

Chapter 9 Solutions

Solution 9.1

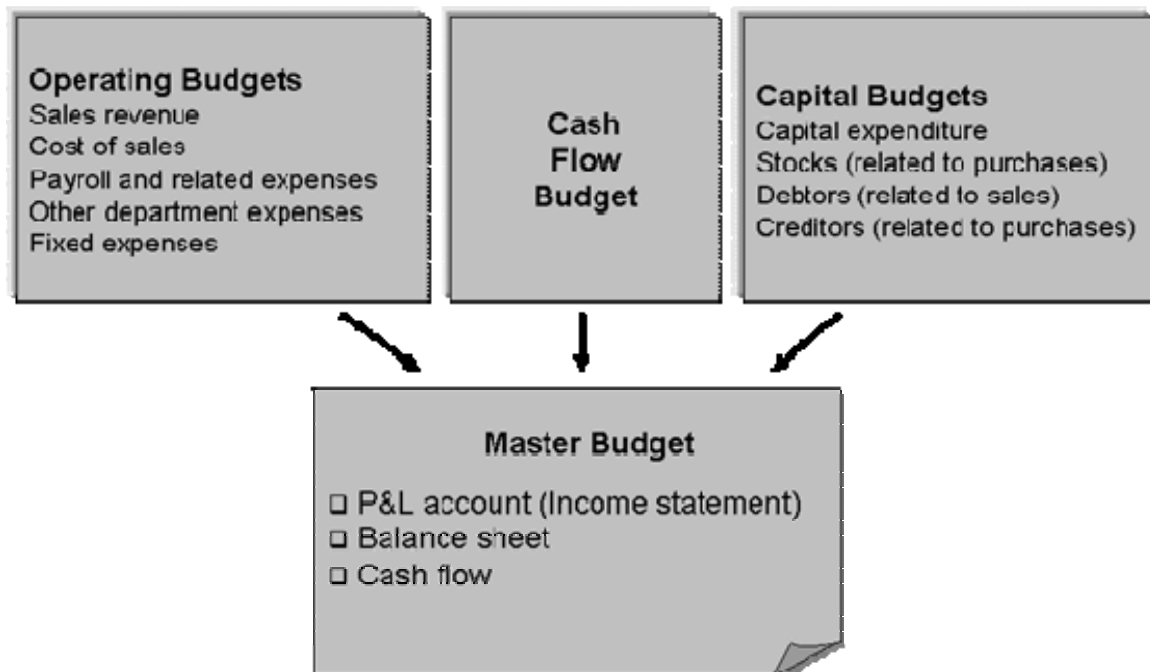
Distinguish between operating and capital budgets.

Operating budgets are the various budgets that relate to the operating performance of the business and are summarised in the projected profit statement for the period. The operating budgets comprise of a sales budget, cost of sales budget, payroll, operating expenses budgets, and fixed expenses budgets.

Capital budgets relate to the balance sheet and are composed primarily of the capital expenditure budget, and include the stock budget, debtors and creditors budgets.

The master budget brings together all the financial projections from the various operating and capital budgets within an organisation for the period. It embraces the impact of both operating decisions (running the business) and investment and financing decisions (capital budgets) that the business has planned for the next time period (usually 12 months). This is illustrated in the following diagram.

The master budget



What are the main advantages of preparing monthly cash budgets?

The cash budget is primarily concerned with the timings of future cash inflows and outflows and is based on data from the operating and capital budgets. The main advantages associated with preparing monthly cash budgets is that management can foresee significant cash surpluses and cash deficits and thus can plan for such events.

For example if a cash budget discloses a budget period where a cash shortfall is likely then management can plan for this situation and ensure the necessary funds are available for the business to get through this period. If the cash budget highlights possible cash excesses then management can plan to invest these cash surpluses to ensure this asset is working for the business and not lying idle.

Outline the main objectives of budgetary planning

- To forces management to set and prioritise goals which act as a blueprint for the future.
- To compels management to plan and focus on the future, thus gaining an advantage by anticipating future business conditions and otherwise unforeseen problems.
- To provide management with a basis on which to measure subsequent performance.
- To encourage and promote upward, downward and horizontal communication within the organisation. Thus the budgetary process plays a strong role in the co-ordination of activities and goal congruence. The budget acts as a vehicle through which the activities of the different parts of the organisation can be integrated into an overall plan.
- To provide a basis for responsibility accounting. Responsibility accounting occurs where managers are identified with their budget centre and are responsible for achieving the budget targets for that centre. Ultimately, responsibility accounting makes managers responsible for the costs, revenues and resources that they actually control. In the context of budgets, responsibility accounting represents the delegation of responsibility to individuals within an organisation.
- To facilitate control within an organisation by the regular, systematic monitoring and reporting of activities and comparing with the budget.
- To facilitate better cash and working capital management through the preparation of the master budgets.

