

# Cash budgets for service organisations

## Objectives

By the end of this chapter you will be able to:

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1 Compile cash receipts budgets for merchandising and other service organisations	59
2 Compile cash payments budgets for merchandising and other service organisations	60
3 Calculate collections from accounts receivable	64
4 Compute payments to accounts payable and for expenses	74
5 Prepare cash budgets for merchandising and other service organisations	?
6 Prepare cash budgets, for merchandising and other service organisations, incorporating financing requirements	?

## Introduction

*In Chapter 1 the distinction was made between cash budgets and budgeted statements of cash flows. Recall that a budgeted statement of cash flows is the estimated cash flows for a future period presented in the specific format required by accounting standards AAS 28 and AASB 1026, both entitled, Statement of Cash Flows. A cash budget shows the predicted cash receipts and payments, and cash balance or balances, for a given period or periods.*

*This chapter deals only with cash budgets. Initially businesses operating on a purely cash basis are considered. Later businesses that receive and grant credit are explored.*

*Budgeted statements of cash flows are introduced in Chapter 5.*

*As cash budgets deal with predicted cash receipts and payments they will affect the collection and payment of Goods and Services Tax (GST).*

*Most businesses must be registered for GST, so this book deals with businesses that are registered. The way GST works is simple in theory: businesses charge tax on their outputs but receive credits for tax paid on their inputs. The net tax paid by the business is therefore only on the value it has added: sales value less cost.*

*When a business makes a taxable supply (a sale of goods or services) it charges its customer a 10% GST. When the same business receives a taxable supply (a purchase of goods or services) it is charged a 10% GST. The tax on outputs is called GST payable. The tax on inputs is called a GST input tax credit. If the GST amounts payable are greater than the GST input tax credits then the difference must be remitted to the Australian Taxation Office (ATO). If the GST input tax credits are greater than the GST amounts payable then the ATO will refund the difference to the business.*

*These amounts are remitted to or refunded by the ATO either monthly or quarterly depending on turnover, or the business can elect to pay monthly. In this book it will be assumed that GST is accounted for monthly.*

*The implementation of GST legislation has been difficult because not all supplies are subject to the 10% GST: some are GST-free supplies and some are input taxed supplies.*

### **GST-free supplies**

These supplies do not have GST added, for example fresh food items.

### **Input taxed supplies**

These supplies have no GST added to the price of a supply by the seller. The customer receiving such a supply does not pay GST and therefore has no input tax credit. The supplier may pay GST on its acquisitions but cannot claim an input tax credit for any GST paid, for example financial services and residential rents.

## Cash receipts budget

Carol Dewar, naturopath, has prepared the following revenue budget for the quarter ending 30 September. All the receipts of Carol Dewar would be either GST-free supplies or input tax supplies: she trades in the medical field, investment interest is input taxed and it is assumed that rental income is from residential rents.

### Carol Dewar Revenue budget for the quarter ending 30 September

	July \$	August \$	September \$	Total for the quarter \$
<b>Consultation fees</b>				
Normal	10 290	9 870	8 960	29 120
Home visits	2 220	2 100	1 920	6 240
<i>Fees income</i>	12 510	11 970	10 880	35 360
<b>Sales</b>				
Vitamins and minerals	1 750	1 430	1 310	4 490
Herbal remedies	1 450	1 550	1 430	4 430
<i>Sales income</i>	3 200	2 980	2 740	8 920
<b>Other income</b>				
Rental income	500	500	500	1 500
Investment interest			150	150
<i>Total other income</i>	500	500	650	1 650
<b>Total revenue</b>	16 210	15 450	14 270	45 930

Carol's cash receipts budget appears below. Remember, Carol operates on a strictly cash basis.

### Carol Dewar Cash receipts budget for the quarter ending 30 September

	July \$	August \$	September \$	Total for the quarter \$
Consultation fees received	12 510	11 970	10 880	35 360
Cash sales	3 200	2 980	2 740	8 920
Rental income	500	500	500	1 500
Investment interest			150	150
<b>Total cash receipts</b>	16 210	15 450	14 270	45 930

### Self-test problem 4.1

St Jude's Musical Academy has the following revenue budget for the quarter ending 31 March. Assuming that St Jude's Musical Academy is a registered educational institution, its supplies would be GST-free.



**St Jude's Musical Academy**  
**Revenue budget for the quarter ending 31 March**

	January \$	February \$	March \$	Total \$
<b>Fees income</b>				
Guitar lessons	5 800	5 400	6 200	17 400
Piano lessons	6 600	5 900	5 900	18 400
Woodwind and brass lessons	2 400	2 000	2 600	7 000
<i>Total fees income</i>	<u>14 800</u>	<u>13 300</u>	<u>14 700</u>	<u>42 800</u>
<b>Sales of instruments</b>				
Guitars	1 000	800	1 200	3 000
Woodwind and brass	600	800	900	2 300
<i>Total sales</i>	<u>1 600</u>	<u>1 600</u>	<u>2 100</u>	<u>5 300</u>
<b>Total revenue</b>	<u><u>16 400</u></u>	<u><u>14 900</u></u>	<u><u>16 800</u></u>	<u><u>48 100</u></u>

St Jude's operates on a strictly cash basis.

*Required*

Prepare a cash receipts budget for the quarter ending 31 March.



**You should now be able to do Question 4.1**

## Cash payments budget

Estimating cash payments requires the entity to convert its budgeted purchases and other budgeted expenses into monthly cash payments. This process is much easier than estimating cash receipts because certain expenses occur at regular intervals throughout the year—for example electricity, rates, insurance etc—so the month of payment is known in advance. Also, some entities are able to arrange suitable payment schedules with creditors.

Three steps are involved in estimating cash payments on a month by month basis:

- 1 Ascertain the expense that will actually be paid in that month.
- 2 Convert the expenses to cash by eliminating any end of period adjustments.
- 3 Ensure any non-cash expenses are excluded from the payment schedule, for example depreciation, discount allowed, bad debts written off.

### GST on payments

If the entity is operating on a strictly cash basis then the input tax credits will be recorded separately when the payments are made, as this is the amount that the entity is entitled to claim back from the ATO.

When preparing payment schedules for entities that are registered for GST it is important not to assume that GST is part of every payment. This is because some pay-

ments do not have GST included, for example interest and wages. For entities not registered for GST, the GST component on any tax invoice will be treated as part of that expense.

While preparing her budgets, Carol Dewar estimated expense details as follows. Note that figures given are GST-inclusive where appropriate.

Purchases of oils, minerals, vitamins and herbs (GST-free)	\$24 000 incurred evenly throughout the year
Rent (10% GST)	\$1500 per month
Laundry (10% GST)	\$1800 incurred evenly throughout the year
Telephone (10% GST)	\$200 per quarter payable in March, June, September and December
Insurances (10% GST)	\$1200 payable in August
Stationery (10% GST)	January—\$150 July—\$200
Motor vehicle running costs (10% GST)	\$0.70 per km  Estimated for the coming quarter July—230 km August—210 km September—190 km
Depreciation (no GST)	\$2400 pa

Carol intends to purchase a new massage table in July at a cost of \$300 (including 10% GST). Carol's cash payments budget for the quarter ending September is shown below. Remember, Carol is operating on a strictly cash basis.

