

FNSACC527

# **ASSESSOR GUIDE**

# Provide management accounting information

Assessment 3 of 3

Project



#### **Assessment Details**

#### Task overview

This project based assessment task allows the student to demonstrate and apply their knowledge and skills using practical problem solving across different products, services, organisations, and sets of operating and cost data.

This project based assessment task is divided into six [6] parts:

- Project 1: (Cost per Unit and Percentage Analysis) Pretori Industries Pty Ltd
- Project 2: (Cost Analysis and Behaviour) Montville Products Pty Ltd
- Project 3: (Payroll) Oswald Lighting Pty Ltd
- Project 4: (CVP and Break-even Analysis) ACI Computer Services
- Project 5: (Activity-Based Costing) Manufacturer, Schlepco
- Project 6: (Variable Costing System) Medica Express

Read the Scenarios and instructions and complete each project.

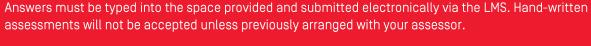


### **Assessment Information**

#### Submission

You are entitled to three [3] attempts to complete this assessment satisfactorily. Incomplete assessments will not be marked and will count as one of your three attempts.

All questions must be responded to correctly to be assessed as satisfactory for this assessment.





#### Reasonable adjustment

Students may request a reasonable adjustment for assessment tasks.

Reasonable adjustment usually involves varying:



- the processes for conducting the assessment (e.g. allowing additional time)
- the evidence gathering techniques (e.g. oral rather than written questioning, use of a scribe, modifications to equipment)

However, the evidence collected must allow the student to demonstrate all requirements of the unit.

Refer to the Student Handbook or contact your Trainer for further information.



Please consider the environment before printing this assessment.



### Assessor Instructions for Assessment Task 3

### Purpose of the Task

This project based assessment task allows the student to demonstrate and apply their knowledge and skills using practical problem solving across different products, services, organisations, and sets of operating and cost data.

#### Guidance to Assessors About this Task

Review all evidence and mark using the assessment checklist and assessment marking criteria listed below.

# Task Instructions: Project 1: (Cost per Unit and Percentage Analysis) Pretori Industries Pty Ltd

Pretori Industries Pty Ltd is a small manufacturing company that does not use a perpetual inventory system. For the month of August, 15,000 units were produced. The following information was provided concerning factory operations for 31 August:

	Amount in \$
Work in process, 1/8	9,300.00
Machine maintenance	800.00
Depreciation on machinery	1,500.00
Supervisor's wages	8,500.00
Wages for machine operators	36,000.00
Rent for the factory	4,000.00
Cleaning costs for the factory	800.00
Purchases of raw materials	70,000.00
Freight inwards on raw materials	1,800.00
Stock of raw materials on hand, 1/8	7,500.00
Stock of raw materials on hand, 31/8	8,600.00
Work in process, 31/8	5,800.00
Accrued wages for machine operators	9,000.00
Electricity	1,200.00

# Steps

You are required to:

a. Prepare a manufacturing statement (Also commonly referred to as the schedule of cost of goods manufactured) for Pretori Industries Pty Ltd for the month of August. Assume that all Direct Materials, Direct Labour, and Factory Overhead are added to the Work in Progress asset account.



- b. Calculate the cost per unit for the month for:
  - Direct materials
  - Direct labour
  - Factory overhead
- c. Perform a percentage analysis of each element of production based on the cost of production.
- d. Prepare the journal entry to record the transfer of the assets from the Work in Progress (WIP) account for the Cost of Goods Sold Transfers from WIP account. In a separate document, summarise the key procedures for preparing, undertaking, and finalising a meeting as per CBSA's Communication Policy & Procedures. Save it with the file name 'Meeting Procedures Assessment Task 3 your name'.

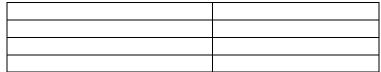
Guidance: Add additional rows as required.

