

SECTION - G
RESPONSIBILITY ACCOUNTING

Responsibility Accounting

9

This Module includes -

9.1 Concept of Cost, Revenue, Profit and Responsibility Centres

9.2 Preparation of Responsibility Report

Responsibility Accounting

SLOB Mapped against the Module

To gather in-depth knowledge of techniques and tools for profit planning, variance analyses, optimal utilization of resources and responsibility accounting. (CMLO 3b, 5a, 5b).

Module Learning Objectives:

After studying this module, this module will be able to

- ✦ Appreciate the nuances of responsibility accounting.
- ✦ Understand the various responsibility accounting centres within an entity.
- ✦ Cognize the contents of a responsibility report and the presentation of the report.

Concept of Cost, Revenue, Profit and Responsibility Centres

9.1

Responsibility Accounting- Concept

- It is used to measure performance of divisions of an organisation rather than organisation as a whole.
- Responsibility Accounting is a system of control where responsibility is assigned for the control of costs. The persons are made responsible for the control of costs.
- Proper authority is given to the persons so that they are able to keep up their performance. In case the performance is not according to the predetermined standards then the persons who are assigned this duty will be personally responsible for it. In responsibility accounting the emphasis is on men rather than on systems.
- Responsibility Accounting collects and reports planned and actual accounting information about the inputs and outputs of responsibility centres”
- Responsibility Accounting must be designed to suit the existing structure of the organization.
- Responsibility should be coupled with authority. An organization structure with clear assignment of authorities and responsibilities should exist for the successful functioning of the responsibility accounting system. The performance of each manager is evaluated in terms of such factors.

Responsibility Accounting- Meaning & Definition

- Responsibility accounting is a system of management accounting under which accountability is established according to the responsibility delegated to various levels of management and a management information and reporting system instituted to give adequate feedback in terms of the delegated responsibility.
- Under this system, divisions or units of an organisation under a specific authority in a person are developed as responsibility centres & evaluated individually for their performance.
- **Horngreen:** defines “Responsibility accounting is a system of accounting that recognizes various responsibility centres throughout the organisation and reflects the plans and actions of each of these centres by assigning particular revenues and costs to the one having the pertinent responsibility. It is also called profitability accounting and activity accounting”. According to this definition, the organisation is divided into various responsibility centres and each centre is responsible for its costs. The performance of each responsibility centre is regularly measured.
- **Institute of Cost and Works Accountants of India** defines Responsibility accounting as “a system of management accounting under which accountability is established according to the responsibility

delegated to various levels of management and a management information and reporting system instituted to give adequate feedback in terms of the delegated responsibility. Under this system divisions or units of an organisation under a specified authority in a person are developed as responsibility centres and evaluated individually for their performance.”

Essential Features of Responsibility Accounting

1. Inputs and Outputs or Costs and Revenues:

- The implementation and maintenance of responsibility accounting system is based upon information relating to inputs and outputs.
- The physical resources utilized in an organisation such as quantity of raw material used and labour hours consumed, are termed as inputs. These inputs expressed in the monetary terms are known as costs.
- Similarly, outputs expressed in monetary terms are called revenues.
- Thus, responsibility accounting is based on cost and revenue information.

2. Planned and Actual Information or Use of Budgeting:

- Effective responsibility accounting requires both planned and actual financial information.
- It is not only the historical cost and revenue data but also the planned future data which is essential for the implementation of responsibility accounting system.
- It is through budgets that responsibility for implementing the plans is communicated to each level of management.
- The use of fixed budgets, flexible budgets and profit planning are all incorporated into one overall system of responsibility accounting.

3. Identification of Responsibility Centres:

- The whole concept of responsibility accounting is focused around identification of responsibility centres.
- The responsibility centres represent the sphere of authority or decision points in an organisation.
In a small firm, one individual or a small group of individuals, who are usually the owners may possibly manage or control the entire organisation.
- However, for effective control, a large firm is, usually, divided into meaningful segments, departments or divisions. These sub- units or divisions of organisation are called responsibility centres.
- A responsibility centre is under the control of an individual who is responsible for the control of activities of that sub-unit of the organisation.
- This responsibility centre may be a very small sub-unit of the organisation, as an individual could be made responsible for one machine used in manufacturing operations, or it may be very big division of the organisation, such as a divisional manager could be responsible for achieving a certain level of profit from the division and investment under his control.
- However, the general guideline is that “the unit of the organisation should be separable and identifiable for operating purposes and its performance measurement possible”.

4. Relationship between Organisation Structure and Responsibility Accounting System:

- A sound organisation structures with clear-cut lines of authority—responsibility relationships are a prerequisite for establishing a successful responsibility accounting system.
- Responsibility accounting system must be so designed as to suit the organisation structure of the organisation.
- It must be founded upon the existing authority- responsibility relationships in the organisation.
- In fact, responsibility accounting system should parallel the organisation structure and provide financial information to evaluate actual results of each individual responsible for a function.