**Carol Dewar**  
**Cash payments budget for the quarter ending 30 September**

	July \$	August \$	September \$	Total for the quarter \$
Purchases	2 000	2 000	2 000	6 000
Rent	1 500	1 500	1 500	4 500
Laundry	150	150	150	450
Telephone			200	200
Insurances		1 200		1 200
Stationery	200			200
Motor vehicle running cost	161	147	133	441
Massage table	300			300
<b>Cash payments including GST</b>	<u>4 311</u>	<u>4 997</u>	<u>3 983</u>	<u>13 291</u>

\* GST input tax credit included in above figures

	210	272	180	662
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\* For reporting purposes, cents are ignored when calculating GST. July's GST is calculated as follows:  $(4311 - 2000)/11 = 210$ .

Note that depreciation has been excluded as it is simply a book entry and does not involve the payment of cash. Also observe that items are included in the month that the payment is expected to take place.



### Self-test problem 4.2

Melanie Street operates a hairdressing salon. She has asked you to prepare a cash payments budget for the quarter ending 30 June. You are provided with the following information.

Advertising (GST-inclusive)	April—\$170 May—\$160 June—\$200
Bank charges (input taxed)	\$300 incurred evenly throughout the year
Cleaning (GST-inclusive)	April—\$190 May—\$200 June—\$190
Depreciation (GST-free)	Office equipment—\$1200 pa Salon equipment—\$2400 pa
Hairdressers' wages (GST-free)	April—\$5200 May—\$5250 June—\$5300
Replacement of hairdressing implements (GST-inclusive)	May—\$180
Office staff wages (GST-free)	\$1750 per month
Purchase of hairdressing materials (GST-inclusive)	April—\$800 May—\$850 June—\$820
Interest on loan (input taxed)	April—\$510 May—\$440 June—\$360
Light and power (GST-inclusive)	\$780 payable in April
Rent (commercial)	April—\$2160 May—\$2160 June—\$2400
Stationery and postage (GST-inclusive)	\$120 paid in June
Insurances (GST-inclusive)	\$1500 paid in May

- Melanie intends purchasing new salon equipment in April at a cost of \$1500 including GST.
- Melanie's business operates on a strictly cash basis.

*Required*

Prepare the cash payments budget for the quarter ending 30 June. Show the GST separately.

**You should now be able to do Question 4.2**



## Format for the cash budget

The basic format for a cash budget is:

- opening balance
- *add* receipts
- *add* GST refund
- total cash available for needs
- *less* payments
- *add* GST payable
- total payments
- closing balance.

When calculating receipts and payments that involve GST, care must be taken to offset GST payable against GST input tax credits. If GST payable is greater than the GST input tax credits amount then the difference must be shown as a payment to the ATO. If, on the other hand, the GST input tax credit amount is greater than the GST payable, the difference must be shown as a receipt in the cash budget. (This is a refund from the ATO.)

In our example for Carol Dewar there is no GST payable but there are amounts for GST credit. In this case the difference is shown as a receipt.

Using Carol Dewar's cash receipts and cash payments budgets illustrated earlier, it is now possible to prepare a cash budget. The opening balance on 1 July is expected to be \$2390 cash at bank.

### **Carol Dewar** **Cash budget for the quarter ending 30 September**

	July \$	August \$	September \$
Opening balance	2 390	14 499	28 224
<i>add</i> Receipts	16 210	15 450	14 270
<i>add</i> GST refund	210	272	180
<i>Total cash available for needs</i>	<u>18 810</u>	<u>30 221</u>	<u>39 674</u>
<i>less</i> Payments	4 311	4 997	3 983
<i>add</i> GST payable	—	—	—
<i>Total payments</i>	<u>4 311</u>	<u>4 997</u>	<u>3 983</u>
<b>Closing balance</b>	<u><u>14 499</u></u>	<u><u>25 224</u></u>	<u><u>36 691</u></u>

If the closing balance reveals a deficiency, this indicates that an overdraft or other finance will have to be arranged. Alternatively, cash payments could be deferred until funds are available.

Note that the closing balance for July becomes the opening balance for August, and so on.

The cash budget presented here was in summary format. If a detailed cash budget is prepared individual cash receipts and payments budgets are not necessary as the detail is included in the cash budget. Detailed cash budgets will be illustrated later in the chapter.

### Treatment of bad debts

When a business operates strictly on a cash basis bad debts are not shown in the cash budget because the cash received is already reduced by the amount of bad debts.

### Treatment of discount received and allowed

On a strictly cash basis neither discount is shown in a cash budget because they would be taken into account in estimating the actual cash receivable and payable.

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### Self-test problem 4.3



Refer to Self-test problem 4.2.

- Estimated opening balance at 1 April is \$1210.
- Estimated cash receipts budget for the quarter ending 30 June showed total receipts as: April \$9840 (\$8946 + GST \$894); May \$13 260 (\$12 055 + GST \$1205); June \$14 780 (\$13 437 + GST \$1343).

*Required*

Prepare, in summary form, the cash budget for the quarter ending June.



***You should now be able to do Question 4.3***

## Collections from accounts receivable

This section deals with GST reported on a cash basis.

Consider the case of Dermott Jewellers. The company is preparing its cash budget for the quarter ending 31 March.

Under current GST legislation registered entities must report their GST obligations either on an accrual basis or cash basis, depending on the size of their annual turnover. Assuming that Dermott Jewellers can report on a cash basis then, as stated earlier, GST is collected and remitted to the ATO in the month when the cash is received from accounts receivable.



- Forty per cent of Dermott's sales are for cash and the remainder are on credit.
- Records reveal that accounts receivable pay: 65% in the month following the sale; 30% in the second month after the sale; 5% in the third month after the sale.
- All sales and budgeted sales figures are GST-inclusive.

(Note: To ascertain the GST amount included in the sales figures we divide those figures by 11, then subtract this amount from the actual sales figures to get the net sales figures (exclusive of GST).)

<b>Sales</b>	<b>\$</b>
<b>Actual</b>	
October	56 000
November	64 000
December	70 000
<b>Budgeted</b>	
January	66 000
February	52 000
March	68 000

To establish the likely cash receipts from accounts receivable, Josh Brown, budget accountant, adopted the following procedure:

### *Step 1*

He calculated cash and credit sales.

	<b>October</b>	<b>November</b>	<b>December</b>	<b>January</b>	<b>February</b>	<b>March</b>
	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Cash sales	20 364	23 273	25 455	24 000	18 910	24 728
GST payable	<u>2 036</u>	<u>2 327</u>	<u>2 545</u>	<u>2 400</u>	<u>1 890</u>	<u>2 472</u>
Total cash sales (40%)	<u>22 400</u>	<u>25 600</u>	<u>28 000</u>	<u>26 400</u>	<u>20 800</u>	<u>27 200</u>
Credit sales (60%)	<u>33 600</u>	<u>38 400</u>	<u>42 000</u>	<u>39 600</u>	<u>31 200</u>	<u>40 800</u>
	<u><u>56 000</u></u>	<u><u>64 000</u></u>	<u><u>70 000</u></u>	<u><u>66 000</u></u>	<u><u>52 000</u></u>	<u><u>68 000</u></u>

Cash sales, and the GST payable applicable to those cash sales, will be received in the month that the sales were made.

