



GLOBAL CMA

**COST & MANAGEMENT
ACCOUNTING AND FINANCIAL
MANAGEMENT**

Paper-10

Syllabus-2016

Answer of Postal test Paper
Set-2

Sol. 1 (a) Match the following

- | | |
|-----------------------------------|--------------------------------------|
| (i) Inter firm comparison | Technique for evaluating performance |
| (ii) Benefit Cost Ratio | Capital Budgeting |
| (iii) Organisation has to be both | Effective and Efficient |
| (iv) Zero based Budgeting | Decision Making |

Sol. 1 (b) MCQ

- (i) A
- (ii) A
- (iii) A

Sol. 1 (c) Fill in the blanks

- (i) Engineering
- (ii) Competing
- (iii) Current Liabilities
- (iv) Internal Rate of Return

Sol. 1 (d) True/False

- (i) False
- (ii) True
- (iii) False
- (iv) True

Sol. 2 (a)

Transfer price decisions can be taken on the following basis.

A. Transfer Price: - Marginal Cost + Opportunity Cost i.e. Rs (5 + 5) = Rs 10

Note: Marginal Cost = Rs 2, 50,000 / 50,000 units = Rs 5

Opportunity cost Rs 5 are computed on the basis that the Division X will sacrifice Rs 5 if they sell the product to Division Y.

B. In this situation, the transfer price will be worked out as under:

Transfer price = Marginal Cost + Contribution + Profit foregone by Division Z

= Rs (5 + 5 + 4) = Rs 14

In situation (B), if Division Y purchases from Division X, it will not purchase from external supplier. Hence, the supplier will stop purchasing from Division Z, which will result in a loss of profit to Division Z @ Rs 4 per unit, and therefore this amount will be recovered from the transfer price.

Sol. 2 (b)

One of the recent developments in the field of management accounting is the responsibility accounting, which is helpful in exercising cost control. Responsibility Accounting is a system of accounting that recognizes various responsibility centers throughout the organization and reflects the plans and actions of each of these centers by assigning particular revenues and costs to the one having the pertinent responsibility. It is also called profitability accounting and activity accounting. It is a system in which the person holding the supervisory posts as president, function head, foreman, etc are given a report showing the performance of the company or department or section as the case may be. The report will show the data relating to operational results of the area and the items of which he is responsible for control. Responsibility accounting

follows the basic principles of any system of cost control like budgetary control and standard costing. It differs only in the sense that it lays emphasis on human beings and fixes responsibilities for individuals. It is based on the belief that control can be exercised by human beings, so responsibilities should be fixed for individuals.

Principles of responsibility accounting are as follows:

- (a) A target is fixed for each department or responsibility center.
- (b) Actual performance is compared with the target.
- (c) The variances from plan are analysed so as to fix the responsibility.
- (d) Corrective action is taken by higher management and is communicated

Sol. 3 (a)

Let X and Y be the cost and profit respectively.

$$X + Y = 3,000 \rightarrow (1)$$

$$\text{Material} = X \times 50/100 = 0.5X$$

$$\text{Labour} = X \times 20/100 = 0.2X$$

$$\text{Overheads} = X \times 30/100 = 0.3X$$

After increase of cost:

$$\text{Material} = 0.5 X \times 117/100 = 0.585 X$$

$$\text{Labour} = 0.2X \times 120/100 = 0.240 X$$

$$\text{Overheads} = 0.300 X$$

$$= 1.125 X$$

$$\text{Profit} = Y \times 75/100 = 0.75Y$$

$$\therefore \text{New Equation } 1.125X + 0.75Y = 3,000 \rightarrow (2)$$

$$\text{Multiplying Eq. (1) by } 0.75 \quad 0.75X + 0.75Y = 2,250$$

$$0.375X = 750$$

$$X = 750/0.375 = ₹ 2,000$$

$$Y = 3,000 - 2,000 = ₹ 1,000$$

Statement of cost & profit per unit at present:

	(₹)
Material = 2,000 x 50%	1,000
Labour = 2,000 x 20%	400
Overheads = 2,000 x 30%	600
	2,000
(+) profit @ 50% of cost	1,000
	3,000

Computation of new selling price to get same percentage of profit:

	(₹)
Material = 1,000 x 117/100	1,170
Labour = 400 x 120/100	480
Overheads	600
Cost	2,250
(+) Profit @ 50%	1,125
New selling price	3,375

Sol. 3 (b)

The practical difficulties that are likely to arise in the implementation of a scheme of inter-firm comparison are:

- a. The top management may not be convinced of the utility of inter-firm comparison.
- b. Reluctance to disclose data which a concern considers to be confidential.
- c. A sense of complacency on the part of the management who may be satisfied with the present level of profits.