Solution 9.2

Outline the main factors that influence sales.

The sales figure of any business is made up of three variables namely sales volume, sales price and sales mix. These variables are influenced by a number of factors that should be taken into account when forecasting sales.

Factors influencing sales

Past sales volume and mix	Level of competition
Quality of the product or service	Consumer behaviour
Strength of the brand name	State of the economy
Planned advertising expenditure	Political and industrial outlook
Pricing policy	Local activities and events
Capacity	Seasonality
Advance bookings	Demand analysis

In practice, sales forecasts can be developed in a number of ways such as:

- To aggregate projections made by the sales force on the basis of their assumptions of the market and changes in market conditions. On one hand this can be quite a subjective approach, however a good sales team should know its market well and should anticipate any significant changes that could affect sales.
- Using market research techniques would be particularly appropriate when considering the launch of a new product.
- Large businesses sometimes develop economic models to predict sales. These models would incorporate a number of the variables identified above and take into account the relationship between them and their effect on sales.

Why is the sales forecast of critical importance to the preparation of projected financial statements?

When preparing projected financial statements, the forecast of sales is the initial task or starting point. A reliable sales forecast is essential as many items such as cost of goods sold, other variable costs, stock levels, fixed assets and capital requirements will be significantly influenced and determined by the level of sales forecast.

Outline the main ways in which a business can forecast its operating costs.

To accurately estimate future costs, it is important to understand cost behaviour patterns and how some costs are affected by fluctuating sales activity levels. Costs may be classified into the following categories:

- o *Fixed costs*. These are costs which are not expected to vary with sales. For example if sales increase by 10 per cent, fixed costs would remain fixed and not increase in proportion to sales. Examples are rent, rates, depreciation, salaries and insurance. From a forecasting perspective, the level of sales activity forecast will not significantly influence these costs unless the sales forecast is beyond the relevant range of sales activity for these costs. Thus the main factors that influence fixed costs are inflation, legal agreements, economic outlook and national wage agreements, as labour costs are a major element of the fixed costs of any business.
- o *Variable costs* . These are costs that are expected to vary with sales. Thus if sales increase by 10 per cent, these costs are expected to increase proportionately. Examples would include cost of sales, sales commissions and part-time labour. In reality, although these costs should increase as sales increase, it may not be strictly proportionate because factors such as supplier's prices, commissions and part-time labour rates may vary.
- o *Semi-variable costs*. These have both a fixed and a variable element and so may vary partially with sales. Such costs may be identified by examining the past records of the business. For example light and heat costs could be classified as a semi-variable cost as a certain amount of light and heat will be incurred irrespective of the level of sales. However if sales increase significantly, then more rooms will be used requiring extra power. Semi-variable costs can be broken down into their separate fixed and variable components (through the use of the high-low method, scatter-graph approach and statistical techniques such as regression analysis covered in chapter 2). By doing this, one can establish the total variable and total fixed costs of a business.

The analysis of costs into fixed and variable components is vitally important when forecasting future costs. Variable costs will increase in relation to sales whereas fixed costs may only increase with the rate of inflation (unless there is evidence to the contrary such as a new leasing agreement or new wage agreements).

Solution 9.3

Incremental budgeting

This is where the current budget and actual figures act as the starting point or base for the new budget. The base is adjusted for forecast changes to, for example, the product mix, sales volume, sales price, expenses and capital expenditure that are expected to occur over the next budget period. It is called incremental budgeting as the approach does not focus on the base, but focuses on the increment (the changes from the base). An example would include increasing last years operating expenses by the rate of inflation to calculate the new budgeted figure. The major disadvantage of this is that the major part of the expense (the base) does not change and in fact is overlooked and not questioned under this approach. For example the base figure may be distorted due to extraordinary events in the previous period which are not expected to reoccur. Thus if this is not taken into account, the budget could be misleading.

Zero-based budgeting

This approach requires that every year, all costs and capital expenditure are questioned and thus require justification and prioritising before any decision is taken regarding the allocation of resources. Thus a zero base is adopted which effectively means that both the base and the increment are questioned. In fact the whole activity that leads to the item of expenditure is questioned and requires justification. Zero-based budgeting changes the approach of traditional or incremental budgeting from focusing on changes in expense items from year to year, to an approach that looks at each department budget as if it were undertaking its activities or programmes for the first time. It requires a detailed justification and cost-benefit approach to each expense item in the department budget. It forces managers to prioritise activities and related expenses based on a value for money concept. In effect, it overcomes the limitations of incremental budgeting.