<ol> <li>Manufacturing statement</li> </ol>	ent	eme	state	uring	Manufact	a.
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\$	\$

b. Cost per unit for the mon	tr	)
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c. Percentage analysis



d. Closing entry

# Marking guide

a) The manufacturing statement for the month of August appears below:

### **Pretori Industries Pty Ltd**

Manufacturing Statement

For the month of 31 August

	\$	\$
Direct Materials, 1/8	7,500.00	<b>D</b>
·	•	
Add: Purchases	70,000.00	
Add: Freight-in	<u>1,800.00</u>	
Total Materials Available for Use	79,300.00	
Less: Direct Materials, 31/8	<u>8,600.00</u>	
Total Direct Materials Used		70,700.00
Add: Wages for Machine Operators	36,000.00	
Add: Accrued Labour	9,000.00	45,000.00
	<u></u>	
Add: Factory Overhead		<u>*16,800.00</u>
Total Manufacturing Overhead		132,500.00
Add: Work in process, 1/8		9,300.00
Total Goods Placed in Process		141,800.00
Less: Work in process, 31/8		5,800.00
Total Work in process Assets		<u>136,000.00</u>
Supervisor's salary	8,500.00	
Rent	4,000.00	
	·	
Electricity	1,200.00	
Machine maintenance	800.00	
Cleaning expenses	800.00	
Depreciation on machinery _	<u>1,500.00</u>	

<u>16,800.00</u>

\*Total Factory Overhead

b) The cost per unit for the month is:

Direct materials (\$70,700/15,000 units) 4.71

Direct labour (\$45,000/15,000 units) 3.00

Factory overhead (\$16,800/15,000 units) \_\_\_\_\_1.12

8.83

c) Percentage analysis:

Direct materials (\$70,700/136,000) x 100 52%

Direct labour (\$45,000/136,000) x 100 33%

Factory overhead (\$16,800/136,000) x 100 12%

d) The closing entry is as follows:

Transfers to WIP (COGS) 136,000.00

Work in progress 136,000.00

Transfer to WIP to Trading account

Submit your assessment via the LMS.

# Task Instructions: Project 2: (Cost Analysis and Behaviour) Montville Products Pty Ltd

In project 2 you will prepare journal entries for transactions for the month of April in accordance with policies and procedures. Tables are provided for you on the page that follows, use these to prepare your journal entries.

Montville Products Pty Ltd is a manufacturing company which has the following transactions for the month of April.

		\$
Apr 2	Purchase of raw materials on credit. GST paid \$5,000.00	55,000.00
Apr 5	Issue of direct materials to production	34,000.00
Apr 10	Indirect materials issued to production	4,500.00
Apr 12	Gross amount of factory payroll paid	46,000.00
Apr 15	Direct labour incurred	28,000.00
Apr 18	Indirect labour incurred	18,000.00
Apr 20	Invoices for factory overhead on credit. GST \$3,000.00	33,000.00
Apr 23	Accrued telephone factory charges	1,200.00
Apr 28	Cost of finished goods in April	95,000.00
Apr 29	Sales in April on credit. GST collected \$14,000.00	154,000.00
Apr 29	Goods returned WIP to Raw Materials Inventory	800.00
Apr 30	Goods returned to supplier	800.00

# **Steps**

Prepare journal entries for these transactions for the month of April in accordance with policies and procedures. Tables are provided for you on the page that follows, use these to prepare your journal entries.

Date	Particulars	Debit	Credit



Date	Particulars	Debit	Credit

1		

Submit your assessment via the LMS.



# **Marking Guide**

Date	Particulars	Debit	Credit
Apr-02	Raw Materials	50,000.00	
	GST paid	5,000.00	
	Accounts payable		55,000.0
	Purchase of raw materials on credit		
Apr-05	Work in process - direct materials	34,000.00	
	Raw Materials		34,000.0
	Issuance of direct materials to production		
Apr-10	Work in process - factory overhead	4,500.00	
	Raw Materials		4,500.0
	Issuance of indirect materials to production		
Apr-12	Salaries and wages	46,000.00	
	Cash in bank		46,000.0
	Payment of gross amount of factory payroll		
Apr-15	Work in process - direct labour	28,000.00	
	Salaries and wages		28,000.0
	Incurrence of direct labour		
Apr-18	Work in process - factory overhead	18,000.00	
	Salaries and wages		18,000.0
	Incurrence of indirect labour		
Apr-20	Work in process - factory overhead	30,000.00	
	GST paid	3,000.00	

	Accounts payable		33,000.00
	Invoices for factory overhead on credit		
Apr-23	Work in process - factory overhead	1,200.00	
	Accrued telephone factory charges		1,200.00
	Accrual of telephone factory charges		
Apr-28	Finished Goods	95,000.00	
	Work in Process		95,000.00
	Cost of finished goods in April		
Apr-29	Accounts receivable	154,000.00	
	Sales		140,000.00
	GST collected		14,000.00
	Sales on credit in April		
Apr-29	Raw Materials	800.00	
	Work in Process - direct materials		800.00
	Returned goods from WIP to raw materials inventory		
Apr-30	Accounts payable	880.00	
	Raw Materials		800.00
	GST paid		80.00
	Returned goods to supplier		

# Task Instructions: Project 3: (Payroll) Oswald Lighting Pty Ltd

Oswald Lighting Products Pty Ltd has twenty (20) employees. Fifteen (15) employees are employed in the factory, and five (5) employees are employed in the administration department.