Note that no GST payable has been calculated on the credit sales because, under a cash reporting basis for GST, this GST is collected when the money is received from accounts receivable and not in the month when the sales were made.

### *Step 2*

Josh prepared a 'collection from accounts receivable' schedule.

**Dermott Jewellers****Schedule of collections from accounts receivable for the quarter ending 31 March**

Month of sale	\$	Month received		
		January \$	February \$	March \$
October	33 600			
November	38 400			
December	42 000			
January	39 600			
February	31 200			
March	40 800			
<b>Total collections</b>				

Note that calculations are based on credit sales.

**Step 3**

Josh calculated the remaining collections from October sales: 65% of October sales should have been collected in November and 30% in December. This leaves 5%, which should be collected in January ( $5\% \times \$33\,600 = \$1\,680$ ).

**Dermott Jewellers****Schedule of collections from accounts receivable for the quarter ending 31 March**

Month of sale	\$	Month received		
		January \$	February \$	March \$
October	33 600	<b>1 680</b>	<b>(5%)</b>	
November	38 400			
December	42 000			
January	39 600			
February	31 200			
March	40 800			
<b>Total collections</b>				
GST payable included in above figures		152		

**Step 4**

Next, he calculated the remaining collections from November sales: 65% of November sales should have been collected in December. This means that 30% is estimated to be collected in January ( $30\% \times \$38\,400 = \$11\,520$ ) and 5% in February ( $5\% \times \$38\,400 = \$1\,920$ ).

**Dermott Jewellers****Schedule of collections from accounts receivable for the quarter ending 31 March**

Month of sale	\$	Month received		
		January \$	February \$	March \$
October	33 600	1 680	(5%)	
November	38 400	<b>11 520</b>	<b>(30%)</b>	<b>1 920</b> (5%)
December	42 000			
January	39 600			
February	31 200			
March	40 800			
<b>Total collections</b>				
GST payable included in above figures*		*1 199		174

\* Note that the GST payable increases every time money is collected that month, in this case \$152 + \$1047 = \$1199.

**Step 5**

He calculated collections from December sales:

- January 65% × \$42 000 = \$27 300
- February 30% × \$42 000 = \$12 600
- March 5% × \$42 000 = \$2100

**Dermott Jewellers****Schedule of collections from accounts receivable for the quarter ending 31 March**

Month of sale	\$	Month received		
		January \$	February \$	March \$
October	33 600	1 680	(5%)	
November	38 400	11 520	(30%)	1 920 (5%)
December	42 000	<b>27 300</b>	<b>(65%)</b>	<b>12 600</b> (30%) <b>2 100</b> (5%)
January	39 600			
February	31 200			
March	40 800			
<b>Total collections</b>				
GST payable included in above figures		3 680		1 319
				190

**Step 6**

Josh then calculated collections from January sales:

- February  $65\% \times \$39\,600 = \$25\,740$
- March  $30\% \times \$39\,600 = \$11\,880$

The uncollected amount at the end of the quarter ( $5\% \times \$39\,600 = \$1\,980$ ) would be part of the balance of accounts receivable account as at 31 March.

**Dermott Jewellers****Schedule of collections from accounts receivable for the quarter ending 31 March**

Month of sale	\$	Month received			
		January	February	March	
		\$	\$	\$	\$
October	33 600	1 680 (5%)			
November	38 400	11 520 (30%)	1 920 (5%)		
December	42 000	27 300 (65%)	12 600 (30%)	2 100 (5%)	
January	39 600		<b>25 740 (65%)</b>	<b>11 880 (30%)</b>	
February	31 200				
March	40 800				
<b>Total collections</b>					
GST payable included in above figures		3 680	3 659	1 270	

**Step 7**

He calculated collections from February sales:

- March  $65\% \times \$31\,200 = \$20\,280$

The uncollected amount at the end of the quarter ( $35\% \times \$31\,200 = \$10\,920$ ) would be part of accounts receivable as at 31 March.

**Dermott Jewellers****Schedule of collections from accounts receivable for the quarter ending 31 March**

Month of sale	\$	Month received			
		January	February	March	
		\$	\$	\$	\$
October	33 600	1 680 (5%)			
November	38 400	11 520 (30%)	1 920 (5%)		
December	42 000	27 300 (65%)	12 600 (30%)	2 100 (5%)	
January	39 600		25 740 (65%)	11 880 (30%)	
February	31 200			<b>20 280 (65%)</b>	
March	40 800				
<b>Total collections</b>					
GST payable included in above figures		3 680	3 659	3 113	

**Step 8**

Josh finalised the ‘schedule of collections from accounts receivable’.

As the first collections from March credit sales will not occur until April nothing is received from these sales in the quarter under review.

To find the amount of cash collected from accounts receivable for each month simply total each month’s column.

To find the amount of GST payable included in each month’s figures, simply add the GST calculated in previous steps. Remember to ignore cents in each step.

**Dermott Jewellers****Schedule of collections from accounts receivable for the quarter ending 31 March**

Month of sale	\$	Month received		
		January	February	March
	\$	\$	\$	\$
October	33 600	1 680 (5%)		
November	38 400	11 520 (30%)	1 920 (5%)	
December	42 000	27 300 (65%)	12 600 (30%)	2 100 (5%)
January	39 600		25 740 (65%)	11 880 (30%)
February	31 200			20 280 (65%)
March	40 800			
<b>Total collections</b>		<b><u>40 500</u></b>	<b><u>40 260</u></b>	<b><u>34 260</u></b>
GST payable included in above figures		3 680	3 659	3 113

**Step 9**

It is possible to establish the balance of the accounts receivable account by computing the amount still uncollected at the end of the quarter. Using the calculations made above, Josh estimated the balance at 31 March to be:

	\$
From January sales	1 980
From February sales	10 920
From March sales	40 800
Balance as at 31 March	<u>53 700</u>

**Step 10**

The cash sales and collections from accounts receivable can now be transferred to the cash receipts budget or the cash receipts section of the cash budget. Assuming no other receipts, the cash receipts budget for Dermott Jewellers would be:

**Dermott Jewellers**  
**Cash receipts budget for the quarter ending 31 March**

	January \$	February \$	March \$	Total \$
Cash sales (incl. GST)	26 400	20 800	27 200	74 400
Collections from accounts receivable (incl. GST)	<u>40 500</u>	<u>40 260</u>	<u>34 260</u>	<u>115 020</u>
<b>Total cash receipts</b>	<u><u>66 900</u></u>	<u><u>61 060</u></u>	<u><u>61 460</u></u>	<u><u>189 420</u></u>
GST payable included in total cash receipts*	6 080	5 549	5 585	17 214

\* The figures of GST payable in the above cash receipt budget are made up by adding the GST payable on cash sales and GST payable from the schedule of collections from accounts receivable.



**Self-test problem 4.4**

Fellini Fashions asks you to prepare its budgets for the quarter ending 30 September. They provide you with the following information:

Sales	\$
<b>Actual</b>	
April	52 000
May	78 000
June	84 500
<b>Estimated</b>	
July	65 000
August	84 500
September	91 000

- Seventy per cent of total sales are for cash, the remainder are on credit.
- The accounts receivable repayment pattern is: 50% in the month after sale; 40% in the second month after sale; 10% in the third month after sale.

