Centre For Distance and online

Education
Punjabi University Patiala

Class: B.COM-Part-III Semester: V Paper : BCOU3503T(Management Accounting)

Unit :2 Medium: English

Lesson No. Updated on: 25th June 2023

2.1 : Tools of Management Accounting

Department website : www.pbidde.org

(2022-23, 2023-24 & 2024-25)

BCOU3603T: MANAGEMENT ACCOUNTING-II

Time allowed : 3 hours
Pass Marks : 35%
Periods per week : 6

Max Marks: 100
Internal Assessment: 30
External Assessment:70

Note : Simple Calculator(not scientific) is allowed

INSTRUCTIONS FOR THE PAPER SETTER/ EXAMINERS

The question paper covering the entire course shall be divided into three sections as follows.

SECTION-A

It will consist of essay type and numerical questions. Four questions, two theory and two numerical, shall be set by the examiner from Unit-I of the syllabus and the candidate shall be required to attempt two. Each question shall carry 10 marks; total weight of the section shall be 20 marks.

SECTION-B

It will consist of essay type and numerical questions. Four questions, two theory and two numerical, shall be set by the examiner from Unit-II of the syllabus and the candidate shall be required to attempt two. Each question shall carry 10 marks; total weight of the section shall be 20 marks.

SECTION-C

It will consist of 12 very short answer questions (six theory and six numerical) from entire syllabus. Students are required to attempt 10 questions up to five lines in length. Each question shall carry 3 marks; total weight of the section shall be 30 marks

UNIT – I

CVP Analysis: Introduction, CVP Assumptions and Uses; Break-Even Analysis: BE Point, Margin of Safety, and maintaining a desired level of profit; Graphical presentation of CVP Relationship; Profit Graph.

Marginal Costing and Management Decisions – Marginal Costing vis-à-vis Absorption Costing; Marginal and differential costing as a tool for decision making; Marginal Costing Techniques; Marginal Cost and Product Pricing; Change of Product Mix; Make or Buy Decisions; exploring new markets; Shut Down Decisions.

UNIT – II

Budgeting for Profit Planning and Control: Meaning of Budget and Budgetary control; Objectives; Merits and Limitations; Types of Budgets: The budget manual, principal [illegible] preparation and monitoring procedures, preparation of functional budgets (Prod[illegible] Materials), cash budget, (idea of master budget); Fixed and flexible budgeting; Contro[illegible] base budgeting; Performance budgeting; Responsibility accounting.

Standard Costing and Variance Analysis: Meaning of Standard Cost and Standard Costing; Advantages and Application; Variance analysis: Material, Labour and Overhead Variances (two-way analysis).

Course Outcome: After the completion of this course students will learn, cost volume profit analysis, budgeting, types of budgets, zero base budgeting. They will also learn about the standard costing and variance analysis.

Note: Assignments must be based on case studies.

R.S.Arora

B.COM. PART – III (Semester-V)

BCOU3503T

MANAGEMENT ACCOUNTING

LESSON NO. 2.1 AUTHOR :

Tools of Management Accounting

LESSON STRUCTURE

2.1.0 Objective:

To make appropriate decision in keeping with the objectives of the firm, the financial manager must have analytical tools. The tools of management accounting like balanced scorecard, flexible budget, Cost Volume Profit (CVP) analysis. Six sigma which is the subject matter of this chapter is such a tool. After going through this chapter, the students must be capable of analyzing the financial data using managerial tools.

2.1.1 Introduction:

Management accounting or managerial accounting is concerned with the provisions and use of accounting information to managers within organizations, to provide them with the basis to make informed business decisions that will allow them to be better equipped in their management and control functions. According to the Chartered Institute of Management Accountants (CIMA), Management Accounting is "the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information used by management to plan, evaluate and control within an entity and to assure appropriate use of and accountability for its resources. Management accounting also comprises the preparation of financial reports for non management groups such as shareholders, creditors, regulatory agencies and tax authorities".

For fulfilling the purpose of management accounting there are already many techniques and tools prevail in the market.