The average wage rate for each factory employee is \$23.00 per hour. The average wage rate for each office worker is \$30.00 per hour. Each factory employee works a 40-hour week, and the administration workers work a 37½-hour week.

Each employee is entitled to four (4) weeks annual leave plus 17  $\frac{1}{2}$ % loading and two (2) weeks sick leave per year.

The gross factory wages for the month of October are \$82,387.00 made up of the following:

Direct labour \$55,200.00

Direct labour overtime \$2,300.00

Indirect labour \$22,500.00

Annual leave for one factory worker for two [2] weeks plus 171/2% loading

One day's sick leave for one office worker

Deductions from gross wages are as follows:

PAYG withholding \$18,432.00

Superannuation deductions to S Super \$975.00

Union fees \$480.00

### Steps

You are required to:

- 1) Calculate (to the nearest dollar amount) the provision for annual and sick leave for October.
- 2) Prepare journal entries for:
- a. Monthly provision for annual and sick leave for October.
- b. Allocations to the work in process and factory overhead accounts (timesheet analysis).
- c. Accruals, deductions and payroll clearing (factory payroll for October).

Tables are provided for you on the following pages, use these to prepare your journal entries.



	No of employees	Average wage rate	Hours per week	Annual leave entitlement	Leave loading	Sick leave
Factory	15	23.00	40	4	17.50%	2
Administration	5	30.00	37.5	4	17.50%	2

	Annual leave	Leave loading	Total	For October
Factory	55,200.00	9,660.00	64,860.00	5405.00
	[15 x \$23.00 x 40 x 4]	(55,200.00 x 17.5%)	(55,200 + 9600.00)	(64,860.00/12)
Administration	22,500.50	3,937.50	26,437.50	2,203.13
	[5 x \$30.00 x 40 x 4]	(22,500.00 x 17.5%)	(22,500.00 + 3937.50)	[26,437.50/12]
Total provision for annual lea	ave			7,608

	Sick leave	Total	For October
Factory	27, 600.00 [15 x \$23.00 x 40 x 2]	27, 600.00	2,300.00 [27,600.00/12]
Administration	11,250.00 (5 x \$30.00 x 40 x 12)	11,250.00	937.50 (11,250.00/12)
Total provision for sick leave			

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Particulars	Debit	Credit

Particulars	Debit	Credit



Submit your assessment via the LMS.

# Assessment marking criteria: Project 3: (Payroll) Oswald Lighting Pty Ltd

Marking Guide				
			\$	\$
	Factory overhead control	Dr	10,846.00	
	Provision for annual leave	Cr		7,608.00
	Provision for sick leave	Cr		3,238.00
	(Monthly entry for provision acc	counts)		
	Work in process	Dr	59,887.00	
	Factory overhead control	Dr	22,500.00	
	Labour control	Cr		82,387.00
	(October timesheet analysis)			
	(\$82,837.00 = \$55,200.00 + \$2,16 loading for factory worker \$2,16 worker)			
	Labour control	Dr	82,387	
	Provision for annual leave	Dr	2,162	
	Provision for sick leave	Dr	225	
	PAYG	Cr		18,432
	Superannuation	Cr		975
	Union fees	Cr		480
	Payroll clearing	Cr		64,887
	[Factory payroll for October]			



# Task Instructions: Project 4: (CVP and Break-even Analysis) ACI Computer Services

ACI Computer Services has the following income statement for the year ended 30 June.

