CA - Final
Theory of Advanced Management Accounting
(Excluding Operation Research)

INDEX

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Chapter – 2: Cost Concepts in Decision Making

1. Short note on Cost Centre? Discuss the various types of Cost Centers.

A cost centre refers to a section, segment or subdivision of an organization of which costs are charged. A cost centre is location, person or equipment (or group of these) for which costs may be ascertained and used for the purpose of control. For example a cost centre may be

(i) Allocation e.g., departments sales territories etc.

(ii) A person e.g., engineers salesmen, machine operators, etc.

(iii) An item of equipment, e.g., machines delivery vans, etc.

2. What is Responsibility Centers? Distinguish Between Cost Centre, Revenue Centre, Profit Centre and Investment Centers.

- It is an activity centre of a business organization entrusted with a special task.
- It is a unit of function of a business organization headed by an executive responsible for its performance.
- Various Responsibility Centers are as under:

Particulars	Cost Centers	Revenue Centers	Profit Centers	Investment Centers
Meaning	A centre for which a standard amount of cost is pre-determined and used for control.	A centre devoted to raising revenue (no responsibility for production)	A centre whose performance is measured in terms of income earned and cost incurred (profit earning)	A centre responsible for earning profits and also for asset utilization.
Primary responsibility	Cost reduction and cost control	Generation of sale revenue	Profit earning	Earning return of Investments.
Performance evaluation	Standard cost less actual cost	Budgeted revenue less actual revenue	Budgeted profits less actual profits	Budgeted ROI less actual ROI
Other points	Control of cost is subject to- 1, Time 2. Location 3. Product	Also responsible for some expenses related with mark-eting of products.	It may mean that one division sells its output to another division within the organization – i.e.inter-divisional transfer pricing.	

3. Write Short Notes on Classification of Cost

Classification of Total cost can be made on either of the Following Criteria

A: Cost on the basis of nature or Element

i. Material
ii. Labour
iii. Overhead *(Including Indirect Material & Labour)*
a) Production b) Administrative c) Selling d) Distribution

B: Classify Cost on the basis of variability or Behaviour

I. Fixed Cost
II. Variable Cost
III. Semi Variable Cost

C: Classify Cost on the basis of Controllability

I. Controllable Cost
II. Uncontrollable Cost

D: Classify Cost on the basis of Normality

I. Normal Cost
II. Abnormal Cost

E: Classify Cost for the purpose of Decision Making of Management

I. Standard Cost
II. Marginal Cost
III. Opportunity Cost
IV. Sunk Cost
V. Relevant Cost
VI. Incremental or Differential Cost
VII. Product Cost
VIII. Shut down Cost
IX. Irrelevant Cost
X. Full Cost
XI. Replacement Cost
XII. Historical Cost

F: Classify Cost on the basis of Functions

(1) Production Cost
(2) Administration Cost
(3) Selling Costs
(4) Distribution Cost
(5) Research Cost
(6) Development Cost
(7) Pre production Cost
(8) Conversion Cost

4. Explain relevant costs.

Costs which are relevant for the decision to be taken are called as relevant cost. It is the cost that shall be incurred if the proposed decision is implemented. If the proposed decision is not implemented, no relevant costs shall be incurred.

During the course of any alternative's financial evaluation, the mangers must consider only relevant costs and not sunk costs.

For example: If the material has already been acquired and has no alternative use, then the relevant cost of using the material for any alternative is Nil. In other words, we can say that the cash outflow in future for using the material is zero; its relevant cost is Zero.

Had the material not been acquired, then the relevant cost for using the material will be its purchase price as it will require cash outflow.

5. Explain Opportunity costs.

Opportunity cost is defined as the cost of the alternative foregone. In other words, it is the profit which could have been earned by choosing a mutually exclusive alternative. It is the cost of opportunity lost by diversion of an input factor from one use to another.

The Opportunity cost or the value of opportunity foregone is taken into consideration when alternatives are compared. When a number of alternatives are available, the highest of the opportunity cost will be considered for decision-making.

For example, a firm could either sell a dead stock item for Rs. 4 or substitute it for another component costing Rs.5. The opportunity cost of using this item in a specific contract will be Rs.5, since the firm would otherwise have opted for substitution (and not sale).

Another example: The opportunity cost of funds invested in a project is the interest that could have been earned by investing the funds in bank deposit.

6. Explain Sunk Costs.

The costs which have already been incurred or the cash outflow for which has already been made or committed, then such costs are sunk costs. These are historical costs.

Sunk costs are not considered as relevant cost for evaluation of an alternative.

7. Explain Irrelevant Costs.

The costs which are not relevant for the purpose of decision making are called as irrelevant costs. **All sunk costs are irrelevant costs. But, it is not necessary that all irrelevant costs are sunk costs.**

Example: Book value of material cost having no alternative use is a sunk cost and hence irrelevant. But, the materials cost to be bought in future and are to be considered for two alternative proposals are irrelevant for comparison purposes.

8. What are Explicit Costs and Implicit Costs?

(a) **Explicit Costs-** These are also known as out of pocket costs they refer to costs involving / immediate payment of cash. Salaries, wages, postage and telegram, printing and stationary, interest on loan etc. are some examples of explicit cost involving immediate cash payment.

(b) **Implicit Costs-** These costs do not involve any immediate cash payment. They are not recorded in the books of account. Example: Notional Rent, Opportunity Cost etc. **They are also known as economic costs or imputed costs.**

9. Distinguish Between Product Cost and Period Cost.

	Product Cost	Period Cost or Discretionary Costs
1	These are costs which are assigned to the product	These are the costs which are not assigned to the product.
2	These costs are first debited to the finished goods account and then COGS is debited to Profit and Loss Account and balance portion is carried as closing stock.	These costs are directly debited to Profit & Loss Account of the period in which these are incurred.
3	These costs are considered in valuation of Inventory.	These costs are not considered in valuation of Inventory.
4	Examples: Variable Factory overhead	Example: Advertisement Expenses
5	Under Absorption costing, Fixed factory Overheads are considered as Product cost and are absorbed with a rate to the manufactured product.	Under Marginal costing, Fixed factory Overheads are considered as Period cost and are debited to Profit & Loss.

10. Distinguish between Marginal Costs and Differential Costs.

Marginal Costing is the technique of ascertaining marginal/additional costs with the change in volume of output by differentiating between fixed costs and variable costs.

Differential Costing is the technique of ascertaining the change in cost with the change in volume by comparing the total cost before change with that of total cost after change. The technique may be termed as incremental costing when the difference is increase in costs and decremental costing when the difference is decrease in costs.

The main points of distinction between marginal costing and differential costing are as below:

a. The technique of marginal costing requires a clear distinction between variable costs and fixed costs whereas no such distinction is made in the case of differential costing.

b. In marginal costing, margin of contribution and contribution ratio are the main yard sticks for performance evaluation and for decision making whereas under differential costs analysis, differential costs are compared with the incremental or decremental revenue (as the case may be) for arriving at a decision.

c. Differential cost analysis is possible in both absorption costing and marginal costing, where as marginal costing in itself is a distinct technique.

11. Site few Examples of Relevant Costs and Irrelevant Costs.

Example of Relevant Cost:

- All variable costs are relevant costs.
- Fixed costs which vary with the decision
- Incremental costs are relevant
- Material proposed to be purchased on adoption of the decision

Examples of Irrelevant Costs:

- All fixed costs are generally irrelevant.
- Variable cost which do not vary with decision
- Book Value of Asset already purchased
- Sunk Costs

Chapter 3: Pricing Decision

1. What are the methods of pricing the Finished Product?

There are many methods of pricing the product. The adoptability of the method depends upon the costing technique and strategy followed by the management of the organization.

	Type/ Method	Brief Definition
1	**Cost plus Pricing**	Full Cost of the Product + Pre-determined Profit
2	**Rate of Return Pricing**	Desired Return of Capital Employed is the base of Profit calculation which is added to the cost of the product to determine Selling Price
3	**Variable Cost Pricing**	Variable Cost of the product + Desired Profit
4	**Competitive Pricing**	Company sets its pricing considering the prices being charged by the competitors
	4A: Competitive Pricing **Going Rate Pricing**	Average Price Level of the industry is adopted as the Price of the enterprise.
	4B: Competitive Pricing **Sealed Bid Pricing**	This is the slightly lower than the expected lowest price to be quoted by the competitor.
5	**Incremental Pricing**	Pricing depends upon the incremental cost being incurred upon taking a decision.
6	**Market Entry Pricing**	The price which an enterprise sets at the time of the first introduction of the product in the market.
	6A: Market Entry Pricing **Skimming Pricing**	Higher Price during early period of Product Life Cycle as initial promotional expenses are higher.
	6B: Market Entry Pricing **Penetration Pricing**	Charge low in the beginning of the product life cycle to attract customers. It is opposite to Skimming Pricing.

