MyStudyBro - Revision Exercise Tool

This Revision Handout includes the Questions and Answers of a total of 5 exercises!

Chapters:

Budgeting - Unit 2 (Pearson Edexcel)

4 Brainboxxe plc is to introduce a new model of a handheld device. Brainboxxe plc will assemble the device using three parts it will buy from suppliers.

The suppliers have informed Brainboxxe plc that they are able to supply the parts up to the following maximum units for **each** of the first four months of production.

Part X – 40 000 units per month

Part Y – 64 000 units in month 1, increasing by 10% in each and every month thereafter.

Part Z – 80 000 units in month 1, increasing by 5 000 units in month 3. The higher level can then be supplied in every future month.

Brainboxxe plc has agreed to purchase the parts in the maximum units for **each** of the first four months.

Required

(a) Prepare, for **each** of the first four months, a Purchases Budget, **in units**, for each of the three parts X, Y, and Z.

(4)

The handheld device will contain the following quantities of each part:

Part X - 2 per device

Part Y - 4 per device

Part Z - 5 per device.

Brainboxxe plc wishes to produce the same amount for each of the first four months of production. This will be the maximum possible amount of production units of the device for month 1.

Required

(b) Calculate, for month 1, the maximum possible amount of production units of the device.

(4)

(c) Prepare, for **each** of the first four months of production, the inventory budget, in units, for part Y.

(5)

The parts will be purchased at the following prices:

Part X - £6.50 per part

Part Y - £14.25 per part

Part Z - £11.95 per part.

(d) Calculate the total value of the inventory of all **three** parts at the end of month 4.

(9)

In month 5, Brainboxxe plc has identified that the number of units of part Z that are available will determine the maximum level of output.

(e) Calculate, for month 5, the maximum possible level of output.

(2)

(f) Evaluate whether Brainboxxe plc should be worried about the value of parts in inventory at the end of month 4.

(6)

(Total for Question 4 = 30 marks)

Source material for Question 4 is on pages 10 and 11 of the source booklet.

If you answer Question 4 put a cross in the box ☒ .

4 (a) Prepare, for **each** of the first four months, a Purchases Budget, **in units**, for each of the three parts X, Y, and Z.

(4)

Purchases Budget (units)	Month 1	Month 2	Month 3	Month 4

(b) Calculate, for month 1, the maximum possible amount of production units of the device.

(4)

(c) Prepare, for **each** of the first four months of production, the inventory budget, in units, for part Y.

(5)

Part Y Inventory Budget (units)	Month 1	Month 2	Month 3	Month 4

Workings

Question Number	Answer	Mark
4 (a)	**AO1 (4)**	**(4)**

Question Number	Answer	Mark
4 (b)	**AO2 (4)**	**(4)**

Question Number	Answer	Mark
4 (c)	**AO2 (5)**	**(5)**

Question Number	Answer	Mark
4 (d)	**AO1 (1), AO2 (3), AO3 (5)**	**(9)**

Question Number	Answer	Mark
4 (e)	**AO3 (2)**	**(2)**

4									
(a) [AO1 4]									
Purchases Budget (units)	Month 1		Month 2		Month 3		Month 4		
X	40 000		40 000		40 000		40 000	**(1) AO1**	
Y	64 000		70 400	**(1)both AO1**	77 440		85 184	**(1) AO1**	
Z	80000		80 000		85 000		85 000	**(1) AO1**	
								4 marks	
(b) [AO2 4]		Units per							
Possible Production	Supply	device	Production						
X	40 000	2	20 000	**(1) AO2**					
Y	64 000	4	16 000	**(1) AO2**					
Z	80 000	5	16 000	**(1) AO2**					
Maximum production	16000	units per	month	**(1) AO2**					
					4 marks				
(c) [AO2 5]									
Y Inventory Budget (units)	Month 1		Month 2		Month 3		Month 4		
Opening inventory	0		0		6 400		19 840	**(1of) AO2**	
Purchased	64 000		70 400		77 440		85 184	**(1of) AO2**	
Used in Production	(64 000)		(64 000)		(64 000)		(64 000)	**(1of) AO2**	
Closing inventory	0		6 400	**(1) both AO2**	19 840		41 024	**(1of) AO2**	
								5 marks	
(d) [AO1 1] [AO2 3] [AO3 5]	Units		Used in		Inventory		_		
Inventory Value (£)	Purchased		Production		end mnth 4		Value		
X	160 000		128 000	**(1) both AO3**	32 000	**(1) AO3**	6.5	208 000	**(1of) AO2**
Y					41 024	**(1of) AO3**	14.25	584 592	**(1of) AO2**
Z	330 000		320 000	**(1) both AO3**	10 000	**(1) AO3**	11.95	119 500	**(1of) AO2**
								912 092	**(1of) AO1**
									9 marks
(e) [AO3 2]									
Possible Production	Purchased	In Inventory	Total		per device	Production			
Units of Z	85 000	10 000	95 000	**(1of) AO3**	5	19 000	**(1of) AO3**		
							2 marks		