Note: All dollar figures are GST exclusive, therefore 10% GST must be added to all sales figures. Fellini Fashions accounts for GST on a cash basis.

*Required*

- Prepare a cash receipts budget for the quarter ending 30 September.
- Compute the balance of the accounts receivable account as at 30 September.



**You should now be able to do Questions 4.4 to 4.6**

## Collections from accounts receivable with discount allowed and bad debts

This section deals with GST reported on an accrual basis.

Accounting for GST on an accrual basis means that GST is reported to the ATO in the month (if on a monthly basis of reporting) that the tax invoice is issued or received and not when the actual cash is received or paid. Accounting for GST on an accrual basis can cause a strain on cash flows because although the GST has to be remitted to the ATO in the month when the sale is made (when a tax invoice is issued) it is possible that some credit sales will not be collected until several months after the sale.

The estimation of collections from accounts receivable can be further complicated by firms offering discounts for prompt payment and the fact that some debtors do not pay at all.

A bad debt is a debt that is overdue and, for various reasons, is unlikely to be collected. For cash budgeting purposes bad debts will not be collected; therefore, they can be completely omitted from the cash budget. As GST is paid when the sale is made it is shown in the cash budget in the month the tax invoice is issued. The subsequent writing back of the debt as bad causes a GST adjustment in the month when the debt is actually written off as bad, which then reduces the amount owing to the ATO for that month.

Writing off debts as bad can be done progressively throughout the year or at balance date: it is a management decision.

### Discount allowed and bad debts

The estimation of collections from accounts receivable can be complicated by firms offering discounts for prompt payment and the fact that some debtors do not pay.

Suppose that Horus Hardware offers a discount to credit customers. Relevant details appear below. (All figures are GST-inclusive):

<b>Sales</b>	<b>\$</b>
<b>Actual</b>	
May	57 000
June	63 000
<b>Estimated</b>	
July	72 000
August	51 000
September	36 000

- Sales are 70% on credit and 30% for cash.
- Accounts receivable are expected to pay to the following pattern: 25% in the month of sale—prompt payment discount is 10%; 20% in the month after sale—prompt payment discount is 5%; 30% in the second month after sale—too late for discount; 20% in the third month after sale.
- Five per cent bad debts are estimated.

The approach to the preparation of the schedule of collections from accounts receivable is similar to that already shown, but discounts must be considered and bad debts omitted. If 5% discount is being offered, only 95% of the amount owed will be received if payment is made within the discount period.

Horus Hardware's schedule of collections from accounts receivable for the three months ending 30 September will now be prepared.

### Step 1

Calculate cash and credit sales and GST payable.

	May \$	June \$	July \$	August \$	September \$
Cash sales (net GST)	15 546	17 182	19 637	13 910	9 819
GST payable	<u>1 554</u>	<u>1 718</u>	<u>1 963</u>	<u>1 390</u>	<u>981</u>
<i>Total 30%</i>	<u>17 100</u>	<u>18 900</u>	<u>21 600</u>	<u>15 300</u>	<u>10 800</u>
Credit sales	36 273	40 091	45 819	32 455	22 910
GST payable	<u>3 627</u>	<u>4 009</u>	<u>4 581</u>	<u>3 245</u>	<u>2 290</u>
<i>Total 70%</i>	<u>39 900</u>	<u>44 100</u>	<u>50 400</u>	<u>35 700</u>	<u>25 200</u>
<b>Total sales</b>	<b><u>57 000</u></b>	<b><u>63 000</u></b>	<b><u>72 000</u></b>	<b><u>51 000</u></b>	<b><u>36 000</u></b>
GST included in total sales	5 181	5 727	6 544	4 635	3 271

### Step 2

Calculate collections from credit sales.

			Net sales		GST		\$
<b>May sales</b>							
Received in July	20% × \$39 900	=	7 255	+	725	=	7 980
<b>June sales</b>							
Received in July	20% × \$44 100 × 95%	=	7 618	+	761	=	8 379
	30% × \$44 100	=	12 028	+	1 202	=	13 230
			<u>19 646</u>	+	<u>1 963</u>	=	<u>21 609</u>
Received in August	20% × \$44 100	=	8 019	+	801	=	8 820
<b>July sales</b>							
Received in July	25% × \$50 400 × 90%	=	10 310	+	1 030	=	11 340
Received in August	20% × \$50 400 × 95%	=	8 706	+	870	=	9 576
	30% × \$50 400	=	13 746	+	1 374	=	15 120
			<u>22 452</u>	+	<u>2 244</u>	=	<u>24 696</u>
Received in Sept.	20% × \$50 400	=	9 164	+	916	=	10 080
<b>August sales</b>							
Received in August	25% × \$35 700 × 90%	=	7 303	+	730	=	8 033
Received in Sept.	20% × \$35 700 × 95%	=	6 167	+	616	=	6 783
	30% × \$35 700	=	9 737	+	973	=	10 710
			<u>15 904</u>	+	<u>1 589</u>	=	<u>17 493</u>

(continued)



**Sept. sales**

Received in Sept.  $25\% \times \$25\,200 \times 90\% = 5\,155 + 515 = 5\,670$

As bad debts will not be collected they have been completely omitted.

**Step 3**

Prepare schedule of collections from accounts receivable.

**Horus Hardware****Schedule of collections from accounts receivable for the quarter ending 30 September**

Month of sale	\$	Month received		
		July \$	August \$	September \$
May	39 900	7 980		
June	44 100	21 609	8 820	
July	50 400	11 340	24 696	10 080
August	35 700		8 033	17 493
September	25 200			5 670
<b>Total collections</b>		<b><u>40 929</u></b>	<b><u>41 549</u></b>	<b><u>33 243</u></b>
GST payable included in above figures*		2 297	3 775	3 020

\* Note that the GST collected for each month is not the same as GST payable each month under the accrual basis of reporting for GST.

Ten per cent of sales for each month—that is, July \$6544, August \$4635 and September \$3271 (see Step 1)—must be remitted to the ATO. The actual amounts collected for these same months are as follows: July \$4260; August \$5165; September \$4001. (These figures are made up from GST on cash sales and GST collected from debtors for that particular month.)

**Self-test problem 4.5**

Nuada Enterprises provides you with the following information. Please note that all figures are exclusive of GST, therefore 10% GST must be added. Also, note that Nuada accounts for GST on an accrual basis.



Sales	\$
<b>Actual</b>	
August	72 000
September	66 000
<b>Budget</b>	
October	90 000
November	108 000
December	96 000

- Sales are 45% cash and 55% credit.

- On average debtors pay to the following pattern: 40% in the month of sale—discount is 5%; 30% in the month following sale; 25% two months after sale.
- Five per cent is estimated as bad debt.

*Required*

Prepare a schedule of collections from debtors for the quarter ending 31 December. Show the amount of GST payable to the ATO for each month of the quarter ending on 31 December.



**You should now be able to do Questions 4.7 and 4.8**

## Accounts payable and expenses

Accounts payable and expenses may not necessarily be paid in the month they are incurred. If an entity reports its GST on an accrual basis then a procedure similar to that used for accounts receivable is adopted, that is the entity receives an input tax credit when the purchase tax invoice is received and not when the tax invoice is paid. Schedules for payments to creditors and for expenses, similar to the schedule for collections from accounts receivable, should be prepared. If GST is returned on a cash basis the GST input tax credit is shown and received in the month when the actual payment is made.