2. What are the advantages & Disadvantages of Cost plus Pricing Model?

Cost plus pricing model of pricing adds a pre determined profit on the cost of the product.
The **advantages** of this model are as under:

a) Assured Method
b) Reduces Risks & Uncertainties
c) Considered as Fair Method

The **disadvantages** of this model are as under:

a) Ignores Competition
b) Ignores Demand
c) Arbitrary Cost Allocation
d) Ignores Opportunity Cost
e) Ignores Price Volume Relationship

3. State 2 types of Competitive Pricing Model.

- Going Rate Pricing
- Sealed Bid Pricing

4. State 2 types of Market Entry Strategies.

- Skimming Pricing
- Penetrating Pricing

5. What do mean by Price Discrimination?

Price discrimination means charging different price depending upon the situation of volume, geographies and knowledge of the customers.
Price discrimination may be based

- On the basis of customer
- On the basis of product version
- On the basis of geographies
- On the basis of time / season

It is only possible when the varying prices can be segmented.

6. Explain Geographic Pricing Strategies?

The pricing to be decided for different geographies are called as Geographic Pricing Strategies. It can be decided that there should be uniform prices for all geographies or there can be varying prices for varying locations. Normally, the vendor must consider the costs of shipping goods to the buyer. Considering the same, various strategies of pricing can be adopted by the vendors which are as under:

- **Point-of-Production Pricing**: The seller quotes the price that it will charge from the factory location and any freight expenses forthwith is to be borne by the purchaser.

- **Uniform Delivered Pricing**: Under this strategy, the same delivered price is quted to all buyers irrespective of their locations.

- **Zone delivered Pricing**: The market is sub-divided into different geographical zones and then a uniform price is for each respective zone is fixed.

- **Freight Absorption Pricing**: Here, the price will charged at the rate of Point of Production pricing plus the actual cost of freight for delivery.

7. What is Penetration Pricing? What are the circumstances under which this policy can be adopted?

Penetration pricing policy advocates in favor of using a low price as the principal tool for penetrating mass markets early. The company may not earn profit by resorting to this policy during the initial stage. Later on, the price may be increased as and when the demand picks up. Penetrating pricing policy normally is adopted when a new product is introduced but is can also be adopted at any stage of product life cycle.

The circumstances for adoption of this policy can be summarized as under:

i. When the demand of the product is elastic to price. (I.e. Demand increases when prices fall)

ii. When there are substantial savings on ;large scale production (i.e. Economies can be achieved with voluminous production)

iii. When there is threat for competition and the product is finding a difficult place in market at current prices.

The low pricing policy is introduced for the quick tapping of the market but at the same point of time it needs an in-depth analysis before determining the price.

8. What is Skimming Pricing Policy?

It is a policy where the prices are kept high during the early period of a product's existence This can be synchronized with high promotional expenditure and in the latter years the prices can be gradually reduced. **The reasons for following such a policy are as follows:**

1. The demand is likely to be inelastic in the earlier stages till the product is established in the market.

2. The gradual reduction in price in the latter years will tend to increase the sales.

3. This method is preferred in the beginning because in the initial periods when the demand for the product is not known and the price covers the initial cost of production.

4. High initial capital outlays needed for manufacture, results in high cost of production. In addition to this, the producer has to incur huge promotional activities resulting in increased costs. High initial prices will be able to finance the cost of production particularly when uncertainties block the usual sources of capital.

9. What do you mean by Pareto Analysis? How Pareto Analysis is helpful in pricing in the case of firm dealing in multiple products?

Pareto analysis is based on the 80:20 rule that was a phenomenon observed by Vilfredo Pareto. According to him 80% of wealth of Milan in Italy was owned by 20% of its citizens. The phenomenon can be observed in many different business situations & the management can follow it in various circumstances to direct management attention to the key control mechanism or planning aspects.

Analysing and focusing on the 80% value relating to 20% volume helps business in the following areas:

- Pricing of a product (in a multi-product company)
- Customer profitability.
- Stock control.
- Activity Based Costing (20% cost drivers are responsible for 80% of total cost)
- Quality Control

Such analysis helps the top management to delegate the pricing decision for approximately 80% of its product to the lower level management, thus freeing them to concentrate on the pricing & marketing decisions for 20% products that will generate 80% revenue for them.

10. Enumerate the uses of Pareto Analysis.

Pareto analysis is useful to:

i. Prioritize Problems, goals & objectives
ii. Allocate physical, financial and human resources effectively
iii. Maximize quality time for higher management personnel

11. State the general guidelines to be used in adopting a pricing policy in a manufacturing organization.

The general guidelines to be used in adopting pricing policies are as under:

- The pricing policy should encourage optimum utilization of resources.
- The pricing policy should work towards a better balance between demand and supply.
- The policy should promote export.
- The pricing policy should serve as an incentive to the manufacturers to maximize production by adopting improved technology.
- It should be able to satisfy the providers of capital by giving then adequate returns.

Q.14. Explain Concept of Shadow Price?

Shadow Price refers to the opportunity cost of one unit of resource for the organization. The concept is of particular relevance in a situation of scarce resources. For instance, if machine hours are a scare resource and the firm could have increased its contribution margin by Rs. 10 by having additional production in one machine hour, the shadow price of one hour's production is Rs. 10.

In other words, the shadow price quantifies the benefit, a firm can expect through increasing its capacity.

Chapter – 4: Recent Developments in Business

Just in Time (JIT)

1. Explain the concept of Just In Time Approach.

Just in Time approach means do the work the moment it is required to be done. As the name signifies, in other words we can say do the work (purchase/production) just in the right time when it is needed.

Most important in JIT system is to ensure receiving of products/spare parts/materials from its suppliers on the exact date and at the exact time when they are needed in order to reduce excessive inventory in stock.

Similarly, the production of the Process – I is dependent on the Input Requirement of Process – II. Process I operation is done only when its output, whenever is produced, is immediately required by the Process II.

Just –in-time (JIT) production (also called **lean production**) is a **"demand- pull" manufacturing system** in which each component in a production line is produced immediately as need in which by the next step in production line. In a JIT production line, manufacturing activity at any particular workstation is promoted by the need for that station's output at the following station. Demand triggers each step of the production process, starting with customer demand for a finished product at the end of the process and working all the way back to the demand for direct materials at the beginning of the process.

A complete JIT system begins with production, includes deliveries to a company's production facilities, continues through the manufacturing plant and even includes the types of transactions processed by the accounting system.

The sound JIT system must ensure the following:

a) The company must ensure that it receives supplies in time and preferably is delivered directly at the production centre.
b) Real time inspection of the goods received must be done by the production or quality managers or engineers.
c) Long set up time are reduced down to shorter set up time thereby reducing the need for WIP stock.
d) Introduction of Kanban Card
e) Introduction of Working Cells

2. What are advantages of JIT approach to manufacturing?

JIT provides competitive advantages in the following ways:

I. Stocks of raw materials and finished goods are eliminated or substantially reduced. Hence, it leads to avoidance of stock holding costs at large.

II. It affords flexibility to customer requirements where the company can manufacture customized products and the competitive advantage is thereby improved.

III. It minimize waiting times and transportation costs.

IV. JIT aims at elimination of non-value added activities and elimination of cost in this direction will improve competitive advantage.

V. It affords flexibility to customer requirements where the company can manufacture customized products and the competitive advantage is thereby improved.

3. How does the JIT approach help in improving an organization's profitability?

JIT approach helps in reduction of cost/increase in price as follows:

I. Eliminates/reduces WIP between machines within working cell.

II. OH costs in the form of rentals for inventory, insurance, maintenance costs etc. are reduced.

III. Higher product quality ensured by the JIT approach leads to higher premium in the selling price

IV. Detection of problem areas due to better production/scrap reporting/labour tracing and inventory accuracy lead to reduction in costs by improvement.

V. Immediate detection of defective goods being manufactured so that early correction is ensured with least scrapping.

4. What kind of costs can be reduced by the Introduction of JIT System?

The following costs can be reduced by the Introduction of JIT System

- Interest cost that relate to Carrying cost of Inventory
- Cost of Inventory that becomes obsolete overtime
- Cost of rent for inventory storage
- Cost of equipments used for storage
- Cost of Warehouse Employees
- Cost of Warehouse Insurance and other related expenses

5. What do you mean by Back-flushing?

Back flushing requires **no data entry of any kind until a finished production is completed**. Once the finished goods come out of production, it is entered in the computer which assumes the material that would have been consumed on production with the help of "**Bill of Material**". This is how raw material consumption is arrived at and with it the closing inventories are arrived.

This kind of accounting eliminates the need of accounting according to the flow of the raw material from process to process. This calls for many disadvantages also as the audit trials are lost. It becomes difficult to track the lots in cases of defectives. Since, the **JIT system** have real-time check over scrap reporting and production reporting, back-flush accounting is considered ideal for JIT system.