Its advantages include the following

- It fosters a questioning attitude to all revenues and costs in preparing operating budgets.
- It focuses attention on the value for money concept.
- It can help identify inefficient work processes and operations.
- It helps minimise waste.
- It should result in more efficient allocation of resources.

Its main disadvantages are that as an approach it is costly and time consuming and may require management to develop and learn new skills.

Many businesses do not apply a full-scale zero-based approach to their budgeting process but only apply it to selected revenue and expense items or departments within an organisation. These expense items would often include advertising, research and the costs associated with developing new products and product lines.

Activity based budgeting

Activity based budgeting (ABB) involves the build up of budgeted costs using an activity approach. All the activities that are undertaken in the organisation, function or department are defined, and costs attributed to that activity are established. Resources are allocated according to activity levels. ABB can be used in all types of organisations. For example, ABB in the front office of a hotel would involve ascertaining such activities as answering customer queries, processing a reservation, preparing a quotation and updating customer accounts. The costs of each activity would then be established and resources would be allocated based on the planned level of activity.

ABB is an extension of the zero-based budgeting approach and goes into far greater detail in identifying value and non-value activities. It can be more effective than zero-based and incremental budgeting because:

- It avoids slack that is often included in the incremental approach.
- ABB focuses attention on each activity, highlighting those that do not add value.

Rolling budgets

A rolling budget is a twelve month budget which is prepared several times each year (say once each quarter). The purpose of a rolling budget is to give management the chance to revise its plans, but more importantly, to make more accurate forecasts and plans for the next few months. When rolling budgets are used, the extra administration costs and effort of producing several budgets instead of just one, should be balanced with more accurate forecasting and planning.

The advantages associated with the use of rolling budgets are

- Budgets are reassessed regularly and thus should be more realistic and accurate.
- Because rolling budgets are revised regularly, uncertainty is reduced.

- Planning and control is based on a recent updated plan.
- The budget is continuous and will always extend a number of months ahead.

The disadvantages are

- Rolling budgets are time consuming and expensive as a number of budgets must be produced during the year.
- The volume of work required with each reassessment of the budget can be off-putting for managers.
- Each revised budget may require revision of standards or stock valuations which is time consuming.

Solution 9.4

a) Cash Budget

Cash Inflow				
Investment	20,000			
Fees from clients	6,525	6,525	9,000	9,000
Total	26,525	6,525	9,000	9,000
Cash Outflow				
Jeep	13,000			
Books & DVDs		810		1080
Office services	500	200	200	200
Insurance	750			750
Overheads	100	100	100	100
Wages	2,500	2,500	2,500	2,500
Total	16,850	3,610	2,800	4,630
Net cashflow	9,675	2,915	6,200	4,370
Opening balance	0	9,675	12,590	18,790
Closing balance	9,675	12,590	18,790	23,160

b) Trading, Profit & Loss Account for four months ending 30th April

Sales		31,050
Books & DVDs	1,890	
Depreciation	1,000	
Office services	1,100	
Insurance	1,000	
Overheads	400	
Wages	10,000	15,473
Net profit		15,577

c) Balance sheet as at 30th April

Fixed assets			
Equipment	500		500
Vehicles	13,000	1,089	11,917
			<u>12,417</u>
Current assets			
Insurance prep aid		500	
Cash		23,160	23,660
			<u><u>36,077</u></u>
Financed by			
Capital			20,500
P&L			15,577
			<u><u>36,077</u></u>

Solution 9.5

a) Profit & Loss Account

Sales		€ 748,000
Opening stock	€ 30,000	
Purchases	€ 438,000	
Closing stock	€ 37,500	€ 430,500
Gross profit		€ 317,500
Wages	€ 186,000	
Expenses	€ 75,000	€ 261,000
Net profit		€ 56,500

b) Cash Budget

<i>Cash inflow</i>			
Sales - cash	€ 48,000	€ 51,200	€ 50,400
Saloo credit	€ 180,000	€ 192,000	€ 204,800
Total	€ 228,000	€ 243,200	€ 255,200
<i>Cash outflow</i>			
Purchases - credit	€ 130,000	€ 140,000	€ 150,000
Wages	€ 60,000	€ 63,000	€ 63,000
Expenses	€ 21,250	€ 21,250	€ 21,250
Equipment	€ 35,000	€ 0	€ 0
Total	€ 246,250	€ 224,250	€ 234,250
Opening balance	€ 10,000	-€ 0,250	€ 10,700
Closing balance	-€ 8,250	€ 10,700	€ 31,650