### Self-test problem 4.6

Potamid's Pool Playthings provides the following information. (Note that all figures provided are GST-inclusive):

	\$
Purchases for:	
January (actual)	47 500
February (actual)	50 500
Ending inventory as at 28 February	63 000
<b>Budgeted sales</b>	
March	77 500
April	68 700
May	81 200
June	75 000

- Cost of sales is 55% of sales. Management wants beginning inventory to represent 100% of the cost of sales for that month plus 20% of the cost of sales for the next month.
- Purchases are paid for as follows: 40% in the month of purchase with a 5% discount; 50% in the following month; 10% two months after purchase.

*Required*

Prepare a schedule of payments for purchases for March and April. Show GST input tax credit separately. *Hint:* You will need to prepare a purchases budget.

**You should now be able to do Questions 4.9 and 4.10**



## The cash budget

After preparing a sales budget, purchases budget, cost of goods sold budget, various expense budgets and schedules of collections from accounts receivable and payments to accounts payable, Apis Antiques prepared the following cash budget, ignoring GST, for the quarter ending 31 March.

### Apis Antiques

#### Cash budget for the 3 months ending 31 March

	January \$	February \$	March \$
<i>Beginning cash balance—surplus/(deficiency)</i>	(4 165)	14 994	(760)
<b>Receipts</b>			
Cash sales	37 240	23 422	28 567
Collections from accounts receivable	15 386	19 894	24 304
<i>Total receipts</i>	<u>52 626</u>	<u>43 316</u>	<u>52 871</u>
<i>Cash available for needs</i>	<u>48 461</u>	<u>58 310</u>	<u>52 111</u>
<b>Payments</b>			
Cash purchases	9 702	15 435	14 994
Accounts payable	12 495	25 015	10 657
Marketing expenses	5 600	5 600	5 600
Administration expenses	5 670	5 670	5 670
Equipment purchase		7 350	
<i>Total payments</i>	<u>33 467</u>	<u>59 070</u>	<u>36 921</u>
<b>Closing cash balance—surplus/(deficiency)</b>	<b><u>14 994</u></b>	<b><u>(7 60)</u></b>	<b><u>15 190</u></b>

It is acceptable for individual receipts and payments to be shown if management requires this level of detail.

### Self-test problem 4.7

The following information is provided by Parvati Products:

Cash at bank—30 September	\$2550
Accounts payable—30 September	\$7650
Actual credit sales	July—\$18 900 August—\$14 700 September—\$8100

(continued)



Estimated credit sales	October—\$13 200 November—\$15 300 December—\$11 400
Estimated cash sales	October—\$22 800 November—\$14 340 December—\$17 490
Estimated credit purchases	October—\$15 315 November—\$6525 December—\$12 855
Estimated cash purchases	October—\$5940 November—\$9450 December—\$9180

- Debtors normally pay 80% in the month after sale; 20% two months after sale.
- Goods purchased on credit are paid for in the following month.
- Wages of \$6900 are paid each month.
- Insurances of \$4500 are due in December.

Note that all figures given are GST-inclusive except for wages, which are GST-free. Parvati accounts for GST on a cash basis.

*Required*

Prepare a cash budget covering October, November and December.



**You should now be able to do Questions 4.11 to 4.15**

## Desired balance and financial requirements

It is not unknown for management to require that a minimum desired cash at bank balance be achieved. This may mean borrowing funds to ensure that the desired balance is attained.

Suppose that Apis Antiques now requires a minimum cash balance of \$10 000. Its cash budget would be restructured as follows. Note that GST has been ignored in this case to demonstrate how to achieve the desired balance.

### Apis Antiques Cash budget for the 3 months ending 31 March

	January \$	February \$	March \$
(a) <i>Beginning cash balance— surplus/(deficiency)</i>	<u>(4 165)</u>	<u>14 994</u>	<u>10 000</u>
<b>Receipts</b>			
Cash sales	37 240	23 422	28 567
Collections from accounts receivable	<u>15 386</u>	<u>19 894</u>	<u>24 304</u>

(continued)

(b) <i>Total receipts</i>	52 626	43 316	52 871
(c) <i>Cash available for needs (a + b)</i>	<u>48 461</u>	<u>58 310</u>	<u>62 871</u>
<b>Payments</b>			
Cash purchases	9 702	15 435	14 994
Accounts payable	12 495	25 015	10 657
Marketing expenses	5 600	5 600	5 600
Administration expenses	5 670	5 670	5 670
Equipment purchase	<u>          </u>	<u>7 350</u>	<u>          </u>
(d) <i>Total payments</i>	33 467	59 070	36 921
(e) <i>Minimum desired balance</i>	<u>10 000</u>	<u>10 000</u>	<u>10 000</u>
(f) <i>Total cash needed (d + e)</i>	<u>43 467</u>	<u>69 070</u>	<u>46 921</u>
<b>Cash surplus/(deficiency) (c – f)</b>	<u>4 994</u>	<u>10 760</u>	<u>15 950</u>
<b>Financing</b>			
Borrowings	—	10 760*	—
Repayments	—	—	(10 760)
Interest	<u>—</u>	<u>—</u>	<u>(90)†</u>
(g) <i>Total effects of financing</i>	<u>—</u>	<u>10 760</u>	<u>(10 850)</u>
<b>Closing cash balance— surplus/(deficiency) (c – d + g)</b>	<u><u>14 994</u></u>	<u><u>10 000</u></u>	<u><u>15 100</u></u>

\* Interest at 10% is payable only when repayments are made. The loan can be reduced by payments at any time, but must be repaid within six months.

†  $\$10\,760 \times 10\%/12 = \$90$

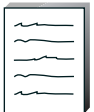
Borrowings are made in the month that a deficit is likely to occur.

In this instance it was possible to repay the borrowings in the following month. This will not always be the case. Also, there may be conditions attached regarding the denominations of amounts that can be borrowed or repaid, for example whole thousands of dollars. There may also be other stipulations regarding repayments and these must be taken into account when preparing the cash budget.

Excess funds may be invested, provided that the cash budget does not reveal that these funds will be required soon after the surplus occurs.

### Self-test problem 4.8

Severe illness has struck down the budget accountant of Mayhew and Associates, a large legal firm. The partially completed cash budget for January and February appears below.



#### Mayhew and Associates Cash budget for the 2 months ending 28 February

	January \$	February \$	
Beginning cash balance	32 500	(a)	
Collection of legal fees	162 500	187 000	
Proceeds from sale of assets	<u>(b)</u>	<u>2 250</u>	
<i>Cash available for needs</i>	<u>230 750</u>	<u>(c)</u>	(continued)

	January \$	February \$
<b>Cash payments</b>		
Salaries and wages	100 000	97 750
Other expenses	84 750	<b>(d)</b>
Purchases of assets	<b>(e)</b>	—
<i>Total payments</i>	210 750	179 000
Minimum desired balance	25 000	<b>(f)</b>
<i>Total cash needed</i>	<b>(g)</b>	204 000
<b>Cash surplus/(deficiency)</b>	<b>(5 000)</b>	<b>(h)</b>
<b>Financing</b>		
Borrowings	<b>(i)</b>	—
Repayment	—	<b>(j)</b>
Interest	—	<b>(k)</b>
<i>Total effects of financing</i>	<b>(l)</b>	(5 050)
<b>Closing cash balance</b>	<b>(m)</b>	30 200

To eliminate any cash deficiency Mayhew and Associates plans to borrow the exact amount required. The current interest rate is 12% per annum. Borrowings are repaid as soon as possible.