2.1.2 Tools of Management Accounting:–

1. Balanced Scorecard:

Balanced Scorecard is a management accounting and strategic management system based upon measuring key performance indicators across all aspects and areas of an enterprise: Financial, Customer, Internal Process, and Learning and

Growth.

2. Flexible Budget:

Flexible budget is based upon different levels of activity. It is a very useful tool for comparing actual costs experienced to the cost allowable for the activity level achieved, i.e. it is dynamic in nature as compared to static. A series of budgets can be readily developed to fit any activity level. Flexible budgeting distinguishes between fixed and variable cost, thereby allowing for a budget that can be automatically adjusted to the level of activity actually attained.

3. Cost Volume Profit (CVP) Analysis:

CVP analysis examines the behaviour of total revenue, total costs and profit as changes occur in the output level, selling price and variable costs per unit or fixed costs. Cost volume profit analysis is a powerful tool that helps manager understands the relationships among cost, volume, and profit. CVP analysis focuses on how profits are affected by the following five factors – selling price, sales volume, unit variable costs, total fixed cost and mix of product sold.

4. Lean Thinking Model or Just In Time (JIT):

Lean thinking model or JIT is a management philosophy that strives to eliminate sources of manufacturing waste and cost by producing the right part in the right place at the right time. The lean thinking model is a five-step management approach that organizes resources such as people and machine around the flow of business process and that pulls units through these processes in response to customer orders. The result is lower inventories, fewer defects, lee wasted effort and quicker customer response times The five steps are as follows

a. Identify value in specific product
b. Identify the business process that delivers value
c. Organize work arrangements around the flow of the business process
d. Create a pull system that responds to customer orders
e. Continuously pursue perfection in the business process

5. Six Sigma:

Six Sigma can be defined as a specific methodology to develop and implement quality improvements in an organization's critical processes by rigorously measuring and identifying variations from customer specifications in those processes and adjusting them or creating entirely new processes to keep variations at an acceptable level. Specifically, Six Sigma seeks to focus an organization on – • defining customer/user requirements, • aligning processes to meet those requirements, • using metrics to minimize variations in processes, • rapidly and permanently improving processes. Six Sigma is a level of quality producing a frequency of defects per million operations (DPMO) that is six standard deviations from a given mean (typically defined as the average of the upper and lower limits of customer specifications for a given product or operation) based on a normalized distribution.

6. Total Quality Management (TQM):

Total Quality Management (or TQM) is a management concept coined by W. Edwards Deming. The basis of TQM is to reduce the errors produced during the manufacturing or service process, increase customer satisfaction, streamline supply chain management, aim for modernization of equipment and ensure workers have the highest level of training. One of the principal aims of TQM is to limit errors to 1 per 1 million units produced. Total Quality Management is often associated with the development, deployment, and maintenance of organizational systems that are required for various business processes. The primary purpose of TQM is to encourage large numbers of employees to use simplified statistical methods. Indeed, a prerequisite for initiating TQM is training the workforce in the use of statistical tools and problem-solving methods. As we have said, however, effective TQM moves beyond this to teach employees how to apply science to improve everyday decision-making. Employees faced with a problem are taught to formulate hypotheses, collect and analyze data, test hypotheses, and then to formulate new hypotheses based on their findings.

7. Enterprise Resource Planning (ERP):

According to Van and Kumar 'Enterprise resource planning (ERP) systems promise to integrate business processes within and across functional areas in organizations. Early ERP systems primarily included inventory control software, material requirements applications and manufacturing planning modules. The continual evolution of ERP systems has subsequently encapsulated the full spectrum of business processes such as selling, marketing, purchasing, warehousing, accounting, and human resource planning into tightly integrated enterprise-wide information databases. The latest generation of ERP systems extends beyond the organization by capturing inter-organizational processes such as customer and vendor relationship management'

8. Activity Based Costing:

Activity Based Costing (ABC) is a costing system that identifies the various activities performed in a firm and uses multiple cost drivers (non-volume as well as the volume based cost drivers) to assign overhead costs (or indirect costs) to products. ABC recognizes the causal relationship of cost drivers with activities. ABC is a costing method that is designed to provide managers with cost information for strategic and other decision that potentially affect capacity and therefore fixed as well as variable cost. Activity based costing is ordinarily used as a supplement to, rather than as a replaced for, a company's usual costing systems. Most organization that use activity based costing have two costing systems – the official coasting systems that is used for external financial reports and the activity based costing systems that is used for internal decision making and for managing activities.