- d. Absence of a proper system of Cost Accounting so that the costing figures supplied may not be relied upon for comparison purposes.
- e. Non-availability of a suitable base for comparison.

Sol. 4(a)

80% Learning Curve results are given below:

Production (Units)	Cumulative Average Time (hours)	Total Time (hours)
1	10	10
2	8	16
4	6.4	25.6
8	5.12	40.96
16	4.096	65.54
32	3.2768	104.86

Labour time required for first eight units = 40.96 hours

Labour cost required for 8 units = 40.96 hours × Rs 12/hr = Rs 491.52

Labour time for 32 units = 104.86 hours

Labour time for first eight units = 40.96 hours

Labour time required for 2nd order for 24 units = 63.90 hours

Labour cost for 24 units = 63.90 hours × Rs 12/hr = Rs 766.80

Sol. 4 (b)

(1) **Delegation of Authority:** Now a day the function of management is no longer personal, management accounting helps the organisation in proper delegation of authority for the attainment of the vision and mission of the business.

(2) **Need of the Management:** Management Accounting plays the role in meeting the need of the management.

(3) **Qualitative Information:** Management Accounting accumulates the qualitative information so that management would concentrate on the actual issue to deliberate and attain the specific conclusion even for the complex problem.

(4) **Objective of the Business:** Management Accounting provides measure and reports to the management thereby facilitating in attainment of the objective of the business.

Sol. 5 (a)

1. Where applicable the learning curve suggest great opportunities for cost reduction to be achieved by improving learning.

2. The learning curve concept suggests a basis for correct staffing in continuously expanding production. The curve shows that the work force need not be increased at the same rate as the prospective output. This also helps in proper production planning through proper scheduling of work; providing manpower at the right moment permitting more accurate forecast of delivery dates.

3. Learning curve concept provides a means of evaluating the effectiveness of training programs. What level of cumulative cost reduction do they accomplish? How does the learning curve for this group or shop compare with others? Whether any of the employees who lack the aptitude to meet normal learning curve should be eliminated.

4. Learning curve is frequently used in conjunction with establishing bid price for contracts. Usually, the bid price is based on the cumulative average unit cost for all the units to be produced for a given contract. If production is not interrupted. Additional units beyond this quantity should be costed at the increment costs incurred, and not at the previous cumulative average. If the contract agreement so provides, a contract may be cancelled and production stopped before the expected efficiency is reached. This would mean that the company having quoted on the basis of cumulative average unit cost is at a disadvantage because it cannot reap the benefit of leaning. The contractor must provide for these contingencies so that it will be reimbursed for such loss.

5. The use of learning curve, where applicable, is important in the working capital required. If the requirement is based on average cumulative unit cost, the revenues from the first few units may not cover the actual expenditures. For instance, if the price was based on the average cumulative unit cost of 328

hours the first unit when produced and sold will cause a deficit of 4.72 hours (8.00 - 3.28). Provision should therefore, be made to cover the deficit of working capital in the initial stages of production.

6. As employees become more efficient, the rate of production increases and so more materials are needed, the work-in-progress inventory turns over faster, and finished goods inventory grows at an accelerated rate. A knowledge of the learning curve assists in planning the inventories of materials. Work-in-progress, and finished goods.

7. Learning curve techniques are useful in exercising control, Variable norms can be established for each situation, and a comparison between these norms and actual expenses can be made. Specific or average incremental unit cost should be used for this purpose.

8. The learning curve may be used for make-or- buy decisions especially if the outside manufacturer has reached the maximum on the learning curve. Help to calculate the sensitive rates in wage bargaining.

Sol. 5 (b)

1. Marginal costing system is simple to operate than absorption costing because they do not involve the problems of overhead apportionment and recovery.
2. Marginal costing avoids, the difficulties of having to explain the purpose and basis of overhead absorption to management that accompany absorption costing. Fluctuations in profit are easier to explain because they result from cost volume interactions and not from changes in inventory valuation.
3. It is easier to make decisions on the basis of marginal cost presentations, e.g., marginal costing shows which products are making a contribution and which are failing to cover their avoidable (i.e., variable) costs. Under absorption costing the relevant information is difficult to gather, and there is the added danger that management may be misled by reliance on unit costs that contain an element of fixed cost.
4. Marginal costing is essentially useful to management as a technique in cost analysis and cost presentation. It enables the presentation of data in a manner useful to different levels of management for the purpose of controlling costs. Therefore, it is an important technique in cost control.
5. Future profit planning of the business enterprises can well be carried out by marginal costing. The contribution ratio and marginal cost ratios are very useful to ascertain the changes in selling price, variable cost etc. Thus, marginal costing is greatly helpful in profit planning.
6. When a business concern consists of several units and produces several products and evaluation of performance of such components can well be made with the help of marginal costing.
7. It is helpful in forecasting.
8. When there are different products, the determination of number of units of each product, called Optimum Product Mix, is made with the help of marginal costing.
9. Similarly, optimum sales mix i.e., sales of each and every product to get maximum profit can also be determined with the help of marginal costing.
10. Apart from the above, numerous managerial decisions can be taken with the help of marginal costing, some of which, may be as follows:-
 - a) Make or buy decisions,
 - b) Exploring foreign markets,
 - c) Accept an order or not,
 - d) Determination of selling price in different conditions,
 - e) Replace one product with some other product,
 - f) Optimum utilisation of labour or machine hours,
 - g) Evaluation of alternative choices,
 - h) Subcontract some of the production processes or not,
 - i) Expand the business or not,
 - j) Diversification,
 - k) Shutdown or continue,