*Required*

Complete the cash budget by finding the missing figures identified by the letters **(a)** to **(m)** inclusive.



**You should now be able to do Questions 4.16 to 4.19**

### Checklist

Before progressing to the next chapter, complete the checklist below. This will identify whether you have an understanding of the important parts of the chapter.

Can you do the following?

- Prepare cash receipts budgets for merchandising and other service organisations
- Prepare cash payments budgets for merchandising and other service organisations
- Prepare summary cash budgets for merchandising and other service organisations
- Estimate collections from accounts receivable
- Estimate payments to accounts payable and for expenses
- Prepare detailed cash budgets for merchandising and other service organisations
- Allow for a minimum desired cash balance and financing requirements, for merchandising and other service organisations

## Questions

- 4.1 Day's Dental Surgery provides you with the following revenue budget. All figures given are GST-free.

### Day's Dental Surgery

#### Revenue budget for the year ending 30 June

	1st quarter	2nd quarter	3rd quarter	4th quarter	Total
<b>Professional services</b>					
Surgery visits	900	1 000	940	980	
Average fee	\$80	\$80	\$85	\$85	
<i>Fees income</i>	<u>\$72 000</u>	<u>\$80 000</u>	<u>\$79 900</u>	<u>\$83 300</u>	<u>\$315 200</u>
<b>Sales—</b>					
<b>orthodontic devices</b>					
Sales volume	50	70	60	55	
Average selling price	\$100	\$110	\$110	\$115	
<i>Sales</i>	<u>\$5 000</u>	<u>\$7 700</u>	<u>\$6 600</u>	<u>\$6 325</u>	<u>\$25 625</u>
<b>Other income</b>					
Investment income	\$3 000		\$3 500		\$6 500
Rental income	\$1 000	\$1 000	\$1 100	\$1 100	\$4 200
<i>Total other income</i>	<u>\$4 000</u>	<u>\$1 000</u>	<u>\$4 600</u>	<u>\$1 100</u>	<u>\$10 700</u>
<b>Total revenue</b>	<u><u>\$81 000</u></u>	<u><u>\$88 700</u></u>	<u><u>\$91 100</u></u>	<u><u>\$90 725</u></u>	<u><u>\$351 525</u></u>

The surgery operates on a strictly cash basis.

#### Required

Prepare the cash receipts budget for the year ending 30 June.

- 4.2 Below is information relating to Dr M. Way for the quarter ending 31 December.

Accounting fees	\$1000 pa paid each December
Depreciation:	
Office equipment	\$900 pa
Surgery equipment	\$2500 pa
Purchase of drugs, medication and dressings	October—\$430 November—\$400 December—\$450
Replacement of surgical and medical instruments	\$800 payable in October
Laundry and cleaning	\$330 per month
Light and power	\$500 per quarter payable in November

(continued)

Motor vehicle lease	\$1300 per month
Motor vehicle running expenses	October—\$710 November—\$690 December—\$740
Professional association fees	\$1000 payable in December
Rent	\$3200 per month
Stationery and postage	October—\$150 November—\$120
Wages:	
Clerk/receptionist	\$1750 per month
Surgery nurse	\$2700 per month

Dr Way operates his practice on a strictly cash basis. All figures given are GST-inclusive except for wages, which are GST-free.

*Required*

Prepare a cash payments budget for the three months ending 31 December.

- 4.3 Refer to Question 4.2. The estimated opening bank balance at 1 October is \$5350 overdrawn. Estimated cash receipts are: October \$12 650; November \$13 780; December \$16 420. Prepare, in summary format, the cash budget for the quarter ending 31 December.
- 4.4 Actual and expected sales for Khepri Products are:

	<b>Units</b>
July	1340
August	1260
September	1200
October	1320
November	1300
December	1390

- Average selling price is \$20 per unit.
- All sales are on credit.
- Collections from debtors follow a pattern: 10% in the month of sale; 70% in the month following sale; 20% two months after sale.
- All figures given are GST-inclusive.
- Khepri Products accounts for GST on a cash basis.

*Required*

- (a) Prepare a schedule of collections from debtors for the three months ending 31 December.
- (b) Compute the balance of the debtors account as at 31 December.
- 4.5 Dr N. Harding is a medical practitioner. Half of her patients pay by cash at the time of their visit; 30% pay by credit card; the remainder claim from their



health fund first and then pay with the health fund cheque and make up any difference. Dr Harding receives payment from health fund claimants in the month following their visit. She receives payment from the credit card companies in the second month after the patient's visit. Estimated fees for the six months ending 30 June are:

	\$
January	20 000
February	18 000
March	19 500
April	20 500
May	22 000
June	25 000

All figures given are GST-free.

*Required*

- (a) Prepare a schedule showing collection of fees for the three months ending 30 June.
- (b) How much of the fees will remain uncollected at 30 June?

4.6 Behdety Sports Supplies is preparing its budgets for the quarter ending 31 March.

	\$
<b>Debtors balances at 1 January</b>	
From October sales	2 000
From November sales	9 000
From December sales	23 000
<b>Estimated sales</b>	
January	39 000
February	43 500
March	42 000

- Cash sales are 50% of total sales.
- Credit sales are normally collected 60% in the month following sale, 30% in the second month after sale, and 10% in the third month after sale.
- Behdety also receives other income: \$1500 rental income in January, February and March; \$2100 investment interest in February.
- All figures given are GST-inclusive except investment interest, which is GST-free.
- Behdety Sports Supplies accounts for GST on a cash basis.

*Required*

Prepare a cash receipts budget for the three months ending 31 March. Hint: Prepare a collection schedule first.

4.7 On 30 June Rahjid Patel had accounts receivable of \$48 000 (\$40 000 related to June sales).

<b>Expected sales</b>	<b>Units</b>
July	5250
August	5400
September	5600

- Selling price will be \$8 per unit.
- Sales are invoiced on the last day of the month.
- Customers are allowed 4% discount if payment is made within 14 days.
- The pattern of receipts has been: 50% pay within the discount period; 30% pay within one month of being invoiced; 18% pay within two months of being invoiced; the remainder never pay.
- Other income: monthly interest of \$1000 is received by Patel in respect of investments.
- All figures given are GST-inclusive.
- Rahjid Patel accounts for GST on an accrual basis.

*Required*

- Prepare a cash receipts budget for the three months ending 30 September.
- Calculate the balance of accounts receivable as at 30 September. Assume no bad debts have been written off.

4.8 Sales for Lar Lingerie are:

	<b>\$</b>
<b>Actual</b>	
February	8 000
March	10 000
<b>Budget</b>	
April	9 000
May	11 000
June	12 000

- Sales are 35% credit and 65% cash.
- Past experience indicates that collections are likely to be: 35% in the month of sale, with a 7.5% discount; 45% in the month following the sale; 15% in the second month after sale; 5% are uncollectable.
- Rental income is \$1800 per month.
- In May it is estimated that \$3000 will be received for commission on consignment sales.
- All figures given are GST-inclusive.
- Lar Lingerie accounts for GST on an accrual basis.