Question Number	Indicative Content	Mark
4 (f)	**AO4 (6)** <u>Agree with concern</u> The value of inventory is over £900 000 (0/f), which is a large amount. Would there be issues about security? The parts must be small, so may be easily stolen. A high inventory value means a higher bill for insurance of inventory. Having over £900 000 (o/f) tied up in inventory does not help cash flow, or the payment of bills. Would the parts become obsolete due to technology, if left in inventory for some time? <u>Against concern</u> Are there issues about storage space? Possible not, as they are parts for a hand held device. <u>Other points</u> We do not know the size of Brainboxxe plc. Is inventory of £900 000 (o/f) a large or small figure for this company? <u>Decision</u> The company probably should be concerned that the inventory level of parts has reached a value of over £900 000 (o/f) in four months.	**(6)**

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding which are recall based. Generic assertions may be present. Weak or no relevant application to the scenario set.
Level 2	3-4	Elements of knowledge and understanding, which are applied to the scenario. Some analysis is present, with developed chains of reasoning, showing causes and/or effects applied to the scenario, although these may be incomplete or invalid. An attempt at an evaluation is presented, using financial and perhaps non-financial information, with a decision.

Level 3	5-6	Accurate and thorough knowledge and understanding. Application to the scenario is relevant and effective. A coherent and logical chain of reasoning, showing causes and effects is present. Evaluation is balanced and wide ranging, using financial and perhaps non-financial information and an appropriate decision is made.

Question Number	Answer	Mark
5 (a)	**AO2 (6)** **AO2: Six marks for correct calculation of figures in statement of changes in equity.** A - 320 **(1) AO2** B - 506 **(1) AO2** C – 0 **(1) AO2** D - 89 **(1) AO2** E - 122 **(1of) AO2** F - 572 **(1of) AO2**	**(6)**

4 Zimba Timber Limited is to start business on 1 January 2019 buying timber from suppliers, which is then sold to customers.

The following budgeted information is available concerning purchases for the store:

- In the period January to April 2019 purchases are expected to be 2 600 units per month
- The average cost of purchase will be £14 per unit
- The breakdown of purchases will be:
  - 45% for cash
  - 35% on one month's credit
  - 15% on two months credit
  - 5% on three months credit.

You are the accountant for Zimba Timber Limited, and have to prepare the budgets in columnar format.

Required

(a) Prepare, for **each** of the **four** months from January to April 2019, the:

(i) purchases budget, in pounds (£)

(2)

(ii) cash budget extract, showing the amount paid to suppliers

(8)

(iii) trade payables budget showing the amount owed to suppliers at the end of each month.

(10)

Suppliers have stated that they will offer a 2% discount if Zimba Timber Limited pay for its **credit purchases** within the same month as the purchase.

(b) Calculate, for the four months January to April 2019, the total amount of discount Zimba Timber Limited would receive if it accepted the offer of a 2% discount for payment within the same month as the credit purchase.

(4)

(c) Evaluate, from the viewpoint of Zimba Timber Limited, whether it should pay suppliers within the same month as purchase.