Sol. 6

a) Computation of Material Usage Variance

$$\begin{aligned}\text{Material usage Variance} &= \text{SQSP} - \text{AQSP} \\ &= \text{SP} (\text{SQ} - \text{AQ}) \\ &= 2.25(100-110)\end{aligned}$$

= 22.50 (A)

b) Computation of Price variance:

1) When Variance is calculated at the point of purchase:

Price variance = AQSP - AQAP
= (110 x 2.25) - (110 x 2.15)
= 11 (F)

2) When variance is calculated at the point of issue on FIFO basis

Price variance = AQSP - AQAP
= (110 x 2.25) - ([100 x 2.25] + [10 x 2.15])
= 1 (F)

3) When variance is calculated at the point of issue on LIFO basis

Price variance = AQSP - AQAP
= (110 x 2.25) - (110 x 2.15)
= 247.50 - 236.50
= 11 (F)

Sol. 8 (b)

a) Expansion: The firm requires additional funds to invest in fixed assets when it intends to expand the production facilities in view of the increase in demand for their product in near future. Accordingly the current assets will increase. In case of expansion the existing infrastructure – like plant, machinery and other fixed assets is inadequate, to carry out the increased production volume. Thus the firm needs funds for such project. This will include not only expenditure on fixed assets (infrastructure) but also an increase in working capital (current assets).

b) Replacement: The machines and equipment used in production may either wear out or may be rendered obsolete due to new technology. The productive capacity and competitive ability of the firm may be adversely affected. The firm needs funds or modernisation of a certain machines or for renovation of the entire plant etc., to make them more efficient and productive. Modernization and renovation will be a substitute for total replacement, where renovation or modernization is not desirable or feasible, funds will be needed for replacement.

c) Diversification: If the management of the firm decided to diversify its production into other lines by adding a new line to its original line, the process of diversification would require large funds for long-term investment. For example ITC and Philips company for their diversification.

d) Buy or Lease: This is a most important decision area in Financial Management whether the firm acquire the desired equipment and building on lease or buy it. If the asset is acquired on lease, there have to be made a series of annual or monthly rental payments. If the asset is purchased, there will be a large initial commitment of funds, but not further payments. The decision – making area is which course of action will be better to follow? The costs and benefits of the two alternative methods should be matched and compared to arrive at a conclusion.

e) Research and Development: The existing production and operations can be improved by the application of new and more sophisticated production and operations management techniques. New technology can be borrowed or developed in the laboratories. There is a greater need of funds for continuous research and development of new technology for future benefits or returns from such investments.

Sol. 9 (a)

- a) The exporter sells the goods to the importer on a deferred payment basis spread over 3-5 years.
- b) The importer draws a series of promissory notes in favour of the exporter for the payments to be made inclusive of interest charges.
- c) Such promissory notes are availed or guaranteed by a reputed international bank which can also be the importer's banker. (it is endorsed on the promissory note by the guaranteeing bank that it covers any default of payment of the buyer).
- d) The exporter now sells the availed notes to a forfeiter (which may be the exporter's banker) at a discount without recourse.

e) The forfeiter may hold these notes till maturity or sell them to group of investors interested in taking up such high-yielding unsecured paper.

Sol.9 (c)

Venture Capital is a form of equity financing especially designed for funding high risk and high reward projects. There is a common perception that Venture Capital is a means of financing high technology projects. However, Venture Capital is investment of long term financial made in:

1. Ventures promoted by technically or professionally qualified but unproven entrepreneurs, or
2. Ventures seeking to harness commercially unproven technology, or
3. High risk ventures.

The term 'Venture Capital' represents financial investment in a highly risky project with the objective of earning a high rate of return.



www.globalcma.in