However, it should be ensured that the following problems must be corrected before it will work properly.

i. Production Reporting
ii. Scrap Reporting
iii. Lot Tracing
iv. Inventory Accuracy

Total Quality Management

6. What do you mean by Total Quality Management?

Total Quality Management (TQM) is defined as a set of concepts and tools for getting all employees focused on continuous improvements in the eyes of the customer. Since TQM focuses the attention of an organization on quality, thus it helps to provide the customer with much higher satisfaction. TQM focus to define the quality not from the angle of producer but from the perspective of customers satisfaction.

TQM may alsobe defined as the continous improvement in quality, productivity & effectiveness obtained by establishing responsibility for process as well as output. TQM is a philosophy & a movement rather than a body of technique.

Since it aims at managing quality by regularizing all sections and sub-activities of the corporation, hence it is called as Total Quality Management.

Critical Success factors for implementation of Quality Management program are:

- Focus on Customers' Needs
- Everyone in the organization must be involved
- Focus on continuous involvement
- Design quality in production process and hence in product
- Effective performance measurement system
- Appropriate training to educate TQM

In other words, the six C's for successful implementation of TQM are as under:

i. Commitment
ii. Control
iii. Continuous Improvement
iv. Cooperation
v. Customer Focus
vi. Culture

Three core Concepts of Total Quality Management.

A. **Quality Control** It is concerned with the past.

B. **Quality Assurance** It deals with the present.

C. **Quality Management** It is concerned with the future.

7. Discuss the benefits accruing from the implementation of Total Quality Management from programme in an organization.

The benefits accruing from the implementation of Total Quality Management program in an organization are:

- There will be increased awareness of quality culture in an organization.
- It will lead to commitment of continuous improvement.
- It will focus on customer satisfaction.
- A greater emphasis on team work will be achieved.

8. Explain 4 P's of Quality improvement principles.

I. People
II. Process
III. Problem
IV. Preparation

9. What are the various stages / steps to be taken in the implementation of TQM?

Stages	Description
1	Identification of customers / Customers groups
2	Identifying customer expectation
3	Identifying customer decision-making requirements and product utilities;
4	Identifying perceived problems in Decision making process and produced utility
5	Comparison with other organization and benchmarking
6	Customer feed-back
7	Identification of improvement opportunities.
8	Quality improvement process through (a) New strategies; (b) Elimination of deficiencies and (c) identifying solutions

10. What do you understand by PRAISE Analysis in TQM.

1) **P**roblem Identification
2) **R**anking of the problems
3) **A**nalysis
4) **I**nnovation
5) **S**olution
6) **E**valuation

Target Costing

11. Define Target Costing.

Target costing is defined as "a structure approach to determining the cost at which a proposed product with specified functionality and quality must be produced, to generate a desired level of profitability at its anticipated selling price".

Target Costing V/S Traditional Costing:

Target Costing	Traditional Costing
Production Specification ↓ Target Price and volume ↓ Target profit ↓ Target cost ↓ Product design	Production Specification ↓ Product design ↓ Estimated cost ↓ Target cost ↓ Target price

In simple words, working backward from the sales price, companies establish an acceptable target profit and calculate the target cost as follows: -

Target Cost = Target Price - Target profit

Important points:

- **Intensive market research is required before implementation of target costing.**
- **Cost means entire life cycle cost.**

12. What are the main features of Target Costing?

The main Features practices followed in Target Costing are:

Step	Description
1	Develop a product that statistics the needs of potential customers.
2	Choose a target price based on customer's perceived value for the product and the prices competitors charge.
3	Derive a target cost by subtracting the desired profit margin from the target price.
4	Estimate the actual cost of the product.
5	If estimated actual cost exceeds the target cost, investigate ways of driving down the actual cost to the target cost.
6	Establish Cost reduction targets for each component and activity using • Value Analysis • Value Engineering

13. What are the problems of Target Costing?

Problems of Target Costing:

- Development of a design is a time taking exercise.
- In order to sell the product at a target price, it may call for cutting of mandatory costs resulting into decrease of quality.
- Determination of the target selling price at designing stage may be hypothetical in nature.

Life Cycle Costing

14. What do you mean by Life Cycle Costing?

Life cycle costing is the methodology of determining the Total cost of the product during its entire life cyle. This includes Revenue expenditure as well Capital expenditure. It also includes designing and related research & development expenditure.

It includes the costs associates with acquiring, using, caring for and disposing of physical asset Including the feasibility studies, research, design, development, production, maintenance, replacement and disposal as well as support, training and operating costs, generated by the acquisition use, maintenance and replacement of permanent physical assets.

Characteristics of Life Cycle Costing concepts:

i. The products have finite lives.

ii. It passes through the cycle of

Development → Introduction → Growth → Maturity → Decline → Deletion

iii. Profit per unit varies as the product passes through various cycles.

iv. Each phase of product life cycle poses varying threats & oppurtunities that give rise to different strategic actions.

v. Example: Emphasis on R&D is given in Development phase whereas emphasis on cost control should be given at decline phase.

Life cycle costing estimates and accumulates costs over a products entire life cycle in order to determine whether the profits earned during the manufacturing phase will cover the costs incurred during the pre-and post manufacturing stages.

Identifying the costs incurred during the different stages of a product's life cycle provides an insight into understanding and managing the total costs incurred throughout its life cycle. In particular, life cycle costing helps management to understand the cost consequences of developing and making a product and to identify areas in which cost reduction efforts are likely to be most effective.

Most accounting systems report on a period-by-period basis, and product profits are not monitored over their life cycles. In contrast product life cycle reporting involves tracing costs and revenues on a product-by-product basis over several calendar periods throughout their life cycle.

15. What are the costs included in Product Life Cycle concept?

Development Phase:	Research Cost , Design Costs etc.
Introduction Phase:	Promotional Costs, Advertisement Cost, Marketing Costs
Growth Phase & Maturity Phase:	Manufacturing Cost, Distribution Costs, Selling Costs
Decline Phase & Deletion Phase:	Higher Repair costs, Sale of Plant costs

16. What are the benefits of Product Life Cycle Costing?

Life cycle costing helps in determination of exact cost of the product which is to be recovered from the customers. Traditionally, product cost is considered as the manufacturing cost only but the product cost includes in addition to manufacturing other costs also like Design cost and dismantling costs.

Development Phase	Introduction Phase	Growth and Saturation Phase	Decline & Deletion Phase

← Cost Incurrence Period →

← Revenue Generation Period →

Value Chain Analysis

17. What do you mean by Value Chain Analysis?

Value chain is the **linked set of value creating activities** from the basic raw materials and components sources to the ultimate end use of the product or service delivered to the customer.

The six business functions contained in the value chain are
- (i) Research & Development;
- (ii) Design
- (iii) Production
- (iv) Marketing
- (v) Distribution
- (vi) Customer Service

The objective of value chain is to serve as means of increasing the customer satisfaction and managing costs effectively. Coordination of the individual parts of the value chain activities creates conditions to improve customer satisfaction in terms of cost efficiency, quality and delivery. A firm which performs value chain activities more efficiently and at a lower cost than its competitors will be able to gain competitive advantage. The following methodology should be adopted.
- The firm should identify the industry value chain and then assign costs, revenues and assets to value acivities.
- Diagnose the cost drivers regulating each value activity.
- Develop sustainable cost advantage either by controlling cost or by reconfiguring the chain value.

By analyzing costs, revenues and assets in each activity systematically a company can achieve low cost. Thus value chain helps managers in deciding how to apply the organization's valuable physical and human resources to each linked process so as to achieve cost effectiveness.

18. Mention three useful strategic frameworks of the value chain analysis.

Three useful strategic frameworks for value chain analysis are:
1. Industry structure analysis;
2. Core competencies;
3. Segmentation analysis.

19. What are the detailed steps in the Value Chain Analysis?

A. Internal Cost Analysis

The principal steps of internal cost analysis are:
- The firm should identify the industry value chain and then assign costs, revenues and assets to value acivities.
- Diagnose the cost drivers regulating each value activity.
- Develop sustainable cost advantage either by controlling cost or by reconfiguring the chain value.