(6)

(Total for Question 4 = 30 marks)

Question Number	Answer	Mark
4(a)(i)	**AO1 (2)** **AO1: Two marks for monthly entries in purchases budget.**	**(2)**

(a) (i) Purchases Budget								
	January		February		March		April	
	36 400		36 400	**(1) AO1**	36 400		36 400	**(1) AO1**
								2 marks

Question Number	Answer	Mark
4(a)(ii)	**AO1 (2), AO2 (6)** **AO1: Two marks for entries for cash purchases from February to April and totals.** **AO2: Six marks for cash entry for January and credit entries.**	**(8)**

(a)(ii) Cash Budget extract								
	January		February		March		April	
Cash	16 380	**(1) AO2**	16 380		16 380		16 380	**(1) AO1**
One month credit			12 740	**(1) AO2**	12 740		12 740	**(1) AO2**
Two months credit					5 460	**(1) AO2**	5 460	**(1) AO2**
Three months credit							1 820	**(1) AO2**
Total	16 380		29 120		34 580		36 400	**(1 of) AO1**
								8 marks

Question Number	Answer	Mark
4(a)(iii)	**AO1 (1), AO2 (6), AO3 (3)** **AO1: One mark for totals.** **AO2: Six marks for all entries for January, one month's credit for February to April entries, two months credit for March and April entries, and April entry for three months credit.** **AO3: Three marks for two months credit for February and three months credit for February and March.**	**(10)**

(a)(iii) Trade Payables								
	January		February		March		April	
One month credit	12 740	**(1) AO2**	12 740		12 740		12 740	**(1) AO2**
Two months credit	5 460	**(1) AO2**	10 920	**(1)AO3**	10 920		10 920	**(1) AO2**
Three months credit	1 820	**(1) AO2**	3 640	**(1)AO3**	5 460	**(1)AO3**	5 460	**(1) AO2**
	20 020		27 300		29 120		29 120	**(1 of) AO1**
								10 marks

Question Number	Answer	Mark
4(b)	**AO3 (4)** **AO3: Four marks for correct calculation of discount.** Monthly purchases on credit = (36 400 - 16 380) **(1 of) AO3** = £20 020 **(1) AO3** Discount = 20 020 x 2% = £400.40 **(1) AO3** Four months= £400.40 x 4 = £1 601.60 **(1) AO3**	**(4)**

Question Number	Indicative Content	Mark
4 (c)	**AO4 (6)** <u>Case for paying within the same month</u> A total of £1 601.60 (o/f) would be saved / received as a discount. This would increase profit and maybe help cash flow, less would need to be paid out each month after April. Better relationship with suppliers. <u>Case against paying in the same month</u> It would not help cash flow for the first four months. There are no details for sales available, but it would appear that a large fraction of sales may have to be made in the same month as purchase. <u>Decision</u> It depends upon the cash flow situation. If cash flow allows, it is a good idea to pay for credit purchases in the same month.	**(6)**

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding which are recall based. Generic assertions may be present. Weak or no relevant application to the scenario set.
Level 2	3-4	Elements of knowledge and understanding, which are applied to the scenario. Some analysis is present, with developed chains of reasoning, showing causes and/or effects applied to the scenario, although these may be incomplete or invalid. An attempt at an evaluation is presented, using financial and perhaps non-financial information, with a decision.
Level 3	5-6	Accurate and thorough knowledge and understanding. Application to the scenario is relevant and effective. A coherent and logical chain of reasoning, showing causes and effects is present. Evaluation is balanced and wide ranging, using financial and perhaps non-financial information and an appropriate decision is made.

SOURCE MATERIAL FOR USE WITH QUESTION 7

7 ZimbaPower Electrical Limited buys and sells electrical goods. The company has many stores throughout the country, and is to open its first store in the city of Naniuke on 1 February 2017.

The following information is available concerning purchases for the Naniuke store:

- In the period February to July, monthly purchases are expected to be 1 200 units each month.
- The average cost of a purchase is £60 per unit.
- The credit terms given by suppliers are:
  - 10% sell only for cash
  - 60% give one month's credit
  - 25% give two months' credit
  - 5% give three months' credit.
- Full advantage is taken of credit terms offered by suppliers.

You are the Cost Accountant for ZimbaPower Electrical Ltd, and have to prepare the budgets in columnar format.

Required:

(a) Prepare for **each** of the months from February to July for the Naniuke store the:

(i) purchases budget, in pounds (£)

(2)

(ii) trade payables budget, showing the amount owed to suppliers at the end of **each** month.

(10)

The following information is available for forecasted sales at the Naniuke store:

- The mark up on all units will be 100%.
- All units are to be sold in the same month as purchase.
- Sales are made on the following terms:
  - 80% are for cash
  - 20% will spread payments equally over a 6-month period, with the first payment due one month after the sale.