9. Job Order Costing (JOC):

Job Order Costing, generally, it is the allocation of all time, material and expenses to an individual project or job. Specifically, JOC is normally software based and provides for budgeting, forecasting, collecting and reporting on the expenditure and revenue associated with specific projects or jobs. A job-order costing systems is used in situations where many different products are produced each zperiod. Job-order costing is also used extensively in service industries. Hospital, law firms, accounting firms, movie studios, advertising agencies and repair shops, for example, all use a variation of job-order costing to accumulate cost for accounting and billing purposes.

10. Process Costing:

Process costing is a method of cost and management accounting applied to production carried out by a series of chemical or operational stages or processes. Its characteristics are that costs are accumulated for the whole production process and that average unit costs of production are computed at each stage. A process costing system is used in situations where the company produces may units of a single product for long periods. Examples include producing paper at Weyerhaeuser, refining aluminum ingots at Reynolds Aluminum, mixing and bottling beverage at Coca-Cola and making wieners at Oscar Meyer. All of these industries are characterized by an essentially homogeneous product that flows through the production process on a continuous basis. Process costing systems accumulate cost in a particular operation or department for an entire period (month, quarter, year) and then divide these total cost by the number of units produced during the period.

11. Standard Costing:

Standard costing is an accounting system designed to properly allocate costs of direct labor, indirect labor, materials, overhead, and selling / general / administrative accounts on a unit basis for the purpose of accurately costing products and the subsequent control of those costs in managing the production, marketing, purchasing, and administrative functions of the business.

11. Variable Costing/ Marginal costing:

Under variable costing, only those manufacturing cost that varies with output are treated as product costs. This would usually include direct materials, direct materials and the variable proportion of manufacturing overhead. Fixed manufacturing overhead is not treated as a product cost under this method. Rather, fixed manufacturing overhead is treated as a period cost and like selling and administrative expenses, it is expensed in its entirety each period. Consequently, the cost of a unit of product in inventory or in cost of goods sold under the variable costing method does not contain any fixed manufacturing overhead cost. Variable costing is sometimes referred to as direct costing or marginal costing.

12. Absorption Costing:

Absorption costing is the method under which all manufacturing costs, both variable and fixed, are treated as product costs with non-manufacturing costs, e.g. selling and administrative expenses, being treated as period costs. Absorption costing treats all manufacturing cost as product costs, regardless of whether they are variable or fixed. The cost of a unit of product under the absorption costing method consists of direct materials, direct labor, and both variable and fixed manufacturing overhead. Thus, absorption costing allocates a portion of fixed manufacturing overhead cost to each unit of product, along with the variable manufacturing costs. Because absorption costing includes all manufacturing costs in product costs, it is frequently referred to as the full cost method.

13. Transfer Pricing:

Transfer pricing refers to the setting, analysis, documentation, and adjustment of charges made between related parties for good, services, or use of property (including intangible property). Transfer prices among components of an enterprise may be used to reflect allocation of resources among such components, or for other purpose. Many governments have adopted transfer pricing rules that apply in determining or adjusting income taxes of domestic and multinational taxpayers. A few countries follow rules that are materially different overall, so the transfer pricing getting momentum.

14. Cost Benefit Analysis:

Cost-benefit analysis is a term that refers both to:

- helping to appraise, or assess, the case for a project or proposal, which itself is a process known as project appraisal; and
- an informal approach to making economic decisions of any kind.

