R plc provides you the following standard cost information for another of its products for next year. It is anticipated that the budgeted quarterly production of 30,000 units will equal sales.

|  |  |
| --- | --- |
|  | Per unit |
| Selling price | £1.00 |
| Variable production cost | £0.65 |
| Fixed production cost | £0.20 |

Budgeted annual selling, distribution and administration (all fixed) are £8,400.

Actual quarterly production and sales are provided below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Quarter | 1 | 2 | 3 | 4 |
| Production (units) | 34,000 | 28,000 | 33,000 | 27,000 |
| Sales (units) | 28,000 | 32,000 | 28,000 | 32,000 |

Assume no opening inventory in quarter 1. In addition, assume all budgeted costs are the same as actual costs.

**Required**:

**a) Quarterly marginal costing profit statements.**

**b) Quarterly absorption costing profit statements.**

**c) Explain the main differences between the above 2 costing systems. Why do external financial reporting use absorption costing systems whilst internal reporting favours marginal costing.**

Indicative content plus how the question may be marked (e.g. points based/band marking etc.)

**Quarterly marginal costing profit statements – workings/notes.**

**Contribution/unit = £ [1 – 0.65] = £0.35**

**Fixed production cost per quarter = £0.2 x 30,000 units = £6,000**

**Fixed selling, distribution and administration cost per quarter = £8,400 / 4 quarters = £2,100.**

**Total fixed cost per quarter = [£6,000 + 2,100] = £8,100**

**Quarterly marginal costing profit statements [in £000s]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Quarter** | **1** | **2** | **3** | **4** |
| **Total contribution @£0.35 per unit sold** | **9.8** | **11.2** | **9.8** | **11.2** |
| **Total fixed costs** | **[8.1]** | **[8.1]** | **[8.1]** | **[8.1]** |
| **Profit** | **1.7** | **3.1** | **1.7** | **3.1** |

**Quarterly absorption costing profit statements.**

**Production cost per unit = £[0.65 + 0.2] = £0.85**

**GP per unit sold = £ [1 – 0.85] = £0.15**

**Fixed selling, distribution and administration cost per quarter = £8,400 / 4 quarters = £2,100.**

**Quarterly absorption costing profit statements [in £000s].**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Quarter** | **1** | **2** | **3** | **4** |
| **GP @£0.15 per unit sold** | **4.2** | **4.8** | **4.2** | **4.8** |
| **[Under]/over absorption of fixed production cost @ £0.2/unit [see notes below]** | **0.8** | **[0.4]** | **0.6** | **[0.6]** |
| **Fixed selling, distribution and administration cost** | **[2.1]** | **[2.1]** | **[2.1]** | **[2.1]** |
| **Profit** | **2.9** | **2.3** | **2.7** | **2,1** |

**Notes:**

**Q 1: [34,000 – 30,000] units x £0.2 = £800**

**Q 2: [28,000 – 30,000] units x £0.2 = £ [400]**

**Q 3: [33,000 – 30,000] units x £0.2 = £600**

**Q 4: [27,000 – 30,000] units x £0.2 = £ [600]**

**COSTING SYSTEMS: ABSORPTION AND MARGINAL** **COSTING**

• Absorption Costing requires that all production costs, both fixed and variable, will be charged to obtain a full absorption cost for the product. A profit margin is then added to this.

• Marginal [or Variable] Costing requires that the variable costs only are considered as a means to determine the cost of a product. A contribution margin is then added to this. The selling price less the variable costs is referred to as ‘contribution’. The term means that every time a unit is sold it is contributing to covering the fixed overheads.

So, in essence, the only difference between the 2 costing systems is the treatment on fixed production costs in inventory valuation and profit reporting. In an absorption costing system this is treated as production costs while in a marginal costing system it is written off as period costs.

With external reporting, absorption costing must be used since inventory must be valued at the full production cost [which includes fixed production costs] as per financial reporting standards [Accounting Standards].

With internal reporting to management there is a choice between the 2 costing systems and hence the debate as to which costing system best serves the needs of management. Management prefer the use of marginal costing. The reasons for this are summarised below.

**Summary**: Differences between marginal costing and absorption costing

|  |  |
| --- | --- |
| **Marginal costing** | **Absorption costing** |
| Variable costs charged to products, fixed costs charged to the period | Direct and Indirect costs of production charged to products as required for external reporting. |
| Cannot be used for external reporting – i.e. only internal/management use e.g. How to price a product in the short term if, for example there is surplus capacity in a factory. | May result in problems of over/under recovery of fixed production overhead as seen in absorption costing profit statements. |
| May result in lack of control over fixed costs | Managers range of interest extended by indirect costs in their performance reports |