Required:

(b) Prepare for **each** of the months from February to July the:

(i) sales budget, in pounds (£)

(2)

(ii) trade receivables budget, showing the amount owed by customers at the end of **each** month.

(6)

The company is considering adding interest on to sales on credit.

(c) State:

(i) **two** advantages of adding interest on to sales on credit
(ii) **two** disadvantages of adding interest on to sales on credit.

(4)

ZimbaPower Electrical Limited has estimated the figures that will be entered into the budgets for the store at Naniuke.

(d) Evaluate the possible accuracy of the estimates ZimbaPower Electrical Limited has entered into the budgets for February to July.

(8)

(Total for Question 7 = 32 marks)

Answer space for Question 7 is on pages 32 to 36 of the question paper.

7(a)(i) Purchases	February		March		April		May		June		July	
	72 000		72 000		72 000	√	72 000		72 000		72 000	√
											(2)	
7(a)(ii) Trade Payables	February		March		April		May		June		July	
One month credit	43 200		43 200		43 200		43 200		43 200		43 200	√
Two months credit	18 000	√	36 000	√	36 000		36 000		36 000		36 000	√
Three months credit	3 600	√	7 200	√	10 800	√	10 800		10 800		10 800	√
Total	64 800		86 400		90 000	√of	90 000		90 000		90 000	√of
											(10)	
7(b)(i) Sales	February		March		April		May		June		July	
	144 000		144 000		144 000	√	144 000		144 000		144 000	√
											(2)	
7(b)(ii) Trade Receivables	February		March		April		May		June		July	
Six months	28 800	√	52 800	√	72 000	√	86 400	√	96 000	√	100 800	√
											(6)	

7(c)(i) Two advantages of adding interest:
- income earned from interest √
- helps cash flow as more customers may pay by cash √
- makes customers pay more quickly √

7(c)(ii) Two disadvantages of adding interest:
- credit customers may buy from other suppliers who do not charge interest√
- administration costs √
- item is now more expensive so sales may reduce √
- may increase bad debts √

(4)

7 (d)

For accuracy

Simba have other stores around the country.√ They can look at the figures of similar sized stores. √

If they have many stores and are opening another store, they are probably a successful company, √ so are probably good at predicting figures. √

Against accuracy

They have not had a store in Naniuke before, so do not know what to expect. √
They may not have accurately factored in local competition √ and the reaction of local competition to a new store. √
They may not have predicted accurately changes in the economic cycle √, having sales the same in each month. √
Simba may not have taken into account customer loyalty to existing stores, √ and it may take some months to build up their own customer loyalty. √
This may have to be done by offering discounts, special offers etc which will alter sales figures. √
Estimates ignore the falling value of money over time √
Sales may be affected by seasonal factors √
There may be changes in technology that result in a different sales level √

Maximum for arguing one side 4 marks

Conclusion – 2 marks
Should relate to points made above

Simba have predicted /not predicted figures accurately.

(8)

Total for Question 7 = 32 marks

2 Soyara plc, a major car producer based in Asia, is to start selling a new model of car, the Zencar, on 1 October 2017, which it will export worldwide. Soyara plc is preparing budgets for the next trading period, July to December 2017.

The budgeted sales for Zencars for the period July to December 2017 are:

- Sales in Asia are forecast to be constant at 12 000 cars per month.
- Sales in Europe are expected to start at 2 000 cars for October.
  - Every month sales are then forecast to rise by 10% on the previous month.
- Sales in America are expected to be 6 000 cars in October.
  - After October, in every month, sales are then forecast to fall by 15% on the previous month.
- Sales in Australia are expected to be 4 000 cars in October.
  - Sales in November are then expected to be only 30% of the October figure.
  - Sales are then expected to rise by 20% each month on the previous month.

Required

(a) Prepare the Sales Budget showing the number of cars sold for the three-month period October to December 2017. The budget must show the forecast number of cars sold for Asia, Europe, America and Australia for **each** month, and a total forecast sales figure for **each** month using the columns provided in the Question Paper.

(5)

The Zencar is delivered to its export markets using sea transport. The delivery time for America and Australia is one month. The delivery time for Europe is two months. Production for Asia is delivered in the same month as sales.

