

SECTION 3 (80 marks)Answer **one** question**8. Marginal and Absorption Costing**

- (a) Wilson Ltd produces a single product. The company's profit and loss account for the year ended 31/12/2022, during which 80,000 units were produced and sold, was as follows:

	€	€
Sales (80,000 units)		2,160,000
Materials	420,000	
Direct labour	376,000	
Factory overheads	340,000	
Administration expenses	152,500	
Selling expenses	<u>182,750</u>	<u>1,471,250</u>
Net profit		<u><u>688,750</u></u>

The materials and direct labour are variable costs.

Apart from a sales commission of 5% of sales, selling and administration expenses are fixed. Factory overheads are mixed costs, and have behaved in the past as follows:

Year ended	Output (units)	Factory overheads in €
31/12/2021	100,000	420,000
31/12/2020	70,000	300,000
31/12/2019	25,000	120,000

Required:

- (i) Calculate the variable and fixed elements of factory overheads using the high/low method. (Show your workings).
- (ii)
 - a) Calculate the company's break-even point and margin of safety.
 - b) Explain what is meant by the term margin of safety. Reference the figures you have calculated in part (ii)(a) in your answer.
- (iii) Calculate the number of units that must be sold at €30 per unit to provide a profit of 10% of the sales revenue earned from these same units.
- (iv) Calculate the selling price the company must charge per unit in 2023, if
 - sales commission is increased to 6% of sales and
 - fixed costs increase by 10%
 The volume of sales and the profit earned are to remain the same.

- (b) Sky Ltd produced 12,000 units of product Q during the year ended 31/12/2022. 9,000 of these units were sold at €6 per unit. The production costs were as follows:

Direct materials	€0.80 per unit
Direct labour	€1.75 per unit
Variable overhead	€0.60 per unit
Fixed overhead cost for the year	€4,000

Required:

- (i) Prepare profit and loss statements under marginal costing and absorption costing principles for Sky Ltd.
- (ii) Outline the benefits of absorption costing.

(80 marks)