

**VCE Accounting Unit 4: Nano Exam 9. Marks = 30. Time = 30 minutes.**

Piuli owns and manages **eBikes** which trades in electric bikes and Go-Karts.

The following transactions occurred during May 2022:

- 3rd May, purchase of 25 eBikes from GoGreen at \$3300 per unit inc. GST, invoice #77.
- 4th May, freight for delivery of 25 eBikes and 15 electric Go-Karts, \$165 inc. GST, cheque #219.
- 5th May, modifications to Australian Standard A15 — fitting of larger brakes at \$39.60 inc. GST per eBikes delivered re invoice #77, Ace Engineers, invoice #AE3.
- 7th May, paid for monthly advertisement in Melbourne Bike News, cheque #220 inc. GST.
- 31st May, sold 10 eBikes to City Bikes using mark-up of 200%. Invoice #89.

- a. Record the transactions in the stock card assuming the business uses product costing. 4 marks

STOCK CARD: eBikes FIFO										
2022		IN			OUT			BALANCE		
Date	Details	QTY.	COST	VALUE	QTY.	COST	VALUE	QTY.	COST	VALUE
1/5	Balance							3	2900	8700
3/5	Invoice 77	25	3000	75000				3	2900	
								25	3000	83700
5/5	Inv. AE3	25	36	900				3	2900	
								25	3036	84600
31/5	Inv. 89				3	2900				
					7	3036	29952	18	3036	54648

- b. Calculate gross profit for May using product costing. Show workings. 4 marks

**Sales:**  
 (2900 X 3) X 3 units = 26100  
 (3036 X 3) X 7 units = 63756      89856  
 Less Cost of Goods Sold  
 Cost of sales                      29952  
 Freight inwards                150                      30102  
 Gross profit    59754

**Tough question since mark-up had to be applied to two different costs!**

- c. Calculate gross profit for May using period costing. Show workings. 4 marks

**Sales:**  
 (2900 X 3) X 3 units = 26100  
 (3000 X 3) X 7 units = 63000      89100  
 Less Cost of Goods Sold  
 Cost of sales                      29700  
 Freight inwards                150  
 Modifications                      900                      30750  
 Gross profit    58350

**Tough question since mark-up had to be applied to two different costs!**

- d. Jennifer, the accountant, said “the product costing method is preferred”. Explain why. 4 marks

**Income Statement.** Product costing works to produce a more accurate profit since it more closely matches the cost of goods sold to the revenue earned in the reporting period. Cost of sales usually includes additional product costs, such as the modifications in this exercise, that are only counted/expensed when the units are sold, hence cost of sales is more accurate than using period costing which counts all additional product costs in the period they are incurred regardless of how many units are sold. Stakeholders get a more relevant value of cost of goods sold and profit in the Income Statement using product costing. **Balance Sheet.** Value of stock control is more accurate using product costing since the value of stock includes not only the unit cost but other additional product costs, such as modifications. Stakeholders get a more relevant value of stock in the Balance Sheet.

- e. Explain how you would record the transaction on May 5th in the journals if product costing was used and then if period costing was used. 2 + 2 = 4 marks

If product costing was used ... **this transaction would be recorded in the Purchases Journal as the modifications become apart of the value of stock control and the creditor, Ace Engineers, is a subsidiary creditor to Creditors Control.**

If period costing was used ... **this transaction would be recorded in the General Journal as modifications would be treated as a period cost and not part of stock control. Ace Engineers would become a sundry creditor and not a trade creditor.**

<b>eBikes: Income Statement extract for November 2024</b>		
	\$	\$
Sales		60000
Less Cost of Goods Sold		
Cost of sales	20000	
Stock transit insurance	1000	21000
Gross Profit		39000

f. Explain why stock transit insurance is reported in the Income Statement extract for November when the business uses product costing.

2 marks

**Transit insurance could not be logically allocated to the product/s so treated as a period cost. Could also argue that value of transit insurance may be immaterial (relevance) compared to the actual product costs thus treated as period cost.**

g. Calculate the product cost of each Pro Kart using product costing. Show workings.

2 marks

**Pro Karts:  
Supplier cost = \$5000 per unit.  
Cartage = \$20 per unit  
Total product cost = \$5020 per unit.**

<b>WANG TRADERS</b>				
Invoice W876. Date 23/3/25				
To	eBikes	Quantity	Cost	Value
For	Ace Go-Karts	4	\$2500	\$10000
	Green Karts	3	\$3000	\$9000
	Pro Karts	5	\$5000	\$25000
				\$44000
	Cartage inwards	12	\$20	\$240
	Transit insurance			\$100
				\$44340
	GST at 10%			\$4434
	Total owing			\$48774

h. Explain your treatment of the \$100 Transit insurance.

2 marks

**No logical way to allocate the transit insurance since the 3 different Go-Karts are of different values hence not logical to simply divide \$100 by the 12 Go-Karts. Also, even if could allocate logically, the value is immaterial (relevance) so stakeholders would not be disadvantaged if no allocation done. Treat as a period cost.**

i. Record invoice #W876 in the following journals assuming period costing is used. Narrations are not required.

4 marks

<b>Purchases Journal (PJ) extract</b>					
Date	Details	Doc.	Stock Control	GST	Total
2025					
<b>23/3</b>	<b>Wang Traders</b>	<b>W876</b>	<b>44000</b>	<b>4400</b>	<b>48400</b>

<b>General Journal (GJ) extract</b>					
2025		General Ledger		Subsidiary Ledger	
Date	Details	Dr. \$	Cr. \$	Dr. \$	Cr. \$
<b>23/3</b>	<b>Cartage inwards</b>	<b>240</b>			
	<b>Transit insurance</b>	<b>100</b>			
	<b>GST clearing</b>	<b>34</b>			
	<b>Creditors Control</b>		<b>374</b>		
	<b>Wang Traders</b>				<b>374</b>