any business, investments look higher, but it always pays rewards with due course of time. Moreover the training expenses for Bhola (Rs 15500) have eaten away most of the profit (see the February month transactions).

Income Statement for the month January

Items	Amount (in Rs)
Revenues	**0**
Expenditure	
Travelling Exp.	1000
Salary Exp.	5500
Internet Expenses	1700
Internet Installation exp.	1000
Depreciation Exp.	3332
	12532
Operating Profit	**-12532**
Interest	0
Profit Before Tax	**-12532**
Tax	0
Profit After Tax (PAT)	**-12532**

Income Statement for the month February	
Items	Amount (in Rs)
Revenues	**9500**
Expenditure	
Travelling Exp.	1500
Salary Exp.	3000
Internet Expenses	2550
Training Expenses	15500
Depreciation Exp.	3332
	25882
Operating Profit	**-16382**
Interest	0
Profit Before Tax	**-16382**
Tax	0
Profit After Tax (PAT)	**-16382**

Income Statement for the month March	
Items	Amount (in Rs)
Revenues	**26000**
Expenditure	
Salary Exp.	2000
Incentives	7700
Internet Expenses	850
Depreciation Exp.	3332
	13882
Operating Profit	**12118**
Interest	0
Profit Before Tax	**12118**
Tax Provision	3636
Profit After Tax (PAT)	**8483**

3. S Paul:

S Paul

Balance Sheet As at 31st March 20X7

	Amount		Amount
Assets		*Liabilities and Owners Equity*	
Cash	32400	Accounts Payable	4680
Accounts Receivable	15300	Notes Payable	600
Inventory	6560	Accrued Interest	440
		Operating Expenses Payable	2480
		S. Paul, Capital	46060
Total Assets	**54260**	**Total Liabilities & Owners Equity**	**54260**

We Know:	
Begin Inventory + Purchases = Ending Inventory + Cost of Goods Sold	
Begin Payables + Purchases on Credit = Ending Payables + Cash Paid	
Balances on June 30 can then be computed	
Ending Inventory	**3960**
Accounts Payable	**5880**
Similarly	
Operating Expenses Payable	**2120**
Interest Accrued (assumed for showroom credit)	**200**

Cash Transactions	
Previous Balance	32400
Add	
Cash Sales	48600
Cash on Accounts Receivable	28500
Subract	
Supplier Payments	61400
Withdrawal	5000
Down Payment Showroom	12000
Down Payment Cash Register	2000
Repayment of Note	600
Interest Paid	440
Payament for Wages/Operatng	16360
Cash Balance	**11700**

The given information makes us believe that a zero accounts receivable balance is there on June 30

S Paul
Income Statement for the June Quarter, 20X7

Sales	**61800**	cash sales 48600 + credit sales (28500 - 15300)
Less: Cost of Goods Sold	65200	Information Provided
Gross Profit	-3400	
Less: Operating Expenses	16000	Information Provided
Operating Profit	-19400	
Less: Interest Expense	200	Information Provided
Profit	-19600	
Less Withdrawal	5000	Information Provided
Balance carried to Balance Sheet	-24600	
New Owners Equity Balance	21460	Computed

S Paul
Balance Sheet as at June 30, 20X7

	Amount		Amount
Assets		***Liabilities and Owners Equity***	
Cash	11700	Accounts Payable	5880
Accounts Receivable	0	Register & Showroom Credit	730000
Inventory	3960	Accrued Interest	200
Cash Register	24000	Operating Expenses Payable	2120
Showroom	720000	S. Paul, Capital	21460
Total Assets	**759660**	**Total Liabilities & Owners Equity**	**759660**

5. Prime Rubber Industries:

Unfortunately this problem has a few errors; we restate the same here and then go about solving the problem:

Error in chapter 3, problem 5, page 148, point (e): Please read it as below:
(e) Accounts receivable are to be maintained at the level of one month's sales. Inventory stock was expected to be Rs 5,000,000 of which 60% will be raw material. Average credit available will be about 30 days purchases.

Error in chapter 3, problem 5, page 148, point (h): Please read it as below:
(h) Administrative expenses are projected to be Rs 2,500,000. Selling and distribution expenses are projected to Rs 1,800,000.

Error in chapter 3, problem 5, page 148, Balance Sheet as on 31 December 2006: Please read it as below:

Prime Rubber Industries
Balance Sheet as at December 31, 20X6 (all figures in 000's)

		Amount		Amount
Assets			*Liabilities and Owners Equity*	
Cash		500	Accounts Payable	1500
Accounts Receivable		3000	Bank Overdraft	3500
RM Inventory		3880	**Current Liabilities**	**5000**
FG Inventory		1000		
Prepaid rent and insurance		120		
Current Assets		**8500**		
Land		300	**Owner(s) Equity**	
Plant and Equipment	1400		Share Capital	1000
Less: Accumulated Depreciation	700	700	Share Premium	1000
Goodwill		1000	Retained Earnings	3500
Total Assets		**10500**	**Total Liabilities & Owners Equity**	**10500**

We now provide the solution to the Prime Rubber Industries problem (after dong the above three corrections).