B. Internal Differentiation Analysis

To understand the sources/basis of differentiation (including the cost) within internal value creating processes

C. **Vertical Linkage Analysis**

Analysis of External Suppliers and customers

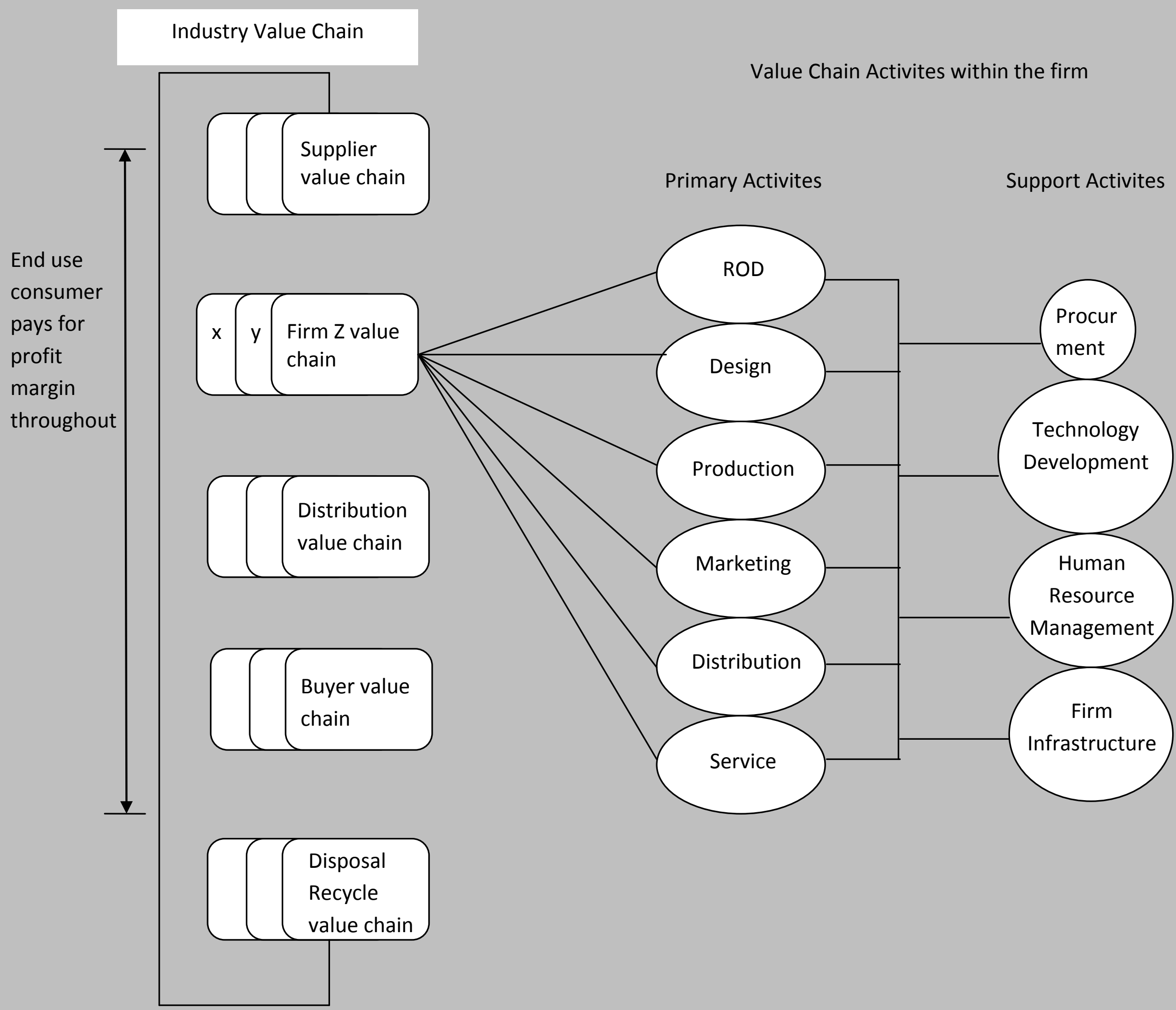
D. Core Competencies Analysis

20. How can Value Chain Analysis achieve Cost Reduction?

Value Analysis can do cost reeduction in the following manner:

- By identifying and removing unnecessary process which had utility earlier
- By introducing component substitution at a lesser cost without affecting the quality of the product.
- By simplifying the product design
- By introducing alternative methods or process

21. Explain with a diagram the value chain activities within the firm with suitable classifications under primary and support activities and also the industry value chain indicating what the end use customer pays for.



22. Distinguish between Traditional Costing & Value Chain Analysis

	Traditional Management Accounting	Value Chain Analysis
1	Focuses on internal information	Focuses on internal as well as external information
2	Application of single cost driver at the overall firm is taken.	Application of multiple cost drivers i.e. analysis are done for each value activity.
3	It assume that cost reduction must be found in the value added process	Exploits linkages throughout the value chain i.e. within firm, with suppliers and customers.
4	Insights for strategic decisions somewhat limited in traditional management accounting	Identity cost driver at the individual activity level and develop cost / differentiation advantage either by controlling those drivers better than competitors by reconfiguring the value chain.

Activity Based Cost Management

23. What do you mean by Cost Driver?

Cost Driver is the factor that causes change in the cost of an activity. There are two categories of Cost Driver:

- **Resource Cost Driver:** It is a measure of the quantity of the resources consumed by an Activity.
- **Activity Cost Driver:** It is the measure of the frequency of the demand placed on activities by cost objects. *(Cost object means Product for which cost is to be derived.)*

Examples of some Important Activities and Cost Drivers:

Activity	Cost Driver
Machine Set Up	Number of Production runs Number of Set up
Purchase Materials	Number of Orders Placed Number of Components
Warehousing	Volume of Stock
Material Handling	Number or Volume of Material
Inspection	Inspection per Item
Quality Testing	Hours of Test Time
Receiving Material	Number of Receiving Orders
Packing	Number of Packing Orders
Store Delivery	Number of Store Deliveries
Distribution	Number of customers Distance to be travelled
Customer Service	Number of Calls Number of Product Serviced
Research & Development	No. of Research Products
Engineering	Production Orders
Marketing	Number of Advertisement Runs Number of Sales Personnel Sales Revenue

24. Give Examples of for each of the following Categories in Activity Based Costing.
(i) Batch Level Activities
(ii) Product Level Activities
(iii) Facility Level Activities
(iv) Unit Level Activities

	Category	Example
b)	**Batch Level Activities:**	Material Ordering Machine Set Up Costs
c)	**Product Level Activities:**	Design of Product Advertisement of Product
d)	**Facility Level Activities:**	Maintenance of Buildings Plant Security Advertisement of Company not Product
e)	**Unit Level Activities:**	Indirect Materials Inspection of Every Unit Produced

25. What is Activity Based Costing (ABC) or Activity Based Cost Management (ABM)?

The Activity-Based Costing (ABC) is a costing system, which focuses on activities performed to produce products**. ABC is that costing in which costs are first traced to activities and then to products.** This costing system assumes that activities are responsible for the incurrence of costs and create the demands for activities. Costs are charged to products based on individual product's use of each activity.

In traditional product costing system, others costs (other than Material & Labour) are charged to product on the basis of Labour Hours or on the basis of Machine Hours. Whereas, in Activity Based Costing, others costs are first charged to activities and then to the product depending upon the usage of the activity by the product.

Now a day, more & more organizations are adopting ABC because of its following advantages:

- More Accurate determination of Product Cost
- Identification of the areas/activities which consumes cost
- Management can give attention on the cot control or cost reduction exactly at the point (i.e. Activities) which consumes cost
- More useful wherein the cost of Support Services are material. Now, a days, support services cost have increased significantly in all areas of operation.
- Correct determination of cost leads to correct determination of Pricing and profit.

26. Cost can be managed only at the point of commitment and not at the point of incidence. Therefore, it is necessary to manage cost drivers to manage cost. Explain the statement.

A firm commits costs at the time f designing the product or deciding the method of production. The committed costs are thereafter incurred at the time of actual production. Once committed, there are least chances that it will be reversed and not incurred. Therefore, no significant cost reduction can be achieved at the time when costs are incurred. **Hence, it is said that costs can be managed at the point of commitment.**

Further, the factor which leads to incurrence of cost is the cost driver. Any organization which wants to reduce its costs have to first identify its cost driver that is leading to cost incurrence. Such, cost drivers are to be properly regulated at the time of commitment of costs to bring cost reduction.