Soyara plc wishes to increase the inventory of Zencars by 500 cars per month, starting in October 2017.

Required

(b) Prepare, using the columns provided in the Question Paper, the:

(i) Production Budget for Zencars for the five-month period August to December 2017. The budget must show the forecast production for Asia, Europe, America and Australia for **each** month, and a total production figure for **each** month.

(7)

(ii) Inventory Budget for Zencars for the three-month period October to December 2017. The budget should show the number of cars going into inventory **each** month, and the total number of cars in inventory **each** month.

(3)

It is expected that 5% of all cars on the production line will need to be "reworked" to correct small errors. On average, this should take two workers one hour per car to rework. Workers are paid £9.50 per hour.

Required

(c) Prepare, using the columns provided in the Question Paper, a budget to show the cost of "reworking" cars for **each** of the five months August to December 2017.

(5)

90% of the parts for the cars are purchased and delivered for production in the same month. Purchases for the remaining 10% of parts are purchased one month in advance.

Each car will require parts to the value of £2 150.

Required

(d) Prepare, using the columns provided in the Question Paper, a Purchases Budget for **each** of the five months July to November 2017.

(10)

The Zencar will sell for £9 900 per car.

Payment in **Australia** is expected to be made using one of the following three options.

Option 1 – 40% of customers are expected to pay for their new car with cash on the day of purchase.

Option 2 – 35% of customers are expected to buy their new car on the terms "£100 to pay when the car is purchased, then nothing to pay for 18 months". Payment is then made in full 18 months after the date of the sale.

Option 3 – The remaining customers are expected to buy their new car on the terms "10% deposit in the month of sale, then 36 monthly payments of £300, starting one month after the sale".

Required

(e) Prepare, using the columns provided in the Question Paper, an extract from the Cash Received Budget to show the amount of cash received from customers for **each** of the three months, October to December 2017, from sales of Zencar in Australia. The budget must show the amount received **each** month from **each** of the options, and a total for **each** month.

(13)

(f) Evaluate, from the point of view of Soyara plc, **each** of the three payment options, and recommend the most appropriate option.

(12)

(Total for Question 2 = 55 marks)

TOTAL FOR SECTION A = 110 MARKS

Source material for Question 2 is on pages 6 and 7 of the source booklet.

2 (a) Prepare the Sales Budget showing the number of cars sold for the three-month period October to December 2017. The budget must show the forecast number of cars sold for Asia, Europe, America and Australia for **each** month, and a total forecast sales figure for **each** month using the columns provided below.

(5)

Sales Budget (number of cars)	October	November	December
Asia			
Europe			
America			
Australia			
Total Sales			

Workings

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

The Zencar is delivered to its export markets using sea transport. The delivery time for America and Australia is one month. The delivery time for Europe is two months. Production for Asia is delivered in the same month as sales.

Soyara plc wishes to increase the inventory of Zencars by 500 cars per month, starting in October 2017.

(b) Prepare, using the columns provided, the:

(i) Production Budget for Zencars for the five-month period August to December 2017. The budget must show the forecast production for Asia, Europe, America and Australia for **each** month, and a total production figure for **each** month.

(7)

Production Budget (number of cars)	August	September	October	November	December
Asia					
Europe					
America					
Australia					
Inventory					
Total Production					

Workings

(ii) Inventory Budget for Zencars for the three-month period October to December 2017. The budget should show the number of cars going into inventory **each** month, and the total number of cars in inventory **each** month.

(3)

Inventory Budget (number of cars)	October	November	December

Workings

It is expected that 5% of all cars on the production line will need to be "reworked" to correct small errors. On average, this should take two workers one hour per car to rework. Workers are paid £9.50 per hour.

(c) Prepare, using the columns provided, a budget to show the cost of "reworking" cars for **each** of the five months August to December 2017.

(5)

Reworking Budget (£)	August	September	October	November	December

Workings

90% of the parts for the cars are purchased and delivered for production in the same month. Purchases for the remaining 10% of parts are purchased one month in advance.

Each car will require parts to the value of £2 150.

(d) Prepare, using the columns provided, a Purchases Budget for **each** of the five months July to November 2017.