5. Assigning Costs to Individuals and Limiting their Efforts to Controllable Costs:

- After identifying responsibility centres and establishing authority-responsibility relationships, responsibility accounting system involves assigning of costs and revenues to individuals.
- Only those costs and revenues over which an individual has a definite control can be assigned to him for evaluating his performance
- The following guidelines should be followed while assigning of costs
 - o If the person has authority over both the acquisition and use of the services, he should be charged with the cost of these services.
 - o If the person can significantly influence the amount of cost through his own action, he may be charged with such costs.
 - o Even if the person cannot significantly influence the amount of cost through his own direct action, he may be charged with those elements with which the management desires him to be concerned, so that he will help to influence those who are responsible.

6. Performance Reporting:

- A control system to be effective should be such that deviations from the plans must be reported at the earliest so as to take corrective action for the future. The deviations can be known only when performance is reported.
- Responsibility accounting system is focused on performance reports also known as ‘responsibility reports’, prepared for each responsibility unit.
- Unlike authority which flows from top to bottom, reporting flows from bottom to top. These reports should be addressed to appropriate persons in respective responsibility centres.
- The reports should contain information in comparative form as to show plans (budgets) and the actual performance and should give details of variances which are related to that centre.
- The variances which are not controllable at a particular responsibility centre should also be mentioned separately in the report.

Pre-requisites of Responsibility Accounting

- It should be a big company with divisionalised organisation structure
- The organisation should have clearly set goals and targets
- Managers should actively participate in establishing budgets against which their performance is measured
- Managers are held responsible only for those activities over which they exercise significant degree of control
- Performance reporting should be timely and contain significant information relating to the responsibility centres

CONCEPT OF RESPONSIBILITY CENTRE:

Responsibility centre

- The main focus of responsibility accounting lies on the responsibility centres.
- A responsibility centre is a sub unit of an organization under the control of a manager who is held responsible for the activities of that centre.
- It is like a small business to achieve the objectives of a large organisation

1. Cost Centre

- o A cost or expense centre is a segment of an organisation in which the managers are held responsible for the cost incurred in that segment but not for revenues.
- o According to CIMA, London a cost centre is “a location person or equipment , for which costs maybe ascertained and used for purposes of cost control”
- o Responsibility in a cost centre is restricted to cost.
- o For planning purposes, the budget estimates are cost estimates; for control purposes, performance evaluation is guided by a cost variance equal to the difference between the actual and budgeted costs for a given period.
- o Cost centre managers have control over some or all of the costs in their segment of business, but not over revenues.
- o In manufacturing organisations, the production and service departments are classified as cost centre. Also, a marketing department, a sales region or a single sales representative can be defined as a cost centre.
- o Cost centre may vary in size from a small department with a few employees to an entire manufacturing plant. In addition, cost centres may exist within other cost centres.
- o E.g. accounting department, repairs & maintenance department

2. Revenue Centre

- o It is a segment of the organisation which is primarily responsible for generating sales revenue.

- o A revenue centre manager does not possess control over cost, investment in assets, but usually has control over some of the expense of the marketing department.
- o The revenue centre manager will control the selling price, promotion mix and product mix
- o The performance of a revenue centre is evaluated by comparing the actual revenue with budgeted revenue, and actual marketing expenses with budgeted marketing expenses.
- o E.g. sales department

3. Profit Centre

- o Also called business centre
- o It is a segment of an organisation whose manager is responsible for both revenues and costs.
- o In a profit centre, the manager has the responsibility and the authority to make decisions that affect both costs and revenues (and thus profits) for the department or division.
- o The managers are encouraged to act as if they were running their own separate business.
- o The main purpose of a profit centre is to maximise profit by making decisions relating to production volume, product mix, selling price, marketing strategy.
- o Profit centre managers aim at both the production and marketing of a product.

4. Investment Centre

- o It is responsible for both profits and investments.
- o The investment centre manager has control over revenues, expenses and the amounts invested in the centre's assets.
- o He also formulates the credit policy which has a direct influence on debt collection, and the inventory policy which determines the investment in inventory.
- o The manager of an investment centre has more authority and responsibility than the manager of either a cost centre or a profit centre.
- o Besides controlling costs and revenues, he has investment responsibility too. 'Investment on asset' responsibility means the authority to buy, sell and use divisional assets.
- o E.g. a new hotel being developed

Preparation of Responsibility Report

9.2

Responsibility performance reporting implies the reporting phase of responsibility accounting.

Responsibility reporting has two purposes:

- (i) To determine the degree of performance in the area of responsibility for which the responsibility manager is directly responsible.
- (ii) To formulate measures to improve the performance of the responsibility centre manager.