27. What are the stages in Activity Based Costing?

The following are the stages of Activity Based Costing:

i) Identification of Activities in organization
ii) Assigning costs to each activity
iii) Determining Cost Driver for each Activity
iv) Allocating cost to the product according to the usage of the activities

28. What are Value added activities and Non-added activities?

The **value added activities** are those activities which are valued by the customers and customers will to pay for such services. **Example: Rust free Polishing done by the car dealer on the Car.**

The non- value added activities are those activities which are not valued by the customers and customers do not will for such services. However, many non-value added activities are necessary for smooth operation of production. **Example: Machine set up for production run.**

29. What are the benefits of ABM?

1. Cost reduction
2. Budget Implementation
3. Cost Definition
4. Decision Making
5. Resource Utilisation

30. State the need for emergence of ABC.

- Traditional product costing systems were designed when company's manufactured narrow range of products.
- Direct labour was predominant in finding the overhead absobtion rate, whereas the overheads are not incurred always on the basis of labour hours.
- Companies were in seller's market.
- Overheads were relataively small in earlier days.
- Now a day, many non-value added activities are to be incurred which should be charged to product through activity ased costing **not on the basis of blanket overhead recovery rate.**

Cost Control & Cost Reduction

31. Distinguish between Cost Control & Cost Reduction

1	**Cost Control** is the - function of cost accounting - to control the cost of the enterprise product.	**Cost Reduction** is defined as the achievement of - real and permanent reduction - in the unit cost of goods manufactured or services rendered - without impairing their suitability for the use intended and - without diminution in the quality of the product
2	**Cost control** aims at maintaining the costs in accordance with the established standard.	**Cost reduction** is concerned with reducing costs. It challenges all standards and endeavors to better them continuously.
3	**Cost control** aims at maintaining the costs in accordance with the established standard.	**Cost reduction** is concerned with reducing costs. It challenges all standards and endeavors to better them continuously.
4	**Cost Control** emphasizes on past and present.	**Cost reduction** emphasizes on present and future.
5	**Cost Control** is a preventive function.	**Cost reduction** is a corrective function. It also operates even when an efficient cost control system exists.
6	**Cost control** ends when targets are achieved.	**Cost reduction** has no visible end.

Theory of Constraints

32. Explain the term Theory of Constraints.

The theory of constraint focuses its attention on bottlenecks & constraints within the organization which hinder speedy production. The main concept is to maximize the rate of profit. **(Rate of Profit is also called as Throughput).**

Bottleneck: A bottleneck is an activity within the organization where the demand for that resource is more than its capacity to supply. It is one of the constraint.

Constraint: Constraints are the problems that hiders the throughput 9Profit) of the organization. Examples of the same are: Lack of Skilled Employees, continuous quality maintenance, or any other bottleneck.

We may say that a bottleneck is a constraint but all constraints are not bottleneck.

Throughput: Throughput Contribution = Sales – Direct Material Cost
(It is similar to Contribution of Marginal Costing and Gross Profit of Accounts.)

The theory of constraint describes methods to maximize operating income under bottleneck situation. The objective of TOC is to

- Increase **Throughput**
- Decrease **Investments**
- Decrease **Operating Costs** (Other costs & Fixed Costs)

The theory of constraints identifies the bottlenecks & constraints which hinders the throughput and come out of solution to increase the capacity or come out with alternate solutions.

TOC adopts the common idiom **"a is no stronger than its weakest link".** Hence, TOC aims at making the weakest link stronger.

33. What is Throughput Accounting?

Throughput accounting is a management accounting technique used as the performance measure in the Theory of Constraints.
It assumes that a manager has a given set of resources available. These comprise the existing buildings, capital equipment and labour force. Using these resources, purchased materials and components must be processed to generated sales revenue. To achieve this, maximum amount of throughput is required with the financial definition.

Throughput = Sales revenue - Direct materials cost

Rate of Throughput = Throughput/ Investments or (Throughput – Other Costs) /Investments

Constraints on throughput :

the existence of an uncompetitive selling price
the need to deliver on time to particular customers
the lack of product quality and reliability
the lack of reliable materials suppliers
the existence of shortage of production resources.

Synchronous Manufacturing

34. What do you mean by Synchronous Manufacturing?

It is an all encompassing manufacturing management philosophy which includes a set of principles, procedures and techniques where every action is evaluated in terms of common goals of the organization.

The principles associated with Synchronized Manufacturing are :

- Focus on synchronizing the production flow than focusing on idle capacities.
- The marginal value of time at bottleneck resource is equal to the throughput rate of the products processed by the bottleneck.
- The marginal Value of time at a non bottleneck resource is negligible.
- Resources must be utilized, not simply activated.
- Transfer batch may or may not be equal to the process batch.
- A process batch should be variable both along its route and overtime.

Material Requirement Planning

35. What do you mean by Material Requirement Planning?

Material Requirement Planning is a computerized Production Scheduling System providing a basis for production decisions.

It progressively translates the forward schedule of final product requirements (the master production schedule) into the numbers of sub assemblies, components and raw materials required at each stage of the manufacturing cycle. In other words, MRP involves input planning based on output budget.

36. What are the objectives/steps of Material Requirement Planning?

- Determine the finished Goods requirement for Production.
- Ascertain the required unit of sub-assemblies to be produced.
- Determine the requirement of Raw Material based on Bill of Material.
- Compute inventories, WIP, Batch Sizes lead time.
- Controlling Inventory

Business Process Re-Engineering

37. Explain the term "Business Process Re-engineering".

Business Process Re-engineering is examination of various processes and activities done by the business organization. On in-depth analysis of day to day operation, it suggests the changes to be made to smoothen the functions and simultaneously reduce the cost without jeopardizing the quality of the product.

Aim of Business Process Re-engineering

- Simplification
- Cost Reduction
- Improved Quality, and
- Enhanced Customer Satisfaction

Benchmarking

38. Explain the term Benchmarking.

Benchmarking is the continuous process of measuring products, services or activities against the best level of performance that may be found either inside or outside the organisation. It is a process of comparing a firm's activities with best practices.

The process involves establishment of benchmarks (targets or comparators) through whose use the levels of performance of the company is sought to be improved. Benchmarking is a tool for continuous improvement because after identifying a best practice performance, it becomes a target to beat.

39. Explain briefly stages involved in the process of Benchmarking.

The process of benchmarking involves the following stpes:

1. Planning
    1. Determination of setting up of Benchmarking
    2. Identification of Best Performance
    3. Establishment of Benchmarking Performance Team
    4. Define the Benchmark

2. Collection of Data & Information
3. Analyzing the findings
4. Placing the Analysis Report & making recommendations
5. Monitoring & Reviewing

40. Explain Four Type of Benchmarking of Critical Success Factor.

1. Competitive benchmarking:	It involves the comparison of competitors product with own.
2. Process benchmarking	It involves comparison of process of competitors.
3. Internal Benchmarking	It develops competition among the various inter units of organization.
4. External Benchmarking	It involves seeking help from outside to set benchmark.
5. Strategic Benchmarking	It involves comparison of long term strategies of competitors or Partners.

41. What are Benchmarking Code of Conducts?

Suggested Benchmarking Code of Conduct:

- Principle of Legality
- Principle of Exchange
- Principle of Confidentiality
- Principle of use
- Principle of Preparation
- Principle of Contact

Divestment Strategy

42. What is Divestment Strategy? Highlight the main reasons for Divestment.

Divestment means selling off or shedding business operations to divert the resources for other value added purposes. Selling off a business segment or product division is one of the frequent forms of divestment strategy. It may also include selling off or giving up the control over subsidiary.

Reason for Divestment Strategy

a. Unprofitable segment eating up the profits of other segments
b. Better opportunities in newer areas
c. Unprofitable segment forced purchase during business acquisition; then post acquisition the same can be hived off.
d. Segments not been able to be operated because of low resources available example: nom-availability of raw material.

Chapter 5: Budget & Budgetary Control

1. What do you mean by Budget and Budgetary Control?

A budget is a financial and/or quantitative statement, prepared prior to a defined period of time, of the policy to be pursued during that period for the purpose of attaining a given objective & must be approved.

Objective :

i. A budget is a **blue print** of the desired plan of action or operation. Plans covering the entire organization and all its functions like purchase, production, sales, financial management, research and development are expressed through budgets.

ii. The budget serves as a **declaration of policies** and also defines the objective for executives at all levels of management.

iii. Budgets provide a **means of co-ordination** of the business as a whole . In the process of establishing budgets, the various factors like production capacity, sales possibilities, and procurement of material, labour, etc. are balanced and co-ordinates so that all the activities proceed according to the objective.

iv. Budgets are **means of communication.** Complex plans laid down by the top management are passed on to those who are responsible for putting them into action.

v. Budgets facilitate **centralized control** with delegated authority and responsibility. Grouped according to the responsibilities of different executive levels, they facilitate decentralization of work.

vi. Budgets are instruments of managerial control by means of which the management can measure performances in every part of the concern and take corrective action as soon as any deviations from the budgets come to light.

Budgetrary Control

It is defined as

- process of preparation of budget
- and continuos comparision of actual with budgets

Advantages of Budgetary Control

It is goods means of control of the actual. It provides a good basis for controlling various functions.

Disadvantages of Budgetary Control Systems:

Budgets are simply an estimate and putting so much of reliance on it will not be juduicious. Sometimes, management do not give so much of emphasis in budgetary control leading to non-success of the system.

2. What are Strategic Planning, Budgetary Planning and Operational Planning?

Strategic Planning: It is concerned with preparation of long term action plans to attain organization objectives.

Budgetary Planning: It is concerned with preparation of short to medium term plan of the organization. It is carried out within the framework of Strategic plan. Example: Preparation of Annual Budget

Operational Planning: It is concerned with the short term or day to day planning process. It is carried out within the framework of Budgetary Planning. It plans the utilization of resources.