Under both definitions the process involves, whether explicitly or implicitly, weighing the total expected costs against the total expected benefits of one or more actions in order to choose the best or most profitable option. The formal process is often referred to as either CBA (Cost-Benefit Analysis) or BCA (BenefitCost Analysis. The practice of cost–benefit analysis differs between countries and between sectors (e.g., transport, health) within countries. Some of the main differences include the types of impacts that are included as costs and benefits within appraisals, the extent to which impacts are expressed in monetary terms, and differences in the discount rate between countries. Agencies across the world rely on a basic set of key cost–benefit indicators, including the following:

1. NPV (net present value)
2. PVB (present value of benefits)
3. PVC (present value of costs)
4. PVC (present value of costs)
5. PVC (present value of costs)
6. NPV/k (where k is the level of funds available)

15. Managerial Risk Accounting:

Managerial Risk Accounting is concerned with the generation, dissemination and use of risk related accounting information to managers within organizations to enable them to judge and shape the risk situation of the organization according to the objectives of the organization. As a part of the management accounting system and function, managerial risk accounting has the following two main purposes:

1. decision-facilitating or decisions-making
2. decision-influencing or stewardship

16. Target Costing:

Target costing is a pricing method used by firms. It is defined as "a cost management tool for reducing the overall cost of a product over its entire lifecycle with the help of production, engineering, research and design". A target cost is the maximum amount of cost that can be incurred on a product and with it the firm can still earn the required profit margin from that product at a particular selling

price. Target costing refers that products should be based on an accurate assessment of the wants and needs of customers in different market segments, and cost targets should be what result after a sustainable profit margin is subtracted from what customers are willing to pay at the time of product introduction and afterwards. These concepts are supported by the four basic steps of Target Costing:
(1) Define the Product (2) Set the Price and Cost Targets (3) Achieve the Targets (4) Maintain Competitive Costs.

17. Economic Value Added (EVA):

Economic Value Added is a new measure of performance that is purported to better align managers' incentives to that of the shareholders. EVA can be measured as Net Operating Profit After Taxes (or NOPAT) less the money cost of capital. EVA is similar to Residual Income (RI), although under some definitions there may be minor technical differences between EVA and RI (for example, adjustments that might be made to NOPAT before it is suitable for the formula below). Another, much older term for economic value added is Residual Cash Flow. In all three cases, money cost of capital refers to the amount of money rather than the proportional cost (% cost of capital). The amortization of goodwill or capitalization of brand advertising and other similar adjustments are the translations that can be made to Economic Profit to make it EVA. The EVA is a registered trademark by its developer, Stern Stewart & Co.

18. Break Even Analysis:

The break-even point for a product is the point where total revenue received equals the total costs associated with the sale of the product (TR = TC). A breakeven point is typically calculated in order for businesses to determine if it would be profitable to sell a proposed product, as opposed to attempting to modify an existing product instead so it can be made lucrative. Break even analysis can also be used to analyze the potential profitability of an expenditure in a sales-based business. Breakeven point (for output) = fixed cost / contribution per unit

Contribution (per unit) = selling price (per unit) - variable cost (per unit)

Breakeven point (for sales) = fixed cost / contribution (per unit) * selling price (per unit)

2.1.3 Self check exercise

1. Write a short note on Economic value added?
2. Write a short note on Managerial Risk Accounting?
3. Write a short note on target costing?

2.1.4 Summary

As management accounting has no statutory bindings like financial accounting a manager can select any techniques and tools he / she likes. Sometimes this selection depends on situation and sometimes on organization's strategy. But choosing the right strategy for the organization is a key factor.

2.1.5 Glossary

1. Flexible budget: Dynamic in nature
2. CVP: Cost Volume Profit
3. TQM: Total Quality Management
4. JOC: Job Order Costing

2.1.6 Questions

1. what is management accounting and explain its various tools?

Short Questions

1. Explain any five tools of management accounting?
2. Explain break even analysis?
3. What is transfer pricing?

2.1.7 Suggested Readings:

1. Ashish K. Bhattacharya, Principles and practices of cost accounting, New Delhi: Prentice Hall of India Private Limited, 2004.

2. Charles T. Horngren, Cost Accounting , A Managerial Emphasis, Prentice Hall Inc., 1973.

3. D.T. Decoster and E.L. Schafer, Management Accounting, New York : John Willey and Sons, 1979

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