c) Balance Sheet

<i>Fixed Assets</i>	Cost	Deprec	N.B.V.
Equipment	€ 285,000	€ 32,125	€ 217,875
Furniture & Fixings	€ 185,000	€ 20,625	€ 179,375
	€ 470,000	€ 52,750	€ 397,250
<i>Current Assets</i>			
Stock	€ 37,500		
Debtors	€ 201,800		
Bank	€ 31,650	€ 270,750	
<i>Current liabilities</i>			
Creditors		€ 148,000	€ 122,750
			€ 520,000
<i>Financed by:</i>			
Capital			€ 463,500
Profit & loss account			€ 56,500
			€ 520,000

Solution 9.6

a) *Prepare a projected profit and loss account for the 5 month period ending 30 November*

The approach to preparing the projected profit and loss account in this question is to firstly start with the trading account and follow the following steps.

1. Outline the trading account and put in the figures given in the questions – sales and opening stock.
2. Calculate gross profit and cost of sales. This is done by using the gross profit percentage given in the question. The question expresses gross profit as a mark-up or as a percentage of cost of sales. Thus cost of sales = 100%, gross profit = 150% and sales = 250%.
3. Calculate closing stock. Stock is to equal 50% of the following months demand. But this figure values stock at selling price. Stock must be valued at cost and so it is marked down to cost by multiplying by 100/250. Thus closing stock at the end of November = 50% x Decembers sales x 100/250.
4. The purchases figure is the balancing figure.
5. In calculating the figures for the profit and loss account it is important to ensure that only expenses charged are included irrespective of whether they are paid or not.

Projected Profit and Loss Account			
Sales			27,000
Less Cost of sales			
Opening Stock	2,000		
Purchases	10,000		
Closing Stock	(6000 * 50% * 100/250)	<u>1,200</u>	<u>10,800</u>
Gross profit			16,200
Overheads (5 x 1200)		6,000	
leasing and Insurance (5000 x 5/12)		2,083	
Advertising (1600 x 5/6)		1,333	
Wages and Salaries (1,500 x 5)		<u>7,500</u>	<u>16,916</u>

Net Loss

(716)

b) Prepare a monthly projected cash budget for the 5 month period ending 30 November.

Projected Cash Budget

	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>
<u>Income</u>					
Sales	<u>5000</u>	<u>5000</u>	<u>5000</u>	<u>6000</u>	<u>6000</u>
Cash	4500	4500	4500	5400	5400
Credit		500	500	500	600
Vat refund			<u>3,210</u>		
Total income	4500	5000	8210	5900	6000
<u>Expenditure</u>					
Purchases (<i>Working 1</i>)		1000	2000	2200	2400
Overheads	1,000	1,000	1,000	1,000	1,000
Leasing and Insurance	1,250			1,250	
Advertising	1,600				
Wages and Salaries	1,200	1,200	1,200	1,200	1,200
Paye/prsi		300	300	300	300
Vat					1,210
Total expenditure	<u>5050</u>	<u>3500</u>	<u>4500</u>	<u>5950</u>	<u>6110</u>
Cash Surplus/Deficit	-550	1500	3710	-50	-110
Opening Balance	<u>0</u>	<u>-550</u>	<u>950</u>	<u>4660</u>	<u>4610</u>
Closing Balance	<u>-550</u>	<u>950</u>	<u>4660</u>	<u>4610</u>	<u>4500</u>

Working 1 – Calculation of purchases

The figure for purchases must be calculated for each month as this is required for the monthly cash budget. This requires preparing a trading account and going through steps 1 – 4 outlined in part (a) above. The purchases figure for any month is paid the following month. Thus the purchases figure for July of €1,000 is paid and is recorded in the cash budget in August.

	July	August	September	October	November
Sales	5000	5000	5000	6000	6000
Less Cost of sales					
Opening stock	2000	1000	1000	1200	1200
Purchases	1000	2000	2200	2400	2400
Closing stock	<u>1000</u>	<u>1000</u>	<u>1200</u>	<u>1200</u>	<u>1200</u>
COGS	<u>2000</u>	<u>2000</u>	<u>2000</u>	<u>2400</u>	<u>2400</u>

Solution 9.7

a) Prepare a budgeted trading, profit and loss account for the three months ended 31 March

The approach to preparing the projected profit and loss account in this question is to firstly start with the trading account and follow the following steps.