Strategic Planning > Budgetary Planning > Operational Planning

3. Discuss the components of budgetary control system.

- Preparation of Budgets
- Comparision of Actual with Budgets
- Determination of Variances
- Analysis of causes of Variances and determination of accountability to the departments concerned.

4. List the eight functional budgets prepared by a business.

The various commonly used Functional budgets are:

- Sales Budget
- Production Budget
- Plant Utilisation Budget
- Direct Material Usage Budget
- Direct Material Purchase Budget
- Direct Labour (Personnel) Budget
- Factory Overhead Budget
- Production Cost Budget

5. What are the key requirements in preparation of Budgets?

- **Budget Manual –** Contains detail of data required for Budget
- **Coordination of Functions**
- **Participative Budgeting**
- **Identification of Key factor or principal Budget Factor**

6. Define the term Zero Based Budgeting.

A budget prepared with nil base is called as Zero Base Budgeting. This kind of budgets are prepared without taking the previous year data as the base. Rather, every time it is prepared, it begins from Zero and a fresh thought on the entire functions are given. Justification of taking any figure into the budget is given every time. This brings creativity and brings value addition each time the budgets are prepared.

7. Describe the process of Zero Based Budgeting.

The "zero base budgeting" involves the following process:

i. Corporate objectives should be established and laid down in details.
ii. Decide about the techniques to be used.
iii. Identify those areas where decisions need to be taken.
iv. Prioritize the areas
v. Develop decision program
vi. Preparation of Budget

8. What are the advantages & Disadvantages of Zero Based Budgeting?

Advantages of Zero Based Budgeting:

a) It provides a systematic approach for evaluation of different activities and ranks them in order of preference for allocation of scarce resource.
b) It ensures that the various functions undertaken by the organization are critical for the achievement of its objectives and are being performed in the best way.
c) It provides an opportunity to the management to allocate resources for various activities only after having a thorough cost-benefits analysis.
d) The areas of wasteful expenditure can be easily identified and eliminated.
e) Departmental budgets are closely linked with corporate objectives.
f) The technique can also be used for the introduction and implementation of the system of "management by objective.'

Disadvantages of Zero based Budgeting

i. Various operational problems are likely to be faced in implementing the technique.
ii. The full support of top management is required.
iii. It is time consuming and costly.
iv. It requires proper trained managerial staff.

9. Distinguish between Traditional Budgeting and Zero Base Budgeting.

	Traditional Budgeting	Zero Base Budgeting
1	Routine Approach	Investigative Approach
2	Reference of Past Budget is made.	Fresh approach is taken without any reference of the past.
3	Managers inflate the already prepared data of past for budgeting.	Nothing is taken into account without justification.
4	Accounting Oriented	Responsibility Accounting Oriented

10. What do you mean by Performance Based Budgeting (PBB)?

Performance budgeting provides a meaningful relationship between estimated inputs and expected outputs as an integral part of budgeting system. A performance budget is one which presents the purposes and objectives for which funds are required. It justifies the reasoning for the requirement of funds through by making feasibility studies through preparation of the Budgets. It acts as good tool for the managers for being cost efficient.

11. Distinguish between Traditional Budgeting and Performance Budgeting.

The traditional budgeting gives more emphasis on the financial aspect than the performance. Performance Budgeting aims at establishing a relationship between the inputs and outputs.

Traditional budgets are generally prepared with the main basis towards the objects or items of expenditure (i.e. It highlights the items of expenditure, namely salaries, stores, rent, etc. Performance Budgeting gives more emphasis on the functions of organization and the programs to discharge these functions.

Performance Based budgeting gives lot of emphasis on the measure of the performance with the actual.

12. Suggest few Budget Ratios used for Performance of Budgets.

1	**Efficiency ratio**	$\frac{\text{Standard Hours}}{\text{Actual Hours}}$
2	**Activity Ratio**	$\frac{\text{Standard Hours}}{\text{Budgeted Hours}}$
3	**Calendar ratio**	$\frac{\text{Actual Working Days}}{\text{Budgeted Working Days}}$
4	**Standard Capacity Usage Ratio**	$\frac{\text{Budgeted Hours}}{\text{Max. Possible Budgeted hours in Budgeted Period}}$
5	**Actual Capacity Usage Ratio**	$\frac{\text{Actual Hours}}{\text{Max. Possible Budgeted hours in Budgeted Period}}$
6	**Actual Usage of Budgeted Capacity Ratio**	$\frac{\text{Actual Working Hours}}{\text{Budgeted Hours}}$

If the above ratios are more than or equal to 1, the performances are considered to be favourable and vice versa.

13. Explain the term Balance Score Card.

A Scorekeeper, the management accountant designs reports to help managers track progress in implementing strategy. Many organizations have introduced a balanced score card approach to manage the implementation of their strategies.

The Balanced Scorecard: -

The balanced scorecard translates an organization mission and strategy into a set of performance measures that provides the framework for implementing the strategy. The balanced scorecard does not focus solely on achieving financial objectives. It also highlights the non-financial objectives that an organisation must achieve to meet its financial objectives.

The Scorecard measures' an organisation performance from four perspectives / Components:

1	**Financial Perspective**	Sales, ROCE
2	**Customer Perspective**	Market Share, Measure of Customer Satisfaction
3	**Internal business processes Perspective**	Manufacturing Quality, Order Delivery Time, Benchmarking
4	**Innovation & Learning Perspective**	Improvement in manufacturing Process, Designing new Products Employee Capabilities measured using employee education and skill levels

It's called the balanced scorecard because it balances the use of financial and non-financial performance measures to evaluate short-run and long-run performance in a single report. The balanced scorecard reduces managers emphasis on short-run financial performance such as quarterly earnings. That's because the non-financial and operational indicators, such as product quality and customer satisfaction measure changes that a company is making for the long run. The financial benefits of these long-run changes may not appear immediately in short- run earnings, but strong improvement in non-financial measures is an indicator of economic value creation in the future. For example an increase in customer satisfaction, as measured by customer surveys and repeat purchases, is a signal of higher sales and income in the future. By balancing the mix of financial and non-financial measures, the balanced scorecard broadners management's attention to short-run and long-run performance.

14. What is the features of Good Balanced Scorecard?

A good balanced scorecard design has several features:

1. It tells the story of a company's strategy by articulating a sequence of cause-and-effect relationships.
2. It helps to communicate the strategy to all members of the organization by translating the strategy into a coherent and linked set of understandable and measurable operational targets.
3. It places strong emphasis on financial objectives and measures in for-profit companies. Non-financial measures are regarded as part of a Program to achieve future financial performance.
4. It limits the number of measures to only those that are critical to the implementation of strategy.

Chapter 6: Standard Costing

1. What is Standard Costing. How are variances disposed off in a standard costing system?

Standard costing is the establishment of cost standards for activities and their periodic analysis to determine the reasons for any variances.

The comparison of actual costs with standard costs is called variance analysis and it is vital for controlling costs and identifying ways for improving efficiency and profitability. If actual cost exceeds the standard costs, it is an unfavorable variance. On the other hand, if actual cost is less than the standard cost, it is a favorable variance.

Standard costing is a tool that helps management account in controlling costs.

<u>Disposal of Variances in Standard Costing</u>:

There is no unanimity of opinion among cost accountants regarding the disposition of variances. The following are commonly used methods for their disposition.

1. Transfer all variances to Profit and loss account. Under this method, stock of work-in-progress, finished stock and cost of sales are maintained at standard cost and variances arising are transferred to profit and loss account.
2. Distributing variances on Pro-data basis over the cost of sales, work in progress and finished goods, stocks by using suitable basis.
3. Write off quantity variance to profit and loss account and spread price variance over to cost of sales, work in progress and finished goods. The reason behind apportioning price variance to inventories and cost of sales, is that they represent costs although they are derived as variances.

2. Distinguish between Partial plan and Single Plan under Standard Costing?

Particulars	Partial Plan	Single Plan
Valuation	Materials, Wages, Overheads & Finished Goods are recorded at **actual** Cost. WIP are recorded at **Standard** Cost.	Materials, Wages, Overheads & Finished Goods are recorded at **Standard** Cost. WIP are recorded at **Standard** Cost.
Timing of Computation	Variances are generated at **WIP Stage.**	Variances are generated on Just in Time stages.

3. State the Features of Partial plan of Standard cost accounting procedure.

Standard cost operations can be recorded in the books of account by using partial plan. Features of partial plan of standard costing procedure are as follows:

(i) Partial plan system uses current standards in which the inventory will be valued at current standard cost figure.

(ii) Under this method WIP account is charged at the actual cost of production for the month and is credited with the standard cost of the month's production of finished product.

(iii) The closing balance of WIP is also shown at standard cost. The balance after making the credit entries represents the variance from standard for the month.

