CHAPTER 2.4 MARGINAL & ABSORPTION COSTING

QUESTION 1

Explain why the profit found when using absorption costing differs from the profit found in marginal costing. [4]

O/N 05/P2 Q3(b), M/J 13/P22/Q3(f), O/N 14/P23 Q3(e), M/J 15/P23/Q3(f),M/J 18/P21/Q4(f)

SOLUTION

Mark Scheme

- *Absorption costing will produce a different profit figure to marginal costing whenever opening and closing inventory differ.* ***(1)***
- *Absorption costing values inventory at total production cost including a portion of fixed costs.* ***(1)***
- *Marginal costing values inventory at variable cost only, treating fixed costs as period costs.* ***(1)***
- *When closing inventory is higher than opening inventory, absorption costing will produce the higher profit.* ***(1)*** *When closing inventory is lower than opening inventory, marginal costing will produce the higher profit.* ***(1) (Max 4)*** ***[4]***
- *Fixed overheads are treated as a period cost under marginal costing* ***(1)*** *but as part of the cost of production under absorption costing* ***(1)****. As a result, the fixed overheads are written off in the period's income statement* ***(1)*** *rather than being carried forward as part of the inventory as is the case in absorption costing* ***(1)****.* ***[4]***

Suggested Solution

The difference between profits calculated in marginal and absorption costing is purely a result of timing of the matching of fixed overheads with products.

In marginal costing fixed costs are charged in full against the profit in which they are incurred (period costs) while in absorption costing, as inventories are valued at full production costs (fixed + variable). So cost of sales in a period will include same fixed overheads incurred in a previous period (i.e. in opening inventory values) and will exclude some fixed overheads incurred in the current period but carried forward in closing inventory values as a charge to the subsequent periods (product costs).

Lastly the overall effect of the positive and negative differences in profits over the business life is zero, provided the allocation process is applied consistently. Finally, it may be said that when inventory levels are decreasing profit under absorption costing is lower and vice-e-versa for the contrary.

QUESTION 2

Explain the reason why valuing inventory on a marginal cost basis produces a different profit figure than valuing it on an absorption cost basis. [4]

M/J 14/P22 Q3(f)

SOLUTION

Mark Scheme

In the ***marginal cost statement****, inventory is valued at variable cost* ***(1)*** *resulting in a higher cost of sales* ***(1)*** *and fixed costs are treated as a period cost* ***(1)****.*
In the ***absorption cost statement****, the inventory value includes an element of fixed overhead* ***(1)*** *resulting in a lower cost of sales* ***(1)****. Some of the fixed overheads are carried forward to the next accounting period* ***(1)****.*

(Maximum 4 marks) [4]

Suggested Solution

In the **marginal cost statement**, inventories are valued at variable cost. If closing inventory is more than the opening inventory then it results in a higher cost of sales compared to absorption costing. In this case fixed costs are treated as a period cost.

In the **absorption cost statement**, an element of fixed overhead is included in the value of inventories. If closing inventory is more than the opening inventory then it results in a lower cost of sales compared to marginal costing. In this way, some of the fixed overheads are carried forward to the next accounting period through inventories.

QUESTION 3

Rajesh has been advised to change from absorption costing to a marginal costing system.

REQUIRED

Advise Rajesh whether or not he should change. Justify your answer. **[5]**

O/N 16/P23/Q4(h)

OR

Advise Kevin whether or not he should change from marginal costing to absorption costing. Justify your answer. **[7]**

O/N 20/P22/Q4(f)

SOLUTION

Mark Scheme

Reasons to change to marginal costing:

- *simple and quick to operate*
- *no apportionment of fixed costs*
- *fixed costs are treated as period costs and so remain unchanged at different activity levels*
- *no over/under absorption of overhead costs to calculate*
- *no further adjustment needed in the income statement for over/under absorption*
- *closing inventory is realistically valued at variable production cost*
- *allows easy calculation of profit when changes in activity occur*
- *great aid in decision making/pricing/make or buy situation.*

Reasons to keep absorption costing:

- *it shares fixed production costs to units of production, which is fair as these costs are incurred in order to make the output*
- *it is easier to determine profitability of several products as they include a share of fixed overheads.*
- *it values closing inventory fairly*
- *When inventory levels increase absorption costing gives a higher profit because the fixed overheads cost contained in the closing inventory is carried forward to the next period*
- *Absorbing overheads into costs aids the setting of prices*

Suggested Solution

Reasons to change to marginal costing:

- **Simplicity:** simple to understand and operate and it can be combined with other forms of costing (e.g. budgetary costing and standard costing) without much difficulty.
- **Customer profitability:** Marginal costing can help determine which customers are worth keeping and which are worth eliminating.no apportionment of fixed costs
- **Outsourcing:** Marginal costing is useful for deciding whether to manufacture an item in-house or maintain a capability in-house, or whether to outsource it.

- **Internal inventory reporting**: Since a firm must include indirect costs in its inventory in external reports, and these can take a long time to complete, marginal costing is useful for internal inventory reporting.
- **No over/under absorption** : In marginal costing there is no need to calculate over/under absorption and no further adjustment needed in the income statement for over/under absorption
- **Short-term profit planning:** Marginal costing can help in short-term profit planning and is easily demonstrated with break-even charts and profit graphs. Comparative profitability can be easily assessed and brought to the notice of the management for decision-making.
- **Cost control:** Marginal costing makes it easier to determine and control costs of production. By avoiding the arbitrary allocation of fixed overhead costs, management can concentrate on achieving and maintaining a uniform and consistent marginal cost as fixed costs are treated as period costs and remain unchanged at different activity levels
- **Accurate overhead recovery rate:** This method of costing eliminates large balances left in overhead control accounts, which makes it easier to ascertain an accurate overhead recovery rate.

Reasons to keep absorption costing:
- Fixed overhead costs are included in production costs, which is fair as these costs are incurred in order to make the output
- It is easier to determine profitability of several products as they include a share of fixed overheads.
- it values closing inventory fairly
- it is used to prepare financial statements
- It shows less fluctuation in in net profit as variation in sales occur while the production stays the same
- This method is accepted by Inland Revenue and international accounting standards as inventory is not undervalued;
- Higher income when production is above sale

QUESTION 4

Differentiate between Marginal & Absorption Costing

SOLUTION

Difference between Marginal & Absorption Costing
- In marginal costing inventories are valued at variable production cost whereas in absorption costing inventories are valued at total cost of production.
- In marginal costing fixed costs are charged in full against the profit in which they are incurred (period costs) while in absorption costing, as inventories are valued at full production costs (fixed + variable). So cost of sales in a period will include same fixed overheads incurred in a previous period (i.e. in opening inventory values) and will exclude some fixed overheads incurred in the current period but carried forward in closing inventory values as a charge to the subsequent periods (product costs).
- Marginal costing is often used in decision making situations whereas absorption costing is used for external reporting.
- Absorption costing can be used for inventory valuation under SSAP 9 whereas marginal costing cannot be.