1. Outline the trading account and put in the figures given in the questions – sales and opening stock.
2. Calculate gross profit and cost of sales. This is done by using the gross profit percentage given in the question. The question expresses gross profit as a percentage of sales. Thus sales = 100%, gross profit = 65% and cost of sales = 35%.
3. Calculate closing stock. Managements policy is to have sufficient stock to cover demand for the following month. This Stock is to equal 100% of the following months demand. But this figure values stock at selling price. Stock must be valued at cost and so it is marked down to cost by multiplying by 35% (35/100). Thus closing stock at the end of March = 100% April sales x 35%.
4. The purchases figure is the balancing figure.
5. Although the question does not ask for a monthly trading account in part (a) - a monthly cash budget is required in part (b). Thus one needs to calculate the monthly purchases figure to show when these purchases are paid in the cash budget. This can be done separately as in question 9.6 or when preparing the trading account as below.

Budgeted Trading, Profit and Loss Account

	January	February	March	Total
	€	€	€	€
Sales	60000	66000	72600	198600
Less cost of goods sold				
O/stock	9000	23100	25410	9000
Purchases	<u>35100</u>	<u>25410</u>	<u>27951</u>	<u>88461</u>
	44100	48510	53361	97461
C/stock	<u>23100</u>	<u>25410</u>	<u>27951</u>	<u>27951</u>
Cogs	21000	23100	25410	69510
Gross Profit	39000	42900	47190	129090
Less Expenses				
Labour costs				49,650
Overheads				39,720
Rent				6000
Loan interest				<u>488</u>
Net Profit				<u>95,858</u>
				<u>33,233</u>

b) Prepare a monthly cash budget for January, February and March

Cash Budget				
	January	February	March	Total
	€	€	€	€
Income				
Cash sales	30000	33000	36300	99300
Cash received from credit sales	<u>24000</u>	<u>30000</u>	<u>33000</u>	<u>87000</u>
Total	54000	63000	69300	186300
Expenditure				
Purchases	15000	35100	25410	75510
Rent	12000			12000
Labour	15000	16500	18150	49650
Overheads	10,000	11200	12520	33720
Taxation		25000		25000
Capital expenditure			30000	30000
Capital repayments			900	900
Interest on loan			488	488
Total expenses	<u>52000</u>	<u>87800</u>	<u>87468</u>	<u>227268</u>
Surplus	2000	-24800	-18168	-40968
Opening balance	<u>2500</u>	<u>4500</u>	<u>-20300</u>	<u>2500</u>
Closing balance	<u>4500</u>	<u>-20300</u>	<u>-38468</u>	<u>-38468</u>

Note

- The cash received from credit sales for January relates to Decembers credit sales. This is given in the opening balance sheet as debtors.
- The purchases figure in January is December's purchases which is given in the opening balance sheet as trade creditors.
- Depreciation is a non cash item and thus is excluded from the overheads figures

c) Prepare a balance sheet as at 31 March

Balance Sheet as at 31 March

	€	€
Fixed Assets		124,000
Current Assets		
Stock	27951	
Debtors	36300	
Prepayments	<u>6000</u>	70251
Current Liabilities		
Creditors	27951	
Bank overdraft	<u>38468</u>	66419
Long-term liabilities		
Loans		18,600
Total Net Assets		<u>109,233</u>
Financed By		
Share capital		57000
Reserves		52,233
		<u>109,233</u>

Note

- The fixed asset figure is calculated as follows

	€
Fixed assets @ Jan 1	100,000
Additions	30,000
Less depreciation	<u>(6,000)</u>
Fixed assets @ 31 March	<u>124,000</u>

- Debtors = March credit sales
- Creditors = March purchases

Solution 9.8

a) Prepare a budgeted trading, profit and loss account for the three months ended 30 November

This company hires out equipment and does not par-take in the buying and selling of goods and services. Thus there is no requirement for a trading account and the profit and loss account is simply sales less expenses as follows. Note the direct costs amount to 10% of sales.

Budgeted Profit and Loss Account

	September	October	November	Total
	€	€	€	€
Sales	66000	72600	79860	218,460
Less Expenses				
Direct costs			21,846	
Labour costs			54,615	
Overheads			43,030	
Rent			6,000	
Loan Interest			<u>825</u>	<u>126,316</u>
Net Profit				<u>92,144</u>

b) Prepare a budgeted monthly cash budget for September, October and November

Cash Budget

	September	October	November	Total
	€	€	€	€
Income				
Cash sales	33000	36300	39930	109230
Cash received from credit sales	<u>22000</u>	<u>33000</u>	<u>36300</u>	<u>91300</u>
Total income	55000	69300	76230	200530
Expenditure				
Direct costs	6,600	7,260	7,986	21,846
Rent		12,000		12,000
Labour	16,500	18,150	19,965	54,615
Overheads	11,000	12300	13730	37030
Accruals		15000		15000
B/S Creditors	15,000			15000
Loan Interest			825	825
Capital repayment on loan			3000	3000
Total expenses	<u>49100</u>	<u>64710</u>	<u>45506</u>	<u>159316</u>
Surplus	5900	4590	30724	41214
O/balance	<u>3560</u>	<u>9460</u>	<u>14050</u>	<u>3560</u>
C/balance	<u>9460</u>	<u>14050</u>	<u>44774</u>	<u>44774</u>