·		\$
Sales		900,000.00
Less cost of goods sold:		
Direct materials	384,000.00	
Direct labour	204,000.00	
Variable factory overhead	88,000.00	
Fixed factory overhead	28,000.00	704,000.00
Gross profit		196,000.00
Less operating expenses:		
Selling		
Variable expenses	66,000.00	
Fixed expenses	11,040.00	77.040.00
Administration		118,960.00
Variable expenses	50,000.00	
Fixed expenses	23,200.00	73,200.00
Net profit		45,760.00
	i	

# **Steps**

You are required to:

- a) Recast the income statement to determine the contribution margin.
- b) Perform cost volume profit (CVP) analysis to determine the break-even point, e.g. the number of units that must be sold to break-even and the dollar value at break-even point if 180, 000 units are produced.
- c) Confirm your calculations in (b) are approximately correct by performing a break-even analysis using the contribution margin ratio method.
- d) What if net profit increased by \$30,000, determine the new break-even point for no of units to be sold.
- e) If the new net profit figure is required after tax, calculate the net profit before tax if the company pays tax at the rate of 30%.



- f) What is the margin of safety between budgeted sales and break-even sales amounts expressed as a percentage?
- g) What are three (3) limitations with respect to the assumptions made in cost volume profit (CVP) analysis?

### a) Income statement

	Debit	Credit
Sales		
Variable costs		
Gross contribution margin		
Net contribution margin		
Fixed costs		
Net income		

b) CVP analysis

Break-even analysis	]
If net profits increased by \$30,000, what is the new break-even point for no of units to	be sol

e) Calculate the new profit figure before tax. Consider that the company pays tax at the rate of 30%.

Determin response	e the margin of s must be a perce	safety between entage.	budgeted sales	and break-ev	en sales amounts
] Identify t	hree (3) limitatio	ns of using CVF	analysis.		
	hree (3) limitatio	ns of using CVF	analysis.		
1	hree (3) limitatio	ns of using CVF	analysis.		
	hree (3) limitatio	ns of using CVF	analysis.		

Submit your assessment via the LMS.



### Marking guide

a) The income statement recast to show contribution margin as follows:

Sales	900,000.00

Variable Costs

Direct materials	384,000.00

**Fixed Costs** 

b) The total sales figure is \$900,000.00. If 180,000 units are produced, then the sale price per unit is \$900,000.00/180,000 = \$5.00. The variable cost per unit is [\$676,000.00 + \$116,000.00]/180,000 = \$792,000.00/180,000 = \$4.40

No of units to break-even is:

$$$5.00p - $4.40p = $62,240.00$$

$$$0.60p = $62,240.00$$

$$p = 103,734 \text{ units}$$

Dollar value at break-even point:  $103,734 \times $5.00 = $518,670.00$ 

c) Using the contribution margin ratio method:

$$108,000/900,000 = .12$$
 \$62,240/.12 = \$518,670 approximately

d) The new net profit figure would be \$45,760.00 + \$30,000.00 = \$75,760.00

= Fixed costs + Target net profit/contribution margin per unit

[\$62,240.00 + \$75,760.00]/0.60 = 230,000 units.



- e) \$108,229 [\$75,760.00/70%]
- f) 42.37% (\$900,000.00 518,667.67)/900,000.00)
- g) Three (3) limitations required:

The following assumptions limit the accuracy and dependability of CVP analysis:

- 1. The relevant range is specified so that fixed and variable expenses can be defined in relation to a specific period of time and a designated range of volume level. This infers that the variable cost per unit will not change and that total fixed costs will not change. It also infers that the sale of products and fees for services will not change in the relevant period.
- 2. All costs are treated as either fixed or variable. Semi-variable costs are not taken into account.
- 3. As unit variable costs are assumed to remain the same, therefore the assumption is that there will be no quarterly discount on materials or increases in labour productivity or other changes related to costs.
- 4. Volume is assumed to be the only important factor affecting cost behaviour. No allowances are made for changes in sale price, production methods or market behaviour.
- 5. Inventory levels are not taken into account, production volume and sales volume are assumed to be the same.

The technology used in production is assumed to remain the same.



# Task Instructions: Project 5: (Activity-Based Costing) Manufacturer, Schlepco

Manufacturing company, Schlepco has the following areas of activity, cost drivers and application rates:

Activity area	Cost driver	Application rate
Design of product	Changes to design	\$1,000.00 per change
Materials	No of requisitions	\$150.00 per requisition
Assembly	Machine hours	\$100.00 per machine hrs
Packing	Labour hours	\$60.00 per labour hour
Sales and distribution	No of sales orders	\$50.00 per unit

Dι	uring an	accounting	period, t	he following	cost driver	information is	s aathered <sup>.</sup>

No of design changes - 4

No of material requisitions - 40

Machine hours for assembling – 3,000 hours

Labour hours – 1,800 labour hours

Sales orders - 60

# Steps

If 500 units are produced and using activity-based costing (ABC) calculate:

- a) the total cost of production;
- b) cost per unit for activity level.

a.	Total cost of production

b. Cost per unit for each activity level





Submit your assessment via the LMS.