*Required*

Prepare a cash receipts budget for the three months ending 30 June.

4.9 Refer to Question 4.7. Mr Patel provides additional information:

- The inventory balance at 30 June is \$36 750.

- Accounts payable figure at 30 June is \$17 100. This is made up of May purchases \$2000; June purchases \$12 000; June expenses \$3100.
- October sales are expected to be 5800 units with no change in sales price.
- Purchases: Each month's closing inventory is to be 140% of the following month's sales. Cost of purchases is \$5 per unit. Purchases are paid 50% cash; 40% in the month after purchase; 10% two months after purchase.
- Other expenditure: Expenses are paid 75% in the month they occur and 25% in the following month. Marketing expenses are 18% of sales for each month. (Depreciation for marketing is \$350.) Administration expenses are 12% of sales for each month. (Depreciation for administration is \$250 per month.)

*Required*

Prepare a cash payments budget for the three months ending 30 September.

4.10 Shou-Hsing, purveyors of fine oriental cuisine, provide the following data:

- Purchases are paid 70% in the month following the purchase and 30% in the second month after the purchase.
- Other expenses are paid 65% in the month they are incurred and 35% in the next month.
- It is planned to purchase new furniture in April for \$20 000.
- Payment of \$160 000 income tax is due in May.
- Depreciation is \$1000 per month.
- Actual and budgeted purchases and expenses are:

Month	Purchases \$	Expenses \$
November	50 000	43 500
December	62 500	45 000
January	50 000	43 750
February	45 000	45 500
March	45 000	37 500
April	47 500	35 000
May	52 500	30 000
June	51 000	36 000

- All figures given are GST-inclusive.
- Shou-Hsing accounts for GST on a cash basis.

*Required*

Prepare the cash payments budget for the six months ending 30 June.

4.11 Prepare a monthly cash budget for Encil Wholesalers for July, August and September using the information provided below.

- Expected receipts are:

	<b>Cash sales</b> \$	<b>Debtors</b> \$	<b>Rent</b> \$	<b>Plant</b> \$
July	37 000	38 750	5 000	
August	57 750	51 000	5 000	
September	52 500	63 250	5 000	15 000

- Purchases and expenses that appear in the budgeted statement of financial performance are:

	<b>Purchases</b> \$	<b>Expenses</b> \$
June	35 000	30 000
July	40 000	32 500
August	45 000	40 000
September	57 500	45 000

- Fifty per cent of expenses are paid in the month they are incurred. The balance of expenses and purchases are paid in the month following.
- Depreciation is \$75 000 per annum.
- The bank account at 30 June is \$12 500 overdraft.
- All figures given are GST-inclusive.
- Encil Wholesalers account for GST on a cash basis.

4.12 Anu Enterprises expects to commence the calendar year with the following assets:

	\$
Cash at bank	33 750
Inventory (at cost)	70 500
Land	75 000
Plant (at cost)	720 000
Debtors	75 000

- Note that the debtors balance will represent 25% of the credit sales for the previous December.
- Sales are estimated as:

	\$
January	270 000
February	450 000
March	810 000
April	825 000

- The sales collection is expected to follow that of previous months: 40% of sales have been on a cash basis with these customers receiving an immediate cash discount of 2%; the remainder of sales are on credit and these customers do not receive any discounts.

- The previous collection pattern is expected to continue: 75% collected in the month of sale; 24% in the next month after sale; 1% uncollectable.
- Purchases are all for cash and receive a discount of 5%. Budgeted purchases are:

	\$
January	180 000
February	345 000
March	517 500
April	628 500

- Monthly selling expenses are budgeted at: \$36 000 fixed; variable—10% of sales.
- Monthly administrative expenses are estimated as: \$25 500 (including depreciation on plant) fixed; variable—3% of sales.
- Depreciation on plant is provided at 5% per annum on the original cost.
- *Payments for expenses:* In the previous year all operating expenses were paid in the month in which they occurred. However, in the budget year the procedure will be two-thirds of the selling expenses will be paid in the month in which they are incurred with the balance being paid in the following month; and administrative expenses will continue to be paid in the month in which they are incurred.
- All figures given are GST-inclusive.
- Anu Enterprises accounts for GST on a cash basis.

*Required*

Prepare a cash budget for each of the first three months of the budget year showing the estimated cash in hand at the end of each month.

4.13 Using the following information from the Shamash Company prepare a cash budget for the months of October, November and December.

**Estimated figures**

	August \$	September \$	October \$	November \$	December \$
Cash sales	230 000	250 000	160 000	200 000	240 000
Credit sales	256 000	276 000	188 000	228 000	264 000
Cash purchases	90 000	84 000	176 000	220 000	84 000
Credit purchases	220 000	60 000	160 000	228 000	200 000
Weeks in the month	4	5	4	4	5

	\$	\$
Rent paid per week		800
Rent received per week		200
Wages per week		
Selling	13 600	
Administration	3 600	
Distribution	17 200	34 400

(continued)

	\$	\$
Rent paid per week		800
Other operating expenses per week		
Selling	3 600	
Administration	1 000	
Distribution	3 200	7 800

- Accounts receivable regularly settle their accounts as follows: 85% pay in the month following sale (these accounts take advantage of a 5% discount); 10% pay in the second month; 3% pay in the third month; the balance is written off as bad.
- July accounts were paid in full in September.
- Accounts payable are settled in the month following purchase and 85% allowed a discount benefit of 5%.
- The other operating expenses include an amount of \$1600 per month for depreciation as follows:

	\$
Selling	600
Administration	400
Distribution	600

- Bank balance as at 30 September was \$55 670.
- All figures given are GST-inclusive except for wages, which are GST-free.
- The Shamash Company accounts for GST on a cash basis.

4.14 The following information gives particulars of actual results for November and December and budgeted results for January to March for the business of Tane Emporium.

Month	Sales		Total \$	Units	Non-current acquisitions \$
	Credit \$	Cash \$			
November	126 000	14 000	140 000	14 000	—
December	113 400	12 600	126 000	12 600	21 000
January	119 700	13 300	133 000	13 300	—
February	138 600	15 400	154 000	15 400	—
March	151 200	16 800	168 000	16 800	25 200
April	126 000	14 000	140 000	14 000	—

- Credit sales are invoiced on the last day of the month. Of the credit sales, it is found that 80% pay their accounts within one month of the invoice date, and a further 15% pay during the second month after invoice date. The balance is found to be irrecoverable.
- Inventory, at the end of each month, has been and is required to be 20% of the quantity that is expected to be sold in the following month. The

purchase price for each unit of inventory is \$6, and is not expected to change. Purchases of inventory are paid for 20% in the month of purchase and 80% in the following month.

- Selling and administrative expenses, including a depreciation charge of \$2800, are incurred at the rate of \$16 800 per month. Payment is made in the month following the month in which the expense is incurred.
- Tane Emporium also has to service a loan of \$280 000. Interest at the rate of 12% per annum is payable quarterly, the next due dates being 31 December and 31 March. No repayment of principal is required during the budget period.
- The balance of the bank account at 31 December is \$8400.
- All figures given are GST-inclusive.
- Tane Emporium accounts for GST on a cash basis.