Note: The cash received from credit sales in September relates to credit sales in August represented by the debtors figure in the opening balance sheet. Overheads figure excludes depreciation as it is a non-cash item

c) *Prepare a forecast balance sheet as at 30 November*

Balance Sheet as at 30th November

	€	€	€
	Cost	Accum Dep	NBV
Fixed Assets	298,000	6,000	292,000
Current Assets			
Debtors		39930	
Bank		44774	
prepayment		<u>8,000</u>	92,704
Current Liabilities			
Creditors for capital expenditure			30,000
Long-term Liabilities			
Loan			<u>30,000</u>
			<u>324,704</u>
Financed By			
Share Capital			205,000
Profit and loss (92,144 + 27,560)			<u>119,704</u>
			<u>324,704</u>

Note:

- The fixed assets at cost figure is €268,000 + €30,000
- The prepayment relates to rent prepaid for 4 months x €2000 per month
- Creditors for capital expenditure relates to the new fixed assets purchased. This is a current liability as it will be paid in December.
- The long term loan has been reduced by a repayment of €3,000
- The profit and loss balance in the balance sheet is made up of the profit and loss balance in the opening balance sheet of €27560 + the projected profit of €268,000.

Solution 9.9

a) Prepare a budgeted departmental trading, profit and loss account for the three months ended 31 August

This question asks for a departmental trading, profit and loss account. That requires a separate trading account for the bar and restaurant. Unlike other questions you are given the purchases figures however you are not given any information on how to calculate closing stock. Thus closing stock is the balancing figure for each trading account. There is no need to prepare a monthly trading account as the monthly purchases figures are already given. The following are the steps in preparing the trading account

1. Outline the trading account and put in the figures given in the questions – sales, purchases and opening stock.
2. Calculate gross profit and cost of sales. This is done by using the gross profit percentage given in the question. The question expresses gross profit as a percentage of sales thus sales = 100%. For the bar, gross profit = 55% and hence cost of sales = 45%. For the restaurant, gross profit = 60% and thus cost of sales = 40%.
3. The balancing figure in the trading account is the closing stock for both the bar and restaurant.

Note: There is rental income in this question. The rental income earned for the period (3 months) should be added to gross profit. However the question does not tell us the monthly rental. This can be calculated by ascertaining how many months does the rent prepaid in the opening balance sheet represent. If the tenant pays every three months and his last payment before the opening balance sheet date was 1 May. Then the amount of the prepayment represents 2 months. Thus the monthly charge is $€1,000 / 2 = €500$

Departmental Trading, Profit and Loss Account

	Bar	Rest	Total
	€	€	€
Sales	30,000	90,000	120,000
Less Cost of sales			
O/stock	800	500	1300
Purchases	<u>13,400</u>	<u>44,000</u>	<u>57400</u>
	14,200	44,500	58700
C/stock	<u>700</u>	<u>8,500</u>	<u>9200</u>
COGS	13,500	36,000	49500
Gross profit	16500	54000	70500
Add rental income			<u>1500</u>
			72000
<u>Less Expenses</u>			
Wages			34,500
Other Expenses (excluding insurance 20,500-3,000)			17,500
Insurance (less prepayment of 9 months 3000-2250)			750
Depreciation			2550
Loan interest			<u>1350</u>
Net Profit			<u>56,650</u>
			<u>15,350</u>

b) Prepare a monthly forecast cash budget for June, July and August

Cash Budget

	June	July	August	Total
	€	€	€	€
Income				
Cash Sales	29520	36000	42480	108000
Cash received from credit sales	1000	3280	4000	8280
Rental Income received	_____	_____	<u>1500</u>	<u>1500</u>
Total income	30520	39280	47980	117780
Less Expenditure				
Purchases	2230	17,000	18,400	37,630
Cash Wages	7000	8400	8750	24,150
PAYE/PRSI		3000	3600	6,600
Expenses	3000	7000	7500	17,500
Insurance	3000			3,000
Loan repayment	1200	1200	1200	3,600
Loan Interest	450	450	450	1350
Preliminary tax			10000	10000
Total expenditure	<u>16880</u>	<u>37050</u>	<u>49900</u>	<u>103,830</u>
	13640	2230	-1920	13950
Opening cash balance	<u>2360</u>	<u>16000</u>	<u>18230</u>	<u>2360</u>
Closing cash balance	<u>16000</u>	<u>18230</u>	<u>16310</u>	<u>16310</u>