Marking Guide			
Activity		Cost	Unit cost
		\$	\$
Design of product	4 x \$1,000.00	4,000.00	8.00
Materials	40 x \$150.00	6,000.00	12.00
Assembly	3,000 hrs x \$100.00	300,000.00	600.00
Packing	1,800 x \$60.00	108,000.00	216.00
Sales and distribution	50 x \$60.00	3,000.00	<u>6.00</u>
		\$ <u>421,000.00</u>	\$842.00
a) \$421,000.00			
b) \$8.00; \$12.00; \$600.00; \$	\$216.00 and \$6.00 (Total cost	per unit \$842.00)	

# Task Instructions: Project 6: . (Variable Costing System) Medica Express

Medica Express, a medical equipment manufacturing company, presents the following data for 2016 for their hospital beds:

0 units
800 units
10,000 units
200 units
\$240.00
\$280.00
\$100.00
\$40.00
\$1,200,000.00
\$800,000.00

# Steps

Compute the unit product cost of one hospital bed using the variable costing method.

Show your solution in the space provided.

### Submission instructions

Submit your assessment via the LMS.

Assessment marking criteria: Project 6:



### Marking guide

Direct materials	\$240.00
Direct labour	\$280.00
Variable manufacturing overhead	\$100.00
Fixed manufacturing overhead	-
Unit product cost	\$620.00

Fixed manufacturing overhead cost is not included while computing the cost of one hospital bed under variable costing system.

### Assessment checklist:

Students must have completed all activities within this assessment before submitting. This includes:

Stud	ent has submitted:	Yes	No
1	Project 1: (Cost per Unit and Percentage Analysis) Pretori Industries Pty Ltd		
2	Project 2: (Cost Analysis and Behaviour) Montville Products Pty Ltd		
3	Project 3: (Payroll) Oswald Lighting Pty Ltd		
4	Project 4: (CVP and Break-even Analysis) ACI Computer Services		
5	Project 5: (Activity-Based Costing) Manufacturer, Schlepco		
6	Project 6: . [Variable Costing System] Medica Express		

**Assessor instructions:** All sections/questions must be completed. Refer to the template for sample answers and benchmarks.

The evidence submitted demonstrates that the student has satisfactorily (S) covered the following criteria or the evidence is Not yet satisfactory (NYS) and requires resubmission.

Proje	ct 1: (Cost per Unit and Percentage Analysis) Pretori Industries Pty Ltd	S	NYS
1	Prepared Manufacturing statement		
2	Determined Cost per unit for the month		
3	Performed a Percentage analysis		
4	Prepared Closing entry		
Project 2: (Cost Analysis and Behaviour) Montville Products Pty Ltd		S	NYS
1	Prepared journal entries for these transactions for the month of April in accordance with policies and procedures.		



Proje	ct 3: (Payroll) Oswald Lighting Pty Ltd	S	NYS
1	Calculate (to the nearest dollar amount) the provision for annual and sick leave for October.		
2	Prepare journal entries for:		
ფ	Monthly provision for annual and sick leave for October.		
	Allocations to the work in process and factory overhead accounts (timesheet analysis).		
Proje	ct 4: [CVP and Break-even Analysis] ACI Computer Services	S	NYS
1	Recast the income statement to determine the contribution margin.		
2	Perform cost volume profit (CVP) analysis to determine the break-even point		
3	Confirmed calculations in (b) are approximately correct by performing a break-even analysis using the contribution margin ratio method.		
4	Determined the new break-even point for no of units to be sold.		
5	calculated the net profit before tax		
6	Determined the margin of safety between budgeted sales and break-even sales amounts expressed as a percentage		
_	Determined three (3) limitations with respect to the assumptions made in cost volume profit (CVP) analysis		
Proje	ct 5: (Activity-Based Costing) Manufacturer, Schlepco	S	NYS
1	Determined Total cost of production		
2	Determined Cost per unit for each activity level		
Proje	ct 6: . (Variable Costing System) Medica Express	S	NYS
1	Computed the unit product cost of one hospital bed using the variable costing method.		



### Congratulations you have reached the end of Assessment 3

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