Chapter 7: Transfer Pricing

1. Indicate the possible disadvantages of treating divisions as profit centre.

The possible disadvantages of treating divisions as profit centre are as follows:

1. Divisions may compete with each other and may take decision s to increase profits at the expense of other divisions thereby overemphasizing short term results.
2. It may adversely affect co-operation between the divisions and lead to lack of harmony in achieving organizational goals of the company. Thus it is hard to achieve the objective of goal congruence.
3. It may lead to reduction in the company's overall total profits.
4. The cost activities which are common to all divisions, may be greater for decentralized structure than centralized structure. It may thus result in duplication of staff activities.
5. Top management loses control by delegating decision making to divisional managers. There are risks of mistakes committed by divisional managers, which the top management may avoid.
6. Series of control reports prepared for several departments may not be effective from the point of view of top management.
7. It may under utilize corporate competence.
8. It leads to complications associated with transfer pricing problems.
9. It becomes difficult to identify and define precisely suitable profit centres.
10. It confuses division's results with manager's performance.

2. What are some goals of a "Transfer Pricing" system in an organization?

The goals of transfer pricing are that it should:

1. Provide information that motivates divisional managers to take good economic decisions which will improve the divisional profits and ultimately the profits of the company as a whole.
2. Provide information which will be useful for evaluating the divisional performance.
3. Seek to achieve goal congruence.
4. Ensure that divisional autonomy is not undermined.

3. What should be the basis of transfer pricing , if unit variable cost and unit selling price are not constant?

If Unit variable cost and unit selling price were not constant than the main problem that would arise while fixing the transfer price of a product would be as follows:

There is an optimum level of output for a firm as a whole. This is so because there is a certain level of output beyond which its net revenue will not rise. The ideal transfer price under this circumstances will be that which will motivate these managers to produce at this level of output. Essentially, it means that some divisions in a business house might have to produce its output at a level less than its full capacity and in all such cases a transfer price may be imposed centrally.

4. What will be the marketable transfer pricing procedure regarding the goods transferred under the following conditions (each condition is independent of the other)?

i) **When divisions are not captives of internal divisions and the divisions are free to do business both internally and externally and where there are reasonably competitive *external markets for the transferred products.***

ii) If the external market for the transferred goods is not reasonably competitive.

Marketable transfer pricing procedure

i. When divisions are not captive of internal divisions and the divisions are free to do business both internally and externally and when there are reasonably competitive external markets for the transferred products, than the most suitable transfer price would be, the market price, as it generally leads to optimal decisions.

ii. In case, the external market for the transferred goods is not reasonable competitive, following two situations may arise in this case.

a. If there is idle capacity: Under this situation opportunity cost will be zero hence minimum transfer price should be equal to the additional outlay costs incurred upto the point of transfer(sometimes approximated by variable costs)

b. If there is no idle capacity: Under this situation opportunity cost be added to outlay costs for determining minimum transfer price.

5. Discuss the potential for maximization of income by a multinational through the use of transfer pricing mechanism.

The potential for maximization of income by a multinational through the use of transfer pricing mechanism is based on the successful implementation of the following steps:

i. Transfer pricing may be set relatively higher for affiliates located in relatively low-tax countries.

ii. Transfer prices to affiliates in countries which are subject to import duties for goods or services purchase may be set low so as to avoid host country taxes.

iii. Transfer prices to an affiliate in a country that is encountering relatively high inflation may be set relatively high to avoid some of the adverse effects of local currency devaluation that are related to the high inflation.

iv. Transfer prices may be set high for goods and services purchased by an affiliate operating in a country that has imposed restriction on the repatriation of income to foreign companies.

v. Transfer prices may be set low for an affiliate that is trying to establish a competitive advantage over a local company either to break into a market or to establish a higher share of the company’s business.

Chapter 8: Uniform Costing & Inter Firm Comparison

1. What are the requisites for installation of a uniform costing system?

Essential requisites for the installation of Uniform Costing are as under:

i. The firms in the industry should be willing to share / furnish relevant data or information.
ii. A spirit of co-operation and mutual trust should prevail among the participating firms.
iii. Mutual exchange of ideas, methods used, special achievement made, research & know-how etc. should be frequent.
iv. Bigger firms should take the lead towards sharing their experience and know-how with smaller firms to enable the latter to improve their performance.
v. In case of accounting methods, principles, procedures and production method uniformity must be established.

2. What is Uniform Costing? Why is it recommended?

It is not a distinct method of costing when several undertakings start using the same costing principles and practices, they are said to be following uniform costing. Different concerns in an industry should adopt a common method of costing and apply uniformly the same principles and techniques for better cost comparison and common good and helps in mutual cost control and cost reduction. Hence it is recommended that a uniform method of costing should be adopted by the member units of an industry.

Chapter 9: Marginal Costing

1. Enumerate the limitations of using the marginal costing technique.

Answer

Marginal costing is defined as the ascertainment of marginal cost and of the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable costs.

Limitations of Marginal Costing Techniques:

The limitations of using the marginal costing technique are as follows:

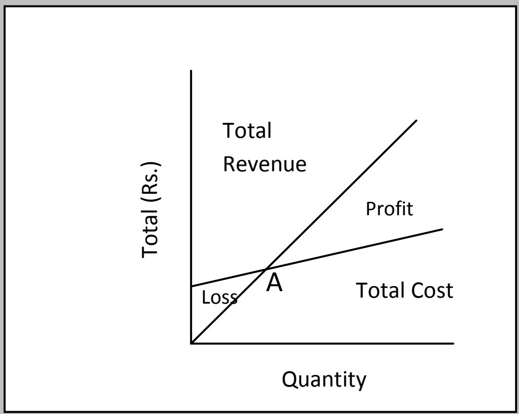
1. It is difficult to classify exactly the expenses into fixed and variable category. Most of the expenses are neither totally variable nor wholly fixed.
2. Contribution itself is not a guide unless it is linked with the key factor.
3. Sales staff may mistake marginal cost for total cost and sell at a price; which will result in loss or low profits. Hence, sales staff should be cautioned while giving marginal cost.
4. Overheads of fixed nature cannot altogether be excluded particularly in large contracts, while valuing the work-in-progress. In order to show the correct position fixed overheads have to be included in work-in-progress.
5. Some of the assumptions regarding the behaviour of various costs are not necessarily true in a realistic situation. For example, the assumption that fixed cost will remain static throughout is not correct.

2. Briefly discuss on curvilinear CVP analysis

In CVP analysis, the usual assumption is that the total sales line and variable cost line will have linear relationship, that is, these lines will be straight lines. However, in actual practice it is unlikely to have a linear relationship for two reasons, namely:

- after the saturation point of existing demand, the sales value may show a downward trend.
- the average unit variable cost declines initially, reflecting the fact that, as output increase the firm will be able to obtain bulk discounts on the purchase of raw materials and can also benefit from division of labour. When the plant is operated at further higher levels of output, due to bottlenecks and breakdowns the variable cost per unit will tend to increase. Thus the law of increasing costs may operate and the variable cost per unit may increase after reaching a particular level of output.

In such cases, the contribution will not increase in linear proportion i.e. based on the phenomenon of diminishing marginal productivity; the total cost lie will not be straight, as assumed but will be of curvilinear shape. This situation will give rise to two break even points. The optimum profit is earned at the point where the distance between sales and total cost is the greatest.



A is the break - even point

3. "Use of absorption costing method for the valuation of finished goods inventory provides incentive for over-production." Elucidate the statement.

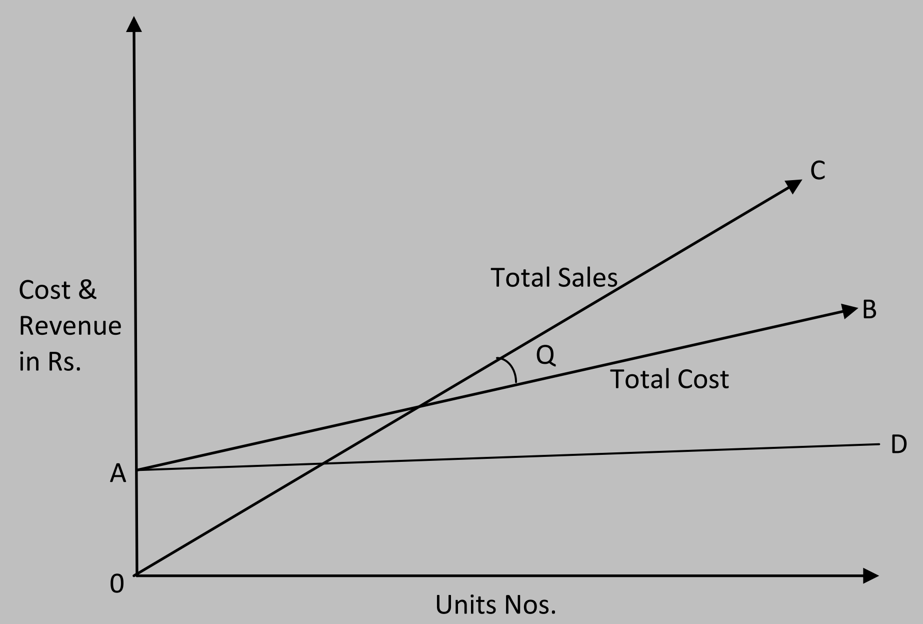
When absorption costing method is used, production fixed overheads are charged to products and are included in product costs. Consequently, the closing stocks are valued on total cost (including fixed overheads) basis. The net effect is that the charge of fixed overheads to P/L account gets reduced, if the closing stock is greater than the opening stock. This situation has the effect of inflating the profit for the period.
Where stock levels are likely to fluctuate significantly, profits may be distorted if calculated on absorption costing basis. If marginal costing is used, since the fixed costs are charged off to P/L account as period cost, such a situation will not arise. The impact of using absorption costing on profits can be summerised as under:

- When sales are equal to production, profits will be the same under absorption costing and marginal costing.
- If production is higher than sales, the absorption costing will post higher profits that marginal costing.
- If sales are in excess of production, absorption costing will show lower profits than marginal costing.