c) Prepare a budgeted balance sheet as at 31 August

Balance Sheet

<u>Fixed Assets</u>	Cost	Depreciation	N.B.V.
Leaseholds	200000	1800	198200
Equipment and Furniture	<u>50000</u>	<u>750</u>	<u>49250</u>
	<u>250,000</u>	<u>2,550</u>	247450
Current Assets			
Stock		9200	
Debtors		4720	
Bank		16310	
Insurance prepaid	(9 months prepaid)	<u>2250</u>	32480
Creditors <12 months			
Trade Creditors		22000	
Wages due		3750	
Rent prepaid		<u>1,000</u>	26,750
Creditors >12 months			
Loan capital			<u>39,830</u>
			<u>213,350</u>
Financed By			
Capital			150000
Reserves			48000
Retained profit			<u>15350</u>
			<u>213350</u>

Note:

- There were no new fixed assets purchased so the NBV of fixed assets is simply cost less depreciation.
- Debtors represent credit sales in August
- Trade creditors represents August credit purchases
- The rent prepaid is a prepayment on a revenue item and thus is a current liability. In effect the tenant has paid in advance and thus the business owes the tenant the amount of the prepayment. The prepayment represents 2 months rent namely September and October.

Solution 9.10

a) A forecast trading, profit and loss account for the period 1 June to 30 September inclusive

The approach in this question is again to layout the information given in the question sales, stock (opening and closing) and using the gross profit percentages given of 30% one can calculate the gross profit and cost of sales figures. In this question opening and closing stock will be the same (€500) thus cost of sales and purchases will also be the same.

Forecast Trading, Profit and Loss Account

	JUNE	JULY	AUGUST	SEPT	TOTAL
	€	€	€	€	€
SALES	10,000	10,000	10,000	9,000	39,000
LESS COST OF GDS SOLD					
O/STOCK	500	500	500	500	500
PURCHASES	7,000	7,000	7,000	6,300	27,300
			<u>500</u>	<u>500</u>	<u>500</u>
C/STOCK	<u>500</u>	<u>500</u>			
			<u>7,000</u>	<u>6,300</u>	<u>27,300</u>
	<u>7,000</u>	<u>7,000</u>			
GROSS PROFIT	3,000	3,000	3,000	2,700	11,700
LESS EXPENSES					
INSURANCE (1900*4/12)				633	
RATES (450*4/12)				150	
OTHER EXPENSES				3,800	
MORT INTEREST (100,000*12%*2/12) Note 1				2,000	
				<u>1,944</u>	<u>8,527</u>
			(100,000-2778*12%*2/12)		
NET PROFIT					<u>22,673</u>

Note 1: The mortgage interest is based on the amount outstanding on the loan. At 1 June the amount of the loan was €100,000 however this amount was reduced at the beginning

of August by €2,778. Thus loan interest is charged for two months based on the amount outstanding of €100,000 and for another 2 months based on the amount outstanding of €97,222.

b) A forecast monthly cash budget for the above period

Forecast Cash Budget

	JUNE	JULY	AUGUST	SEPT
	€	€	€	€
INCOME				
CASH SALES	9,000	9,000	9,000	8,100
CREDIT SALES	_____	<u>1,000</u>	<u>1,000</u>	<u>1,000</u>
Total income	9,000	10,000	10,000	9,100
EXPENDITURE				
PURCHASES		7,000	7,000	7,000
INSURANCE	1,900			
OTHER EXPENSES		950	950	950
DRAWINGS	800	800	800	800
MORTGAGE CAPITAL			2,778	
MORTGAGE INTEREST Note 1			3,000	
RATES			225	
Total expenses	2,700	8,750	14,753	8,750
CASH SURPLUS/ DEFICIT	6,300	1,250	(4,753)	350
			17,550	
OPENING BALANCE	10,000	16,300		12,797
			12,797	
CLOSING BALANCE	16,300	17,550		13,147