The responsibility reporting should be suitable and relevant with respect to content, frequency of reporting and level of details required. In order to provide relevant contents in the report, only those items that are controlled by the particular responsibility centre manager should be reported. Frequency of reporting and the quantum of details in the report can be decided in terms of requirements. Generally, in a production department of a manufacturing enterprise, detailed data on production, direct costs, and indirect costs needs to be gathered and reported to foreman quite frequently. However, the same data is reported to senior management in a summarized form and at less frequent intervals. The difference in the frequency of reporting in this situation is due to the fact that the foreman has direct responsibility whereas senior managers have overall responsibility for long-term and strategic decisions. Usry and Hammer have mentioned the following as characteristics of responsibility reporting:

1. Reports should fit the organization chart, that is, the report should be addressed to the individual responsible for the items covered by it, who, in turn, will be able to control those costs under his jurisdiction. Managers must be educated to use the results of the reporting system.
2. Report should be prompt and timely. Prompt issuance of a report requires that cost records be organized so that information is available when it is needed.
3. Reports should be issued with regularity. Promptness and regularity are closely tied up with the mechanical aids used to assemble and issue reports.
4. Reports should be easy to understand. Often they contain accounting terminology that managers with little or no accounting training find difficult to understand, and vital information may be incorrectly communicated. Therefore, accounting terms should be explained or modified to fit the user. Top management should have some knowledge of the kind of items chargeable to an account as well as the methods used to compute overhead rates, make cost allocations and analyze variances.
5. Reports should convey sufficient but not excessive details. The amount and nature of the details depend largely on the management level receiving the report. Reports to management should neither be flooded with immaterial facts nor so condensed that management lacks vital information essential to carrying out its responsibilities.
6. Reports should give comparative figures, i.e., a comparison of actual with budgeted figures or of predetermined standards with actual results and the isolation of variances.

7. Reports should be analytical. Analysis of underlying papers, such as time tickets, scraps tickets, work orders, and materials requisitions, provide reasons for poor performance which might have been due to power failure, machine breakdown, an inefficient operator, poor quality of materials, or many other similar factors.
8. Reports for operating management should, if possible, be stated in physical units as well as in terms of money since monetary information may give a foreman not trained in the language of the accountant a certain amount of difficulty.
9. Reports may tend to highlight departmental efficiencies and inefficiencies, results achieved future goals or targets.

Responsibility reports help each successively higher level of management in evaluating the performances of subordinate managers and their respective organizational units. The reports should be tailored to fit the planning, controlling and decision making needs of subordinate managers and should include both monetary and non-monetary information.

Responsibility Report for Cost Centres

(₹)

General Manager	Actual Cost	Budgeted Cost	Variance
Sales Department	3,65,000	3,75,000	(+)10,000
Production Department	3,75,000	3,75,000	-
Office and Administration	1,10,000	1,15,000	(+) 5,000
Interest on loans	20,000	15,000	(-) 5,000
Total	8,70,000	8,80,000	(+)10,000

(₹)

Production Manager	Actual Cost	Budgeted Cost	Variance
Mfg. section	94,000	96,000	(+) 2,000
Testing section	1,20,000	1,21,000	(+) 1,000
Assembly section	1,61,000	1,58,000	(-) 3,000
Total	3,75,000	3,75,000	-

(₹)

Foreman (Manufacturing Division)	Actual Cost	Budgeted Cost	Variance
Direct materials	50,000	48,400	(-) 1,600
Direct labour	31,000	34,000	(+) 3,000
Indirect labour	12,000	12,000	-
Supplies	1,000	1,600	(+) 600
Total	94,000	96,000	(+) 2,000

Analysis:

It is observed from the above that, each responsibility report contains items and information which are required by the concerned responsibility centre manager and which are within his responsibility area.

Similarly, Responsibility Reports can also be prepared for other centres.

Solved Illustrations & Cases**Illustration 1**

The processing department of a large company informs the marketing department that the price of processing 2,00,000 items will be ₹50,00,000. The marketing department submits the material for the item two weeks later than originally planned and tells the processing department that the scheduled date of completion has been advanced two weeks. In order to achieve the new schedule, the processing department incurs an additional production cost of ₹16,00,000.

- (i) In an organization using responsibility accounting, where would the additional costs be assigned? Would these costs be considered controllable costs? What effect might this have on future printing orders from the marketing department?
- (ii) In an organization that does not use responsibility accounting, where would the various costs be assigned? What effect might this have on future printing orders from the marketing department?

Solution:

- (i) In an organization using responsibility accounting, the originally quoted price of ₹ 50,00,000 plus the additional cost of ₹16,00,000 would be assigned to the marketing department. This would be considered a controllable cost. The long-range effect might be that the marketing department will become more cost-conscious and will plan activities better.
- (ii) In an organization that does not employ responsibility accounting; the additional production costs most probably would be assigned to the processing department. There would be no motivation by the marketing department to adhere to scheduled dates or to plan processing needs in a better fashion.