(10)

Purchases Budget (£)	July	August	September	October	November

Workings

(e) Prepare, using the columns provided, an extract from the Cash Received Budget to show the amount of cash received from customers for **each** of the three months, October to December 2017, from sales of Zencar in Australia. The budget must show the amount received **each** month from **each** of the options, and a total for **each** month.

(13)

Cash Received Budget (£)	October	November	December

Workings

Question Number	Answer	Mark
2 (a)	**AO1 (5)** **AO1 Five marks for a correct row for each continent**	**(5)**

Sales Budget (number of cars)	October	November	December		
Asia	12 000	12 000	12 000	**(1)**	AO1
Europe	2 000	2 200	2 420	**(1)**	AO1
America	6 000	5 100	4 335	**(1)**	AO1
Australia	4 000	1 200	1 440	**(1)**	AO1
Total Sales	24 000	20 500	20 195	**(1)** o/f	AO1

Question Number	Answer	Mark
2 (b)(i)	**AO1 (1), AO2 (6)** **AO2 Six marks for each full row for each continent, but two marks for Europe** **AO1 One mark for totals for all months**	**(7)**

Production Budget (number of cars)	August	September	October		November	December	
Asia			12 000		12 000	12 000	**(1)** AO2
Europe	2 000	2 200	2 420	**(1)** AO2 o/f	2 662	2 928	**(1)** AO2 o/f
America		6 000	5 100		4 335	3 685	**(1)** AO2 o/f
Australia		4 000	1 200		1 440	1 728	**(1)** AO2 o/f
Inventory	____	_____	500		500	500	**(1)** AO2
Total Production	2 000	12 200	21 220		20 937	20 841	**(1)** AO1 o/f

Question Number	Answer	Mark
2 (b)(ii)	**AO1 (3)** **AO1: One mark for every month for production, and two marks for total row**	**(3)**

Inventory Budget (number of cars)	October	November	December	
From production	500	500	500	**(1)** AO1
Total	500	1 000	1 500	**(1)** AO1

Question Number	Answer	Mark
2 (c)	**AO2 (5)** **AO2: Five marks each monthly total**	**(5)**

Reworking budget (£)	August		September		October		November		December	
Production	100		610		1 061		1046.85		1042.05	
Cost per car	£19.00		£19.00		£19.00		£19.00		£19.00	
Total cost	£1,900	**(1)** AO2 o/f	£11,590	**(1)** AO2 o/f	£20,159	**(1)** AO2 o/f	£19,890	**(1)** AO2 o/f	£19,799	**(1)** AO2 o/f

Question Number	Answer	Mark
2 (d)	**AO1(3), AO2 (7)** **AO1: Three marks for cost row, and total purchases** **AO2: Seven marks for all other calculations in purchases budget**	**(10)**

Purchases Budget (£)	July	August		September		October		November	
Cost	£2,150	£2,150		£2,150		£2,150		£2,150	**(1)** AO1
Advance Purchases	200	1 220		2 122		2 094		2 085	**(1)** AO2 o/f
Amount	£430,000	£2,623,000		£4,562,300	**(1)** AO2 o/f	£4,502,100		£4,482,750	**(1)** AO2 o/f
Same month purchases		£3,870,000	**(1)** AO2 o/f	£23,607,000	**(1)** AO2 o/f	£41,060,700	**(1)** AO2 o/f	£40,513,095	**(1)** AO2 o/f
Total purchases	£430,000	£6,493,000		£28,169,300	**(1)** AO1 o/f	£45,562,800		£44,995,845	**(1)** AO1 o/f

Question Number	Answer	Mark
2 (e)	**AO1(4), AO2 (3), AO3 (6)** **AO1: Four marks for Option 3 total and Total Cash Received row** **AO2: Three marks for Option 2 row, and Option 3 monthly totals** **AO3: Six marks for Option 1 row, and Option 3 deposits row**	**(13)**

Cash Received Budget	October		November		December	
Sales	4000		1200		1440	
Option 1	£15,840,000	(1) AO3 o/f	£4,752,000	(1) AO3 o/f	£5,702,400	(1) AO3 o/f
Option 2	£140,000		£42,000		£50,400	(1) AO2 o/f
Option 3 deposits	£990,000	(1) AO3 o/f	£297,000	(1) AO3 o/f	£356,400	(1) AO3 o/f
Option 3 monthly	£0		£300,000	(1) AO2 o/f	£390,000	(1) AO2 o/f
Total Option 3	£990,000		£597,000		£746,400	(1) AO1 o/f
Total Cash Received	£16,970,000	(1) AO1 o/f	£5,391,000	(1) AO1 o/f	£6,499,200	(1) AO1 o/f