*Required*

Prepare a cash budget for the months of January, February and March.

4.15 Chiron Book Distributors provides you with the following figures:

	\$
June sales (actual)	28 000
July sales (budgeted)	26 000
August sales (budgeted)	24 000
September sales (budgeted)	16 800

- Sales are expected to be 70% credit and 30% cash. Invoices for credit sales are issued at the end of each month. Accounts receivable pay: 70% within 30 days of invoice, receiving 5% discount; 20% within 60 days; 5% within 90 days; 5% bad debts.
- Accounts receivable balances as at 30 June are \$31 600, made up of April sales \$2400, May sales \$9600 and June sales \$19 600.
- Purchases are paid for in the month in which they are made. Budgeted purchases are:

	\$
July	16 000
August	15 200
September	8 000

- Marketing expenses are budgeted at 10% of sales and are paid in the month in which they are incurred.
- Other expenses are expected to be:

	\$
July	6 000
August	4 800
September	7 200

- Other expenses are paid in the same month that they are incurred.
- Depreciation is included in the other expenses above and is \$2000 per month.
- Machinery will be paid for on 20 August for \$20 000.
- Cash balance at the end of June is \$32 000.
- All figures given are GST-inclusive.
- Chiron Book Distributors accounts for GST on a cash basis.

*Required*

Prepare a cash budget for July, August and September.

4.16 The following information pertains to Carnabon Industries:

- Balance of cash at bank 1 November is \$27 000.
- Actual sales for September and October and estimated sales for November are:

	September \$	October \$	November \$
Cash sales	19 500	15 750	22 200
Credit sales	<u>60 000</u>	<u>90 000</u>	<u>120 000</u>
	<u>79 500</u>	<u>105 750</u>	<u>142 200</u>

- Collections from accounts receivable follow a pattern: 15% in month of sale; 60% in month following sale; 20% in second month after sale; 5% are uncollectable.
- Purchases for November are expected to be \$75 000: 25% of a month's purchases are paid for in the month of purchase. Accounts payable at 31 October of \$48 000 will be paid in November.
- Selling and administration expenses for November are expected to be \$39 000. Of this amount, \$12 000 is for depreciation.
- Equipment costing \$54 000 will be purchased for cash during November. The proprietor will make cash drawings of \$9 000 in the same month.
- It is desired that Carnabon Industries maintain a minimum cash balance of \$15 000. Any shortfall will need to be financed by borrowings.

*Required*

Prepare a cash budget for the month of November. Indicate in the financing section any borrowings, if required.

- 4.17 Rhegium Realty is a real estate agency. It had a cash balance of \$8300 at 1 April. Rhegium expects that receipt of commissions will be \$75 000 in April and \$101 500 in May. The business should receive investment income of \$33 300 in May. Projected cash payments are \$110 000 in April and \$125 800 in May. Due to special financing arrangements, a minimum cash balance of \$6000 is required by the firm's bank. When the bank account balance drops below \$6000 the bank credits the account, by way of a loan, with the amount needed to make up the shortfall, but only in multiples of \$500. Rhegium borrows as little as



possible and repays the loan, again in multiples of \$500, as quickly as possible. Interest is paid monthly on the entire outstanding balance (as it stands immediately before any repayments) at the rate of 12% per annum.

*Required*

Prepare a cash budget for the two months April and May.

- 4.18 Central Medical Centre provides a wide range of hospital services in its community. The hospital's board of directors has recently authorised the following capital expenditures:

	\$
Neonatal care equipment	900 000
CT scanner	800 000
X-ray equipment	650 000
Laboratory equipment	1 450 000
<b>Total</b>	<b>3 800 000</b>

The expenditures are planned for 1 October, and the board wishes to know the amount of borrowing, if any, necessary on that date. Marc Kelly, chief accountant, has gathered the following information to be used in preparing an analysis of future cash flows.

- Billings, made in the month of service, for the first six months of the year are:

Month	Actual amount \$
January	4 400 000
February	4 400 000
March	4 500 000
April	4 500 000
May	5 000 000
June	5 000 000

- Ninety per cent of the hospital's billings are made to third parties: Medicare, federal or state governments, and private insurance companies. The remaining 10% of the billings are made directly to the patients. Historical patterns of billing collections are:

	Third party billings %	Direct patient billings %
During month of service	20	10
During month following service	50	40
During second month after service	20	40
Uncollectable	10	10

- Estimated billings for the last six months of the year under review are listed below. The same billing and collection patterns that have been experienced during the first six months of the year are expected to continue during the last six months of the year.

Month	Estimated amount \$
July	4 500 000
August	5 000 000
September	5 500 000
October	5 700 000
November	5 800 000
December	5 500 000

- The purchases of the previous three months and the planned purchases for the last six months of the year are presented in the following schedule.

Month	Amount \$
April	1 100 000
May	1 200 000
June	1 200 000
July	1 250 000
August	1 500 000
September	1 850 000
October	1 950 000
November	2 250 000
December	1 750 000

- Endowment fund income is expected to continue at the rate of \$175 000 per month.
- The hospital has a cash balance of \$300 000 on 1 July and has a policy maintaining a minimum end-of-month cash balance of 10% of the current month's purchases.
- All purchases are made on account and accounts payable are paid in the month following the purchase.
- Salaries for each month during July to December are expected to be \$1 500 000 plus 20% of that month's billings. Salaries are paid in the month of service.
- The hospital's monthly depreciation charges are \$125 000.
- The medical centre incurs interest expenses of \$150 000 per month and makes interest payments of \$450 000 on the last day of each quarter (that is, 31 March, 30 June, 30 September and 31 December).

*Required*

- Prepare a schedule of budgeted cash receipts by month for the third quarter of the year (July through to September).
- Prepare a schedule of budgeted cash disbursements by month for the third quarter of the year.

- (c) Determine the amount of borrowing, if any, necessary on 1 October to acquire the capital items totalling \$3 800 000.<sup>1</sup>

4.19 Tegea Traders makes all its sales on credit. Budgeted sales are:

	<b>Units</b>
July	10 000
August	11 000
September	12 000
October	12 500

- Selling price is \$7 per unit.
- Collections are expected to be 60% in the month of sale and 38% in the next month. It is anticipated that the remainder will be uncollectable.
- Accounts receivable balance at 30 June is \$26 600, which will be received in July.
- Purchases are equal to 70% of the projected sales dollars for the following month. Purchases are paid in full in the month after purchase.
- Selling and distribution expenses are paid for each month and are expected to be \$11 550 per month.
- Additionally, depreciation is \$3500 each month.
- Cash balance at 1 July is \$5600.
- All figures given are GST-inclusive.
- Tegea Traders accounts for GST on a cash basis.

*Required*

For the quarter ending 30 September prepare:

- (a) sales budget
- (b) purchases budget
- (c) schedule of collections from accounts receivable
- (d) schedule of payments for purchases
- (e) cash budget.

## Endnote

- <sup>1</sup> Hilton, R., *Managerial Accounting*, 2nd edn, New York, USA: McGraw-Hill Book Company, 1994