Illustration 2

The receipt of raw materials used in the manufacture of products and the shipping of finished goods to customers are under the control of the warehouse supervisor. Approximately 60% of the warehouse supervisor's time is spent on receiving activities and 40% on shipping activities. Separate employees handle the receiving and shipping operations. The labour-related costs for the warehousing function are as follows:

Warehouse supervisor's salary	₹40,000
Receiving clerks' wages	₹75,000
Shipping clerks' wages	₹55,000
Employee benefit costs (30% of wage and salary costs)	<u>₹51,000</u>
	<u>₹2,21,000</u>

The company employs a responsibility accounting system for performance reporting purposes. The costs are classified on the report as period or product costs. You are required to state the total labour-related costs to list on the responsibility accounting performance report as product costs under the control of the warehouse supervisor for the warehousing function.

Solution:

This question focuses on product costs that are under the control of the warehouse supervisor. The supervisor controls both receiving and shipping, but shipping is a selling cost. Thus shipping is a period cost that is expensed in the period in which it is incurred, so shipping costs are not product costs. Therefore, the costs for the shipping

department are not part of the answer, even though they are controllable by the warehouse supervisor. The supervisor's salary is not controlled by the supervisor, so that is not a part of the answer, either. The labour-related product costs that the supervisor can control include only the wages and benefits of the receiving department. The receiving clerks' wages are ₹75,000 and their benefits are 30% of this amount (₹22,500). Therefore, the supervisor controls ₹ 97,500 of costs (₹75,000 + ₹ 22,500).

Illustration 3

The following information for R & Co. for the prior year:

- ⦿ The company produced 1,000 units and sold 900, both as budgeted.
- ⦿ There were no beginning or ending work-in-process and no beginning finished goods inventory.
- ⦿ Budgeted and actual fixed costs were equal, all variable manufacturing costs were affected by production volume only, and all selling variable costs were affected by sales volume only.
- ⦿ Budgeted per unit revenues and costs were as follows:

Sales price	₹100
Direct materials	₹30
Direct labour	₹20
Other variable manufacturing costs	₹10
Fixed manufacturing costs	₹5
Variable selling costs	₹12
Fixed selling costs (₹3,600 total)	₹4
Fixed administrative costs (₹1,800 total)	₹2

Calculate the contribution margin earned by R & Co. for the prior year

Solution:

Contribution margin is calculated as sales revenue minus the variable costs for the units sold. The sales price is ₹100 per unit and the variable costs total ₹72 per unit: Direct Material - ₹30; Direct Labour - ₹20; other variable manufacturing costs - ₹10; Variable selling costs - ₹12. Thus, contribution is ₹28 per unit (₹100 – ₹72). 900 units were sold, giving a contribution margin of ₹ 25,200.

Illustration 4

The Hind Company allocates national magazine advertising cost to territories on the basis of circulation, which is determined by an index that measures relative buying power in the territories. Top management wants to know if this method of allocation gives appropriate cost and benefit figures to make the following decisions:

- (a) For deciding whether or not to close an unprofitable territory
- (b) For deciding whether or not a territorial manager has obtained sufficient sales volume
- (c) For determining how efficiently the territorial manager has operated the territory
- (d) For determining whether or not advertising costs are satisfactorily controlled

Solution:

The answers are as follows.

- (a) It is not appropriate for deciding to close the territory. Closing the territory will not change the amount of national advertising expenses. For deciding what action to take with respect to the territory, the segment margin (sales less variable expenses less direct territorial fixed expenses) should be compared with the amount of cost that can be saved by closing that territory. This will show whether or not the territory is making a contribution to costs that will continue regardless of the decision.
- (b) It may be appropriate for concluding that a territorial manager has obtained sufficient sales volume. National advertising is one of the general distribution costs to be allocated to territories if there is evidence of cause-and-effect relationships.
- (c) The method is not appropriate. A territorial manager should be judged on the basis of expenses that he or she has to control. By its nature, national advertising must be centrally controlled.
- (d) It is not appropriate to allocate national advertising costs to territories from a control standpoint. Control can be exercised only over the total expenditure for national advertising and at the source; control is not aided by allocating this total to territories.

The following concepts are highlighted in the contribution approach to cost allocation:

- ⊙ Contribution margin - Sales less variable costs.
- ⊙ Contribution controllable by segment managers - Contribution margin less direct fixed costs controllable by segment managers. Direct fixed costs include discretionary fixed costs such as certain advertising, research and development, sales promotion, and engineering.
- ⊙ Segment margin - Contribution controllable by segment managers less fixed costs controllable by others. Fixed costs controllable by others include such traceable and committed fixed costs as depreciation, property taxes, insurance, and the segment managers' salaries.
- ⊙ Net income - Segment margin less unallocated common fixed costs.

Illustration 5

You have a client who operates a large retail self-service grocery store that has a full range of departments. Management has encountered difficulty in using accounting data as a basis for making decisions concerning possible changes in departments operated, products, marketing methods, and so forth. List several overhead costs, or costs not applicable to a particular department, and explain how the existence of such costs (sometimes called common costs or joint costs) complicates and limits the use of accounting data in making decisions in such a store.

Solution:

There are many examples of “common” costs to the sales department of a self-service grocery store. Some are rent, supervision, trucking, and advertising.