Question Number	Answer	Mark
2 (f)	**AO1(1) , AO2(1), AO3(4), AO4 (6)** <u>Option 1</u> Advantages • Brings in a large amount of cash on the day of the sale. • No need to wait for any payment. Disadvantages • May not be helpful in generating sales volume, as many customers cannot afford the £9 900. • The total amount of cash from a sale is less than option 3. <u>Option 2</u> Advantages • May be helpful in generating sales volume, as many customers can afford the £100 to put down. Disadvantages • Does not bring in a large amount of cash on the day of the sale. Company has to wait 18 months for nearly all of the payment, which only totals £9 900. No interest is charged. • It is possible that some of the debts will turn bad before payment is made. If the car has to be repossessed in 18 months time, it will have depreciated in value by then, and the amount owing may not be fully recovered. • The total amount of cash from a sale is less than option 3. <u>Option 3</u> Advantages • May be helpful in generating sales volume, as many customers can afford the deposit of £990. • Brings in some cash on the day of the sale. • The total amount received from each customer is the most using this option ie £11 790. This is £1890 more than the other two options. This is equal to about 6% interest.	**(12)**

	Disadvantages • Does not bring in a large amount of cash on the day of the sale. • Company has to wait for payment over 36 months. <u>Conclusion</u> Option 3 brings in the most cash per sale, although company must wait 3 years to collect all of it. It may be argued that option 1 is the best, as company receive cash on the day of the sale and as 40% of customers use it.	

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-3	Isolated elements of knowledge and understanding recall based. Weak or no relevant application to the scenario set. Generic assertions may be present.
Level 2	4 - 6	Elements of knowledge and understanding, which are applied to the scenario. Chains of reasoning are present, but may be incomplete or invalid. A generic or superficial assessment is present.
Level 3	7 - 9	Accurate and thorough understanding, supported throughout by relevant application to the scenario. Some analytical perspectives are present, with developed chains of reasoning, showing causes and/or effects. An attempt at an assessment is presented, using financial and maybe non-financial information, in an appropriate format and communicates reasoned explanations
Level 4	10 - 12	Accurate and thorough knowledge and understanding, supported throughout by relevant and effective application to the scenario. A coherent and logical chain of reasoning, showing causes and effects. Assessment is balanced, wide ranging and well contextualised using financial and maybe non-financial information and makes informed recommendations and decision(s).

5 Episkopi Engineering Ltd manufactures printers and uses a flexible budget system when preparing annual budgets. The production budget for Year 8 is based on the production budget for Year 7.

Production budget for Year 7

Output (units)	21 000
Costs	**£**
Direct labour	201 600
Direct materials	310 800
Production overheads – semi-variable	59 080
Production overheads – semi-fixed	10 640
Machine maintenance overheads – fixed	38 750
Other overheads – semi-variable	22 640
Total costs	643 510

The following information is available for the production budget for Year 8:

- Direct labour will rise by 10% per unit.
- Direct materials will rise by 5% per unit.
- Semi-variable production overheads include a fixed element of £42 700
- The semi-fixed production overhead is depreciation on machinery. Each machine can only produce 3 000 units per year. Each machine costs £8 000 and will operate for 5 years, before being sold for £400
- The other overheads include a variable element of 19 pence (£0.19) per unit.

Required

(a) Complete the table in the question paper to show the costs for the flexible budget for output levels of 20 000, 22 000 and 25 000 units for year 8.

(24)

(b) Evaluate the usefulness of a flexible budget system for Episkopi Engineering Ltd.

(6)

(Total for Question 5 = 30 marks)

If you answer Question 5 put a cross in the box ☒ .

Source material for Question 5 is on page 13 of the source booklet.

5 (a) Complete the table to show the costs for the flexible budget for output levels of 20 000, 22 000 and 25 000 units for year 8.

