

- 1 Kirjen Ltd manufactures a single product. Its sales and costs for the financial year ended 31 May 2015 were as follows.

	£	£
Sales (70 000 units)		1 400 000
Direct materials	490 000	
Direct wages	154 000	
Variable overheads	126 000	
Managers' commission	84 000	
Fixed costs	<u>292 500</u>	<u>1 146 500</u>
Profit		<u>253 500</u>

The selling price and costs were constant throughout the financial year. The managers' commission is directly related to the units sold.

To improve the profitability of Kirjen Ltd in 2015-2016, the following options are being considered.

Option 1

Increase the selling price by 5% per unit and spend an additional £65 000 on advertising. Sales would increase by 3000 units. All other costs would be unchanged.

Option 2

Change the supplier for direct materials from a local supplier to an overseas supplier. The cost of direct materials would be reduced by £0.50 per unit. All other costs, selling price and sales quantity would be unchanged.

REQUIRED

- (a) Calculate for the financial year ended 31 May 2015 the:
- break-even point in units
 - margin of safety in units. [3]
- (b) Taking options 1 and 2 independently, calculate the profit for **each** option. Show the contribution per unit for **each** of the options. [7]
- (c) For option 1, calculate the sales in units required to achieve a profit of £289 300 in the next financial year. [4]
- (d)* Evaluate **three** effects on Kirjen Ltd of it changing from a local to an overseas supplier. [11]
- (e) Discuss **two** advantages and **two** limitations of using break-even analysis when making decisions. [8]

- 2 Ian Craven is a trader selling a single product. He stock-takes at the end of each month using the periodic basis. On 1 March 2015 he had a stock balance of 150 units which he had purchased at a cost of £8 per unit. Subsequent transactions over the three month period ending 31 May 2015 are shown below.

Date	Purchases	Sales
3 March		70
9 March	100 @ £8 each	
12 March		90
18 March		30
27 March	170 @ £8.50 each	
2 April		60
8 April		80
13 April	110 @ £8.80 each	
20 April		140
26 April	160 @ £8.80 each	
3 May		90
5 May	100 @ £9 each	
11 May		80
18 May		30
28 May		60

The selling price in March 2015 was £15 per unit and this was increased by 10% for all sales in April 2015 and May 2015.

REQUIRED

- (a) The closing stock valuation at **each** of 31 March 2015, 30 April 2015 and 31 May 2015, using the FIFO **and** LIFO methods of stock valuation. [9]
- (b) The Trading Account for the three-month period ending 31 May 2015, using the FIFO method of stock valuation. [6]
- (c) Distinguish between periodic and perpetual methods of stock valuation. [2]
- (d) Discuss **two** advantages and **two** disadvantages of using the FIFO method of stock valuation. [8]

- 3 Escofet Manufacturing started business on 1 January 2012, and the following information is available for its first three years of trading. This information reflects the trading policies of the business.

	2012	2013	2014
Total fixed costs (£)	17 000	20 200	25 000
Direct materials per unit (£)	10	10	11
Direct labour per unit (£)	6	6	7
Variable overheads per unit (£)	4	4	5
Selling price per unit (£)	30	33	33
Sales (units)	7 200	7 560	8 976
Production (units)	7 500	8 250	9 075

REQUIRED

- (a)* A statement showing the gross profit for **each** of the three years under the FIFO method of valuing issues of stock, if the company used the:
- marginal costing approach to valuing stock
 - absorption costing approach to valuing stock. [24]
- (b) Assess the policies adopted by Escofet Manufacturing in relation to production and sales **and** the financial implications of these policies over the three-year period. [9]

- 4 Chelbond Construction Ltd has been awarded the long-term contract for the building of a replacement factory for Samore Ltd. The contract is expected to last two years. Work commenced on 1 January 2014 and the following details are available for the year ended 31 December 2014.

	£
Machinery delivered to site	620 000
Materials purchased	2 120 000
Materials transferred in from another site	170 000
Material returns to suppliers	98 000
Direct labour	950 200
Plant hire	130 000
Architects' fees	64 300
General expenses	110 500
Cash received	3 690 000

As at 31 December 2014:

Direct labour accrued	83 500
Materials on site not yet used	166 500
Prepayment for plant hire	15 000
Cost of work not certified	199 000

Additional information.

- (i) The machinery was delivered to site on 1 January 2014 and was estimated to last the full two years of the contract with no residual value. Included in the machinery was one machine which cost £80 000. On 30 June 2014, this machine was transferred to another contract. The value at which the transfer took place reflected the exact depreciation charge for the six months which had passed. The straight line method of depreciation is used, with the charge being applied for each part of the year.
- (ii) The company policy is to charge head office expenses to the contract each year at a rate of 3% of the value of work certified by the architects during the year.
- (iii) The cash received represents work certified by the architects as at 31 December 2014 less a 10% retention.
- (iv) The attributable profit formula used by Chelbond Construction Ltd is:

$$\text{apparent (notional) profit} \times \frac{2}{3} \times \frac{\text{cash received}}{\text{work certified}}$$

REQUIRED

- (a) The Contract Account for the year ended 31 December 2014. The balances brought down as at 1 January 2015 should be shown in the Contract Account. [19]
- (b) Describe **two** characteristics of contract costing. [4]
- (c) It is intended that the new factory will include the latest technology and, as a result, lower labour costs at Samore Ltd.

Discuss the social, moral and ethical implications for the workforce of Samore Ltd including the introduction of the latest technology in its new factory with reference to its labour force. [6]

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