Common costs are usually apportioned on various arbitrary bases to the sales departments, but for numerous managerial decisions such apportionments produce misleading results. Decisions as to discounting a department, adding a department, enlarging a department, or decreasing a department cannot be made based on the data produced from the apportionments. For example, if a department is discontinued because it appears to be unprofitable, it may be determined that the costs of other departments will increase as a result of having to absorb more of the shared common costs. Thus, the overall operating results will be less favorable if the “unprofitable” department is discontinued.

Illustration 6

The monthly service charge a bank makes on a customer's checking account is based on the cost of handling each account. A customer disagrees with this policy because she cannot see how it is possible to determine the exact cost of handling her account. Do you agree with the customer? Discuss fully the problems involved in determining cost for such a service, including the limitations of the cost figures obtained.

Solution:

This is a problem involving fixed and common costs. Within considerable limits, the cost of operating a bank would not change because of the addition of new accounts or the loss of old ones. The depreciation and other costs associated with the bank building, fixtures and equipment, salaries of officers, and other such items are fixed costs of operation within very wide limits. There would have to be a considerable change in the number of accounts before there would be any noticeable impact on those fixed costs. There is also a question of joint use of facilities among the various phases of bank operations. For example, the vault houses not only the files of commercial accounts, but also the savings account records, collateral on loans, coins and bills, and many other types of property and records. Unless the bank is large and the work highly specialized, a teller will handle a good many types of operations during a working day. A given official may make loans, open new accounts, advise customers as to investments, and so on. It would be extremely difficult to assign many of such operating expenses to any particular type of operation, let alone any account.

The problem of determining a reasonable and useful cost for handling an account involves obtaining data related to costs of functions and number of transactions handled, so that the direct or semi direct costs may be determined. The average labour cost per transaction for tellers and for transit, clearings, and bookkeeping functions can be obtained with considerable accuracy. Then it becomes necessary to allocate costs of all other necessary functions to these and other principal banking operations. Like all allocations of fixed or indirect overhead, the allocations will be arbitrary, but they can be made in a reasonable and logical manner by using appropriate bases.

While the costs obtained from such an accounting procedure may be useful for setting service charges, it must be recognized that they do have one important limitation. They are average costs and not "differential costs." Therefore, they have limited usefulness for certain types of management decisions relating to expansion or contraction of services or changes in operations.

Illustration 7

Consider each of the following scenarios:

- (i) Mr. P K. Dhawan, plant manager for the laser printer factory of Bharat Co. brushed his hair back and sighed. December had been a bad month; two machines had broken down, and some direct labourers (all on salary) were idled for part of the month. Materials prices increased, and insurance premiums on the factory increased. No way out of it —costs were going up. He hoped that the marketing VP would be able to push through some price increases, but that really wasn't his department.
- (ii) Ms. Sonam Kapoor was delighted to see that her ROI figures had increased for the third straight year. She was sure that her campaign to lower costs and use machinery more efficiently (enabling her factories to sell several older machines) was the reason why she planned to take full credit for the improvements at her semi-annual performance review.

For each of the above independent scenarios, indicate the type of responsibility center involved (cost, revenue, profit, or investment).

Solution:

- (i) Cost center — Total cost
- (ii) Profit center — Operating Income

Hint: For explanation of the same, please read the relevant portion of the Study Module.

EXERCISE**Theoretical Question**⊙ **Multiple Choice Questions**

1. Which of the following would be the most appropriate measure to monitor the performance of the manager of a profit centre?
 - A. Gross profit margin
 - B. Revenue minus all costs
 - C. Revenue minus controllable costs
 - D. Return on capital employed
2. In a responsibility accounting system, managers are accountable for:
 - A. Incremental costs.
 - B. Product costs but not for period costs.
 - C. Costs over which they have control.
 - D. Variable costs but not for fixed costs.
3. In designing a responsibility accounting system, one should keep in mind a certain characteristic of each cost. This characteristic is:
 - A. The degree of cost controllability by the manager;
 - B. How the cost behaves with respect to volume;
 - C. The accuracy of cost allocation;
 - D. All of the above.
4. Which of the following statements are true about responsibility accounting?
 - A. Responsibility accounting results in inter-departmental conflicts
 - B. In responsibility center more focus is paid on products, processes or jobs
 - C. No focus is paid on controlling costs
 - D. None of the above
5. Which concept (or concepts) listed below is (are) consistent with traditional responsibility accounting?
 - A. Vertical structure.
 - B. Cross functional measurements.
 - C. Bottom up control.
 - D. A and B.
6. In profit center revenue represents a monetary measure of output emanating from a profit center in a given period irrespective whether
 - A. The revenue is realized or not
 - B. The output is sold or not
 - C. Both A and B
 - D. None of the above