(24)

Output (units)	20 000	22 000	25 000
Costs	**£**	**£**	**£**
Direct labour			
Direct materials			
Production overheads – semi-variable			
Production overheads – semi-fixed			
Machine maintenance overheads – fixed			
Other overheads – semi-variable			
Total costs			

Workings

<table>
<tr><th>Question Number</th><th>Answer</th><th>Mark</th></tr>
<tr><td>5 (a)</td><td>
AO1 (5), AO2 (12), AO3 (7)
AO1: Five marks for insertion of fixed overheads, calculation of depreciation per year, and calculation of total costs.
AO2: Twelve marks for correct calculation of direct labour, direct materials and semi-variable overheads.
AO3: Seven marks for correct calculation of number of machines required and semi-fixed overheads, also variable element in semi variable production overheads and fixed element in other overheads.
<table>
<tr><td>Output (units)</td><td><u>20000</u></td><td><u>22000</u></td><td><u>25000</u></td></tr>
<tr><td>Costs</td><td></td><td></td><td></td></tr>
<tr><td>Direct Labour</td><td>211 200 (1) AO2</td><td>232 320 (1) AO2</td><td>264 000 (1) AO2</td></tr>
<tr><td>Direct Materials</td><td>310 800 (1) AO2</td><td>341 880 (1) AO2</td><td>388 500 (1) AO2</td></tr>
<tr><td>Production overheads – semi variable</td><td>58 300 (1) AO2</td><td>59 860 (1) AO2</td><td>62 200 (1) AO2</td></tr>
<tr><td>Production overhead – semi fixed</td><td>10 640 (1) AO3</td><td>12 160 (1) AO3</td><td>13 680 (1) AO3</td></tr>
<tr><td>Machine maintenance overheads - fixed</td><td>38 750</td><td>38 750</td><td>38 750 (1) AO1</td></tr>
<tr><td>Other overheads – semi variable</td><td><u>22 450</u> (1) AO2</td><td><u>22 830</u> (1) AO2</td><td><u>23 400</u> (1) AO2</td></tr>
<tr><td>Total costs</td><td><u>652 140</u> (1) of AO1</td><td><u>707 800</u> (1) of AO1</td><td><u>790 530</u> (1) of AO1</td></tr>
</table>
<u>Workings:</u>
Production overheads – semi variable:
59 080 – 42 700 = 16 380
16 380 / 21 000 = 0.78 (1) o/f AO3
variable element per unit
Production overhead – semi fixed:
(£8 000 - £400)= £7 600 ÷ 5 = £1 520 (1) AO1
depreciation per machine per year
</td><td>(24)</td></tr>
</table>

	22 000 output requires 8 machines, (1) AO3 so £1 520 x 8 = £12 160 o/f 25 000 output requires 9 machines, (1) AO3 so £1 520 x 9 = £13 680 o/f Other overheads: (21 000 x £0.19) = £3 990 £22 640 - £3 990 = £18 650 (1) AO3 fixed element	

Question Number	Answer	Mark
5 (b)	**A04 (6)** <u>Case for flexible budgets</u> • Allows good decision making as "like is compared to like" e.g. costs at the same output levels. • Variances are more meaningful if the volume element is eliminated. • May save time and money by allowing "management by exception" i.e. take action only if there is a variance at the same level of output. • The targets are realistic if the budget is flexible and this may improve motivation of employees. • May allow company to see future possible profit or loss at various output levels. <u>Case against flexible budgets</u> • Drawing up a series of budgets at different output levels will take time which means money. • Figures are only estimates so some variances may be misleading or the action taken in response is inappropriate. <u>Decision</u> Should relate to points made above i.e. flexible budgets are a very useful tool. The decision should be supported by reference to key points of their argument.	**(6)**

Level	Mark	Descriptor
	0	A completely incorrect response.
Level 1	1-2	Isolated elements of knowledge and understanding that are recall based. Generic assertions may be present. Weak or no relevant application to the scenario set.

Level 2	3-4	Elements of knowledge and understanding, which are applied to the scenario. Some analysis is present, with developed chains of reasoning, showing causes and/or effects applied to the scenario, although these may be incomplete or invalid. An attempt at an evaluation is presented, using financial and perhaps non-financial information with a decision.
Level 3	5-6	Accurate and thorough knowledge and understanding. Application to the scenario is relevant and effective. A coherent and logical chain of reasoning, showing causes and effects is present. Evaluation is balanced and wide-ranging, using financial and perhaps non-financial information and an appropriate decision is made.