Note 1: Loan interest is paid on a quarterly basis with the next payment date 1 August. Thus the loan interest to be paid will be €100,000 x 3/12 x 12% = €3,000

c) Relevant extracts from the balance sheet as at 30 September

Current Assets	€
Stock	500
Debtors	900
Prepayments	
Insurance	1,267

Rates	150
Bank	13,147

Current Liabilities

Trade creditors	6,300
Accruals	
Other expenses	950
Loan Interest Note 1	1,944

Long- term Liabilities

Mortgage Loan	97,222
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Financed By

Net profit	22,673
Less drawings	(3,200)

Note 1: Loan interest due at the end of September relates to the interest that has been charged to the profit and loss account but not paid by the end of September. The only interest payment made was at the beginning of August relating to the May June and July. Thus The interest charged for August and September is outstanding and a current liability. This amounts to $€97,222 \times 12\% \times 2/12 = €1944$

Solution 9.11

a) A forecast profit and loss account for the three months to the end of March

Budgeted Profit & Loss Account for 3 months ending 31 March

Sales		190,000
Cost of sales		
Opening stock	0	
Purchases (Note 1)	153,000	
Less: Closing stock	<u>-96,000</u>	
		<u>57,000</u>
Gross profit (Note 2)		133,000
Expenses		
Wages and salaries	41,000	
Rent of premises (Note 3)	37,500	
General expenses	20,000	
Depreciation of equip (Note 4)	<u>12,000</u>	<u>110,500</u>
Operating profit		22,500
Loan interest (Note 5)		<u>2,700</u>
Net profit before tax		<u>19,800</u>

Note 1 : Purchases is calculated as follows

- Cost of sales + closing stock – opening stock
- €57,000 + €96,000 – 0) = €153,000

Note 2: Gross profit is calculated as 70% of sales

Note 3: The annual rent is €150,000 for which only 3/12 should be charged.

Note 4 : Depreciation is 12.5% of €384,000 x 3/12.

Note 5: Loan Interest is charged at 6% of €180,000 x 3/12

b) A monthly forecast cash budget for January February and March

Cash budget for 3 months January to March

	Jan	Feb	Mar
Receipts	€	€	€
Share capital	250,000		
Bank loan	180,000		
Cash sales (30% of current month)	15,000	18,000	24,000
Debtors (70% of sales 2 months previous)	<u>0</u>	<u>0</u>	<u>35,000</u>
	445,000	18,000	59,000
Payments			
Purchases (Note 1)	0	85,000	28,000
Wages and salaries (current month)	12,000	13,500	15,500
Rent of premises (150,000 x 6/12)	75,000		
Gen expense (prev month)		6,000	6,500
Loan principal	1,500	1,500	1,500
Loan interest	900	900	900
Equip and furniture.	<u>192,000</u>	<u>0</u>	<u>192,000</u>
	281,400	106,900	244,400
Net Cash Inflow/(Outflow)	163,600	-88,900	-185,400
Opening balance	0	163,600	74,700
Closing balance	163,600	74,700	-110,700

Note 1 Calculation of purchases

Workings - Purchase	Jan	Feb	Mar	Jan-Mar
	€	€	€	€
Sales	50,000	60,000	80,000	190,000
Mult by Cost of sales %)	0.30	0.30	0.30	0.30
Gives: Cost of sales	15,000	18,000	24,000	57,000
Add: Closing stock (given)	70,000	80,000	96,000	96,000
Less: Opening stock	<u>0</u>	<u>-70,000</u>	<u>-80,000</u>	<u>0</u>
Gives: Purchases	85,000	28,000	40,000	153,000

c) A forecast balance sheet at end of March

Budgeted Balance Sheet on 31 March

	€	€
Fixed Assets at Book Value (384,000 - depreciation 12,000)		372,000
Current Assets		
Stock on hand	96,000	
Debtors (Note 1)	98,000	
Prepaid rent (Note 2)	37,500	
	<u>231,500</u>	
Current Liabilities		
Bank overdraft	110,700	
Trade creditors (Note 3)	40,000	
Accrued general exp (Note 4)	7,500	
	<u>158,200</u>	
Net Current Assets		73,300
Total assets less current liabilities		445,300
Less: Bank Loan at 6% (Note 5)		<u>175,500</u>
Net Assets		<u>269,800</u>
Share Capital and Reserves		
Ordinary share capital		250,000
Profit and loss account		<u>19,800</u>
		<u>269,800</u>

Note 1: Debtors is calculated as 70% of both February (€60,000) and March's sales (€80,000).

Note 2: Rent was paid for 6 months. By the end of March only 3 months have elapsed thus rent is prepaid by 3 months = €150,000 x 3/12.

Note 3: Trade creditor represents March's purchases.

Note 4 : Accrued expenses represent unpaid general expenses for March.

Note 5 : €1500 a month was paid off the loan