7. Which type of responsibility center has the greatest amount of autonomy?
 - A. Revenue center.
 - B. Cost center.
 - C. Profit center.
 - D. Investment center.
8. Which of the following is responsibility center?
 - A. Expense center
 - B. Profit center
 - C. Investment center
 - D. All of the above
9. The characteristics of a responsibility system for a JIT, or lean organization include
 - A. Competition between subsystems.
 - B. Independence of subsystems.
 - C. Cross functional measurements.
 - D. A and B.
10. The responsibility centers, for control purposes, may be classified into _____ types.
 - A. Five
 - B. Three
 - C. Four
 - D. None of the above
11. The area of focus on responsibility center is
 - A. Quantum of sales
 - B. Quantum of production
 - C. Optimum utilization of resources
 - D. All of the above
12. In responsibility cost accounting the costs in focus are
 - A. Controllable costs
 - B. Uncontrollable costs
 - C. Both A and B
 - D. None of the above
13. In responsibility accounting, responsibilities of various groups or individuals are identified in terms of
 - A. Work
 - B. Revenue
 - C. Cost
 - D. All of the above

14. Responsibility Accounting is also known as
 - A. Profitability accounting
 - B. Activity accounting
 - C. Both A and B
 - D. None of the above
15. Which of the following represent arguments against traditional responsibility accounting?
 - A. It tends to promote competition between segments of a company.
 - B. It tends to promote subsystem, or local optimization.
 - C. It tends to ignore many of the interdependencies within an organization.
 - D. All of the above.
16. Which of the following characteristics is not associated with traditional responsibility accounting?
 - A. Assumes optimization of the parts will optimize the whole.
 - B. Assumes independence of the parts.
 - C. Places emphasis on the performance of individuals.
 - D. Attempts to control processes.
17. Responsibility Accounting is also known as
 - A. Profitability accounting
 - B. Activity accounting
 - C. Both A and B
 - D. None of the above
18. Responsibility Accounting is also called Accounting
 - A. Profitability
 - B. Management
 - C. Authority
 - D. None of these
19. Responsibility accounting is used for
 - A. cost control
 - B. planning
 - C. decision making
 - D. pricing
20. The performance of investment centre is based on
 - A. Cost of the centre
 - B. Profit of the centre
 - C. Profit and investment of the centre
 - D. Revenue of the centre

21. In responsibility accounting the organization is divided into different centers
 - A. Responsibility
 - B. Cost
 - C. Profit
 - D. None of these
22. A cost centre is a segment of the organization where the manager is responsible for
 - A. Costs
 - B. Inputs
 - C. A or B
 - D. None of these
23. Both costs and revenues are measured in centers
 - A. Cost
 - B. Profit
 - C. Revenue
 - D. All of these
24. A centre where the manager is responsible for sales is
 - A. Cost centre
 - B. Revenue centre
 - C. Investment centre
 - D. Sales Centre
25. The performance of investment centre is based on
 - A. Cost of the centre
 - B. Profit of the centre
 - C. Profit and investment of the centre
 - D. Revenue of the centre

Answers:

1- C, 2-C, 3-A, 4-A, 5-A, 6- C, 7- D, 8- D, 9- C, 10- B, 11- C, 12- A, 13- D, 14- C, 15-E, 16-D, 17-C, 18-A, 19-A, 20- C, 21- A, 22-C, 23- B, 24-B, 25- C.

⊙ **State True or False**

1. Responsibility accounting is the system for collecting and reporting revenue and cost information by areas of responsibility
2. A responsibility accounting system produces responsibility reports that assist each successively higher level of management in evaluating the performances of subordinate managers and their respective organizational units.
3. A key task of the management accountant is to create accounting systems that ensure that costs are incurred in accordance with expectations.

4. Responsibility reports for subordinate managers and their immediate supervisors normally include comparisons of actual results with flexible budget figures.
5. In the functional approach, company activities and responsibilities are organized according to major functions, such as marketing, manufacturing, and finance.
6. Goals defined for each area of responsibility should be attainable with efficient and effective performance.
7. Responsibility accounting is more far-reaching.
8. A cost center is an organizational unit whose manager has the authority only to incur costs and is specifically evaluated on the basis of how well costs are controlled
9. A profit center is an organizational unit whose manager is responsible for generating revenues and managing expenses related to current activity.
10. A revenue center is strictly defined as an organizational unit that is responsible for the generation of revenues and has no control over setting selling prices or budgeting costs.

Answers:

1- True, 2- True, 3- True, 4- True, 5- True, 6- True, 7- True, 8-True, 9- True, 10-True.

⊙ **Fill in the Blanks**

1. Anis an organizational unit whose manager is responsible for managing revenues and current expenses.
2. A unique challenge for the design of arises from the instance in which one responsibility center supplies its outputs largely to other internal responsibility centers
3.should be prompt and timely.
4.help each successively higher level of management in evaluating the performances of subordinate managers and their respective organisational units.
5. of the production division can be held accountable for all direct and indirect costs incurred in his division.
6. A manager may emphasize production efficiency and deemphasize the pleas of sales personnel for faster service and rush orders.
7. In most cases, it is relatively easy to identifywith specific managers.
8. The most elementary form of responsibility center is the
9. Theresolves many of the problems just noted for the cost and revenue center concepts by combining the two.
10. A unique challenge for the design ofarises from the instance in which one responsibility center supplies its outputs largely to other internal responsibility centers.