Prime Rubber Industries
Projected Income Statement for the period ending December 31, 20X7 (all figures in 000's)

Income Statement for the first quarter		Remarks
Sales	**21215**	Estimated from Gross Profit (backwards)
Less: RM Consumed	6364.5	Given as 30% of Sales
Less: Wage Expenses	2121.5	Given as 10% of Sales
Less: Other Direct Mfrg Exp	2121.5	Given as 10% of Sales
Gross Profit	**10607.5**	Estimated from PBT (backwards)
Less: Selling, Administration Expenses	4300	Provided in the problem
Less: Depreciatioin Expense	457.5	Details Provided
Operating Profit	5850	
Less: Interest Expense	350	On Mortgage Loan
Profit Before Tax	5500	Estmated from PAT
Less: Tax	1650	Given as 30% of PBT
Profit After Tax	**3850**	Given in the problem
Less: Withdrawal	0	Assumed
Retained Earnings Addition	3850	

Purchases, wages, other expenses are based on sales. In order to arrive at the sales figure we need to make the backward collection from the projected net profit to calculate the Gross Profit first (and then the sales) in the following way:

Net Profit + Tax Expense = Profit Before Tax (PBT)
Net Profit Projected is given as 3850 and Tax Rate is 30%. So, PBT = 5500

PBT + Interest Exp. + Depreciation Exp. + Admin. Exp. + Sales & Distribution Exp. = Gross Profit
PBT = 5500, Interest Exp. = 350, Dep. = 457.5, Admin Exp = 2500, Sales & Distribution Exp. = 1800

So, Gross Profit = 10607.5
But, Gross Profit + Cost of Goods Sold = Sales, OR
As Gross Margns are given as 50% (in the case) ➔ Sales = 21215

Cost of Goods Sold (10607.5) = Goods Available for Sale – Finished Goods Inventory (2000)
➔ Goods Available for Sale = 12607.5

Goods Available for Sale (12607.5) = Total Goods Available – Raw Material Inventory (3000)
➔ Total Goods Available = 15607.5

Total Goods Available (15607.5) = Beginning Inventory (4880) + Raw Material Purchases + Wage Expenses (2121.5) + Other Direct Mfg. Costs (2121.5)
➔ Raw Material Purchases (during the period) = 6484.5

It is given that Closing Accounts Payable is 10% of the above
➔ Accounts Payable = 648.5

Cash Transactions			
Previous Balance	500	Subtract	
Add		Equipment installment	460
Owners Equty	5600	Selling & Administration Expense	4300
Cash Sales	22447	Suppliers Payments	7336
		Wage Exp	2121.5
		Other Direct Exp	2121.5
		Tax Exp	1650
		Bank Overdraft	3500
Cash Balance	**7058**		

Prime Rubber Industries
Projected Balance Sheet as at December 31, 20X7 (all figures in 000's)

		Amount		Amount
Assets			*Liabilities and Owners Equity*	
Cash & Bank Balance		7058	Accounts Payable	648.5
Accounts Receivable		1768		
RM Inventory		3000	**Current Liabilities**	**648.5**
FG Inventory		2000		
Prepaid rent and insurance		120	Mortgage Loan (+ Accrued Interest)	3850
Current Assets		**13946**	Equipment Credit	1840
Land		300		
Building	3500		**Owner(s) Equity**	
Less: Accumulated Depreciation	87.5	3412.5	Share Capital	3800
Plant and Equipment	3700		Share Premium	3800
Less: Accumulated Depreciation	1070	2630	Retained Earnings	7350
Goodwill		1000		
Total Assets		**21288.5**	**Total Liabilities & Owners Equity**	**21288.5**

7. Malabar Constructions:

We start by assuming that Malabar Constructions started and completed only one project during the quarter i.e., the building worth Rs 2,48,56,000. The company was not handling any other projects during the quarter.

We can prepare the income generated by the Malabar Constructions for the quarter ending 30th June 2000 by matching all the revenues and closing stock with the expenses and opening stock for the period in the following way:

Beginning Inventory + Purchases during the period =
Closing Inventory + Consumption during the period

One type of presenting the solution:

Malabar Constructions
Profit & Loss Account for June Quarter, 2006

PARTICULARS		AMOUNT	PARTICULARS		AMOUNT
Opening Stock			**Sales (Completed building)**		**2,48,56,000**
Cement	1,86,000		Closing value of Inventory		
Steel	1,59,600		Cement	1,05,000	
Supplies	1,68,900	5,14,500	Steel	1,65,850	
Purchases for the Quarter			Supplies	86,400	3,57,250
Cement	11,28,000				
Steel	10,85,000				
Supplies	2,58,000	24,71,000			
Labour Expenses		18,25,000			
Insurance Expenses (*)		12,000			
Rent (*)(*)		6,000			
Other Expenses		56,00,000			
Profit for the period		**1,47,84,750**			
		2,52,13,250			2,52,13,250

(*) Prepared insurance for the year ending 31st March 2000 was considered as the expense since it was pertaining to the Quarter ending 30th June 2000.
(*)(*) Advance rent paid on 30th June 2000 of Rs 12,000 is not included in the expenses relating to the Quarter.

Another way of presenting the solution:

Malabar Constructions Income Statement for the June Quarter, 2006		
	All figures in Rs 000s	
Sales		**24856000**
Less: Expenses		
Steel consumed	*1209000*	
Cement consumed	*1078750*	
Supplies consumed	*340500*	
Raw Material Consumed		2628250
Labour Charges		1825000
Sub-contract payments & related expenses		5600000
Rent Expenses		6000
Insurance Expenses		12000
Profit for the Period		**14784750**