Answers:

1- Investment center, 2- Responsibility centers, 3- Report, 4- Responsibility reports, 5- Divisional manager, 6- Cost centre, 7- Activities, 8- Cost center, 9- Profit center, 10- Responsibility centers.

◉ **Short Essay Type Question**

1. Differentiate between a cost center and a profit center.
2. What is the major shortcoming of using income from operations as a performance measure for investment centers?
3. Differentiate between a profit center and an investment center.
4. How are revenue variances computed?
5. Why and how are support department costs allocated to operating departments?

◉ **Essay Type Question**

1. Why should the factors under the control of the investment center manager (revenues, expenses, and invested assets) be considered in computing the rate of return on investment?
2. The rates of return on investment for ABC Co.'s three divisions, East, Central, and West, are 26%, 20%, and 15%, respectively. In expanding operations, which of ABC Co.'s divisions should be given priority? Explain.
3. Which factors determine whether a firm should be decentralized or centralized?
4. How are decentralization and responsibility accounting related?
5. What are the four primary types of responsibility centers, and what distinguishes them from each other?

Practical Problems

◉ **Multiple Choice Questions**

1. There are three departments A, B and C in a company. The sales of A, B and C are ₹ 3,52,000, ₹ 2,88,000 and ₹ 1,60,000, respectively. The variable costs of A, B and C are ₹ 2,40,000, ₹ 1,76,000 and ₹ 1,44,000 respectively. The direct fixed costs of A, B and C are ₹ 28,000, ₹ 22,400 and ₹ 12,800. Rank the different departments on basis of relative profitability.
 - A. A- Rank 3, B- Rank 1 and C- Rank 2
 - B. A- Rank 2, B- Rank 1 and C- Rank 3
 - C. A- Rank 3, B- Rank 2 and C- Rank 1
 - D. Insufficient data
2. In a company Department A recorded loss in the first half of the current year. The sale of department is ₹ 90,000 and uncontrollable costs are ₹ 91,000, Advice the management whether its operations should be continued or terminated.
 - A. Continued
 - B. Terminated
 - C. Insufficient information
 - D. None of the above

3. In a control report of Department X, it is mentioned as indirect materials are ₹1,000, indirect labour ₹900, Overtime Charges ₹100, Depreciation on equipment ₹500, Allocated factory overhead (38% of factory space) ₹4,300, Allocated overhead of repair shop is ₹ 1,200. Determine total costs treating department X as a responsibility center.
- A. ₹ 3,200
 B. ₹ 2,200
 C. ₹ 1,200
 D. None of the above

Answers:

1- A, 2-C, 3-A.

⊙ **Comprehensive Numerical Questions**

1. The printing department of a large company informs the marketing department that the price of printing 1,00,000 colour flyers will be ₹ 60,00,000. The marketing department submits the material for the flyer two weeks later than originally planned and tells the printing department that the scheduled date of completion has been advanced two weeks. In order to achieve the new schedule, the printing department incurs an additional production cost of ₹15,00,000.
- (1) In an organisation using responsibility accounting, where would the additional costs be assigned? Would these costs be considered controllable costs? What effect might this have on future printing orders from the marketing department?
- (2) In an organisation that does not use responsibility accounting, where would the various costs be assigned? What effect might this have on future printing orders from the marketing department?
2. A merchandising firm sells its goods through department stores and discount houses which it has setup for operating the sales. The ROI of both businesses is 20 per cent and has the following data:

Particulars	Department Stores	Discount Warehouses
	₹	₹
Divisional profit	20,000	32,000
Divisional investment	1,00,000	1,60,000
Divisional sales	2,00,000	4,80,000

Evaluate the two Divisions.

3. A bank considers acquiring new computer equipment. The computer will cost ₹1,60,000 and result in a cash savings of ₹70,000 per year (excluding depreciation) for each of the five years of the asset's life.

It will have no salvage value after five years. Assume straight-line depreciation (depreciation expensed evenly over the life of the asset). The company's tax rate is 15 per cent, and there are no current liabilities associated with this investment.

Required:

- (a) What is the ROI for each year of the asset's life if the division uses beginning-of-year net book value asset balances for the computation?
 - (b) What is the economic value added each year if the weighted-average cost of capital is 25 per cent?
4. The following information relates to the operating performance of two divisions of ABC India, for last years:

	X Division	Y Division
Operating Profit	₹ 8,00,000	₹ 12,00,000
Total Assets (acquisition cost)	40,00,000	75,00,000
Total Assets (current replacement costs)	60,00,000	80,00,000

Required:

- (a) Compute the return on investment (ROI) of each division, using total assets stated at acquisition cost as the investment base.
 - (b) Compute the ROI of each division, using total assets based on current replacement cost as the investment base.
 - (c) Which of the two measures do you think gives the better indication of operating performance? Explain your reasoning.
5. The income from operations and the amount of invested assets in each division of Devon Industries are as follows:

	Income from Operations	Invested Assets
Goods Division	₹ 80,000	₹ 4,00,000
Health care Division	41,600	2,60,000
Commercial Division	70,000	3,20,000

Required:

- (a) Compute the rate of return on investment for each division.
 - (b) Which division is the most profitable in terms of amount invested?
6. For each of the following service departments, identify an activity base that could be used for charging the expense to the profit centre.
- (a) Central purchasing
 - (b) Legal
 - (c) Accounts receivable
 - (d) Duplication services

- (e) Electronic data processing
 - (f) Telecommunications
7. ABC Company has income from operations of ₹ 20,125 invested assets of ₹ 87,500 and sales of ₹1,75,000. Use the DuPont formula to compute return on investment and show
 - (a) the profit margin,
 - (b) the investment turnover, and
 - (c) return on investment.
 8. The Commercial Division of Tata Company has income from operations of ₹1,35,000 and assets of ₹6,50,000. The minimum acceptable rate of return on assets is 10%. What is the residual income for the division?
 9. LT Company has income from operations of ₹50,000, invested assets of ₹200,000, and sales of ₹5,00,000. Use the DuPont formula to compute the return on investment and show
 - (a) the profit margin,
 - (b) the investment turnover, and
 - (c) return on investment.
 10. XYZ Company uses economic value added (EVA) to evaluate top management performance. In 2022, ABC Company had net operating income of ₹54,580 lakhs, income taxes of ₹15,230 lakhs, and average noncurrent liabilities plus stockholders' equity of ₹1,55,740 lakhs. The company's capital is about 30% long-term debt and 70% equity. Assume that the after-tax cost of debt is 5% and the cost of equity is 11%.

Required:

1. Compute economic value added (EVA).
2. Explain what EVA tells you about the performance of the top management of XYZ Company in 2022.

◉ Unsolved Cases

Analyse the following cases and comment:

1. A manager of a fast food restaurant may be held responsible for reporting on variances in the profits of the unit, even though he or she does not have control over either the cost of the food or the price it is sold for. Decisions outside of the manager's control should not be part of the manager's performance evaluation. Even so, the manager can and should still be held responsible for reporting on the results because he or she is in the best position to explain the variances between actual and budgeted items.
2. Assigning some percentage of each operating department's contribution to covering common costs reminds each department that it is a part of a larger organization, and as such it has a responsibility to the larger organization to maintain earnings that are adequate to cover a portion of the firm's indirect costs;

and it formalizes their accountability for doing so.

3. In evaluating segment performance and the segment manager's performance, it is important to distinguish between the performance of the manager and the performance of the segment the manager manages. On a contribution income statement by segment, direct fixed costs controllable by others are the same as non-controllable traceable fixed costs. Costs that are traceable to a segment but controlled by someone other than the segment manager are used in evaluating the performance of the segment, but they should not be used in evaluating the performance of the segment manager.
4. When a company reports operating results according to responsibility center, each responsibility center's report contains a partial balance sheet showing the assets under its control, the liabilities incurred for the purchase of those assets, and an operating income statement showing the responsibility center's revenues and expenses. However, shareholders' equity does not appear on the individual responsibility center balance sheets because equity belongs to the whole corporation. Equity cannot be divided up among responsibility centers, and it cannot be affected by any decision made by any individual responsibility center manager.

Since no individual responsibility center has any equity on its balance sheet, no individual responsibility center manager has any authority to determine how equity should be raised. Decisions about raising equity to finance capital investments (that is, sale of new common or preferred stock or the use of retained earnings) can be made only by senior management.

Therefore, the operating decisions made by the individual division managers affect the total assets employed by their divisions, the working capital they have to work with, and the total assets they have available to them (whether the assets are employed or not). The operating decisions made by the individual division managers cannot affect shareholders' equity.

5. Relationship between responsibility accounting and cost control

There is a direct relationship between responsibility accounting and cost control. Costs are easier to control when a responsibility accounting system is in effect. Department heads know immediately when cost overruns occur and can work quickly to reduce them. Department heads are aware that their supervisors are receiving data on their performance and will make efforts to perform in a more cost-efficient manner.

Key Terms

Cost Center: A cost center is the smallest segment of activity or area of responsibility for which costs are accumulated.

Investment Center: Investment center, like a profit center, is responsible for both revenue and expenses, but also for related investments of capital.

Profit Center: Some business units have control over both costs and revenues and are therefore evaluated on their profit outcomes.

Responsibility Accounting : Responsibility accounting is an underlying concept of accounting performance measurement systems.

Responsibility Center: A responsibility center is an organizational unit headed by a manager, who is responsible for its activities and results.

Revenue Center: Revenue center can be defined as a distinctly identifiable department, division, or unit of a firm that generates revenue through sale of goods and/or services.

Responsibility Reports: The responsibility accounting performance report is a budget that compares actual and budgeted amounts of controllable costs for a department and its manager.