Since profit calculation in absorption costing can produce strange result, the managers may deliberately alter the stock levels to influence the profits if absorption costing is used.Hence, it is true to say that if absorption costing method is used managers have the incentive to over produce to show better result.

4. Draw and explain the angle of incidence in a break-even chart. What is its significance to the management?

Answer



Angle of incidence (0) is the angle between the total cost line and the total sales line.

If the angle is large, the firm is said to make profits at a high rate and vice-versa. A high angle of incidence and a high margin of safety indicate sound business conditions.

Chapter 10. Costing of Service Sector

1. Explain the main characteristics of Service sector costing.

Main characteristics of service sector are as below:

Activities are labour intensive: The activities of service sector generally are labour intensive. The direct material cost is either small or non-existent.

Cost-unit is usually difficult to define: The selection of cost units usually, for service sector is difficult to ascertain as compared to the selection of cost unit for manufacturing sector. The following table provides some examples of the cost units for service sector.

Hospital – Patient per day, Room per day

Accounting firm – Charged out client hours

Transport – passenger km., quintal km.

Machine maintenance – Maintenance hours provided to user department

Computer department – Computer time provided to user department.

Product costs in service sector: Costs are classified as product or period costs in manufacturing sector for various reasons.

2. How will you apply customer costing in service sector? Explain with the help of a suitable example.

Customer costing analyses the costs incurred to earn the revenues from customers. A customer cost hierarchy, categorizing the costs relating to the customers into different cost pools on the basis of different types of cost drivers or different degrees of difficulty in determining cause and effect relationship, is used. The details of activities involved in customer costing, for example, are sales order processing, sales visits, normal delivery costs, special orders, and credit collection charges. The Central theme of this approach is customer satisfaction. The profitability of different customers or groups of customer will differ.

Customer costing can be introduced in a company engaged in courier service where the costs to serve the customers vary with the type of service selected by customers (how fast the package is to be delivered), the destination, weight, size of package and whether the package is to be collected from customers' location or will be dropped at the office of the courier firm. The firm could use an efficient system of internet strategy to accomplish the tasks like preparing labels at the customers' site, arranging of pick up, dropping at the destination and tracking and tracing packages. The system calculates the freight charges, invoices customers daily and produces customized reports. These parameters can be used with the objective of determining customer profitability and based on the costs involved in handling each customer, the firm can even offer volume discounts to customers who use the services heavily.

3. Write short note on pricing by Service Sector.

Answer: The service has no physical existence and it must be priced and billed to customers. Most service organizations use a form of time and material pricing to arrive at the price of a service. Service companies such as appliance repair shops, automobile repair business arrives at prices by using two computations, one for labour and other for material and parts. If material and parts are not part of service being performed, the only direct labour costs are used as basis for determining price. For professionals such as accountants and consultants a factor representing all overhead costs is applied to the base labour costs to establish a price for the service, which are generally worked out on the basis of rate per man hour.

4. **Give and Appropriate cost unit for each of the following service sectors**

Hotel	Per Room per day
School	No. of Students
Hospital	Patient Day
Accounting Firm	Client Hours
Transport	Per Passenger Km or Tonne KM
Staff Canteen	No. of Meals
Machine Maintainance	Maintenance Hours to User Department
Computer Department	Computer Time to User Department
Power	Per kilo Watt Hour

Question Paper, Revision Test paper & Model test Paper

Question Paper May' 2013

Question 1. **(Marks :5)**
Prescribe the steps to be followed to solve an assignment problem.

Question 2. **(Marks :4)**
What do you mean by DPP? What are its benefits ?

Question 3. **(Marks :4)**
Bring out the main applications of Learning Curve ?

Question 4. **(Marks :5)**
State the advantages available in inter-firm comparison.

Question 5. **(Marks :4)**
What are the focuses of Theory of Constraints ? How it differs with regard to cost behavior ?

Question 6. **(Marks :4)**
Brief the reasons for using simulation technique to solve problems .

Question 7. **(Marks :4)**
List out the qualities required for a good pricing policy.

Question 8. **(Marks :4)**
Under what circumstances PERT is more relevant ? How?

Question 9. **(Marks :4)**
Enumerate the expected disadvantages in taking divisions as profit centres?

Question Paper Nov' 2012

Question 10. **(Marks :5)**
Explain the term **'Degeneracy'** in the context of a transportation problem. How can this be solved?

Question 11. **(Marks :4)**
Discuss the characteristics of Zero Base Budgeting ?

Question 12. **(Marks :4)**
Discuss the essential requisites for installation of Uniform Costing System?

Question 13. **(Marks :4)**
In the context of Activity Based Costing System, explain the following statement :
"Strategic cost Analysis should exploit internal linkages"

Question 14. **(Marks :4)**
What is Target Costing? It is said that target costing fosters team work within the organisation. Explain how target costing creates an environment in which team work fosters.

Question 15. **(Marks :4)**
What qualitative factors should be considered in an decision to outsource manufacturing of a product ?

Question 16. **(Marks :4)**
"Sunk Cost is irrelevant in decision making, but all irrelevant costs are not Sunk Cost." Explain with examples

Question 17. **(Marks :4)**
Write a short note on the characteristics of the dual problem.

Question Paper May' 2012

Question 18. **(Marks :5)**

State whether each of the following independent activities is value-added or non-value-added :

I. Polishing of furniture used by a systems engineer in a software firm.
II. Maintenance by a software company of receivables management software for a banking company.
III. Painting of pencils manufactured by a pencil factory.
IV. Cleaning of customers' computer key boards by a computer repair centre.
V. Providing brake adjustments in cars received for service by a car service station.

Question 19. **(Marks :5)**

State with a brief reason whether you would recommend an activity based system of costing in each of the following independent situations :

I. Company K produces one product. The overhead costs mainly consist of depreciation.
II. Company L produces 5 different products using different production facilities.
III. A consultancy firm consisting of lawyers, accountants and computer engineers provides management consultancy services to clients.
IV. Company S produces two different labour intensive products. The contribution per unit in both products is very high. The BEP is very low. All the work is carried on efficiently to meet the target costs.

Question 20. **(Marks :4)**

Classify the following items under the more appropriate category :

Category (CC) – Cost Control or Category (CR) – Cost Reduction

I. Costs exceeding budgets or standards are investigated.
II. Preventive function.
III. Corrective function.
IV. Measures to standardize for increasing productivity.
V. Provision of proper storage facilities for materials.
VI. Continuous comparison of actual with the standards set.
VII. Challenges the standards set.
VIII. Value Analysis.

Question 21. **(Marks :4)**

Define the following:

I. Maximum Capacity.
II. Practical Capacity.
III. Normal Capacity.
IV. Principal Budget Factor.

Question 22. **(Marks :4)**

Suggest suitable cost units for the following services :

I. Hospital
II. Hotel
III. Transport
IV. Staff Canteen

Question Paper Nov' 2011

Question 23. **(Marks :5)**

State any 5 limitations of the assumptions of PERT and CPM .

Question 24. **(Marks :5)**

Classify the following items under appropriate categories of quality costs viz. Prevention Costs, Appraisal Costs, Internal Failure Costs and External Failure Costs:

I. Rework
II. Disposal of Scrap
III. Warranty Repairs
IV. Revenue Loss
V. Repair to manufacturing equipment
VI. Discount on defective sale
VII. Raw Material Inspection
VIII. Finished Product Inspection
IX. Establishment of Quality Circles
X. Packaging Inspection

Question 25. **(Marks :4)**
State the pricing policy most suitable in each of the following independent situations:

I. The company makes original equipments and does defense contract work. There are other companies which also undertake such projects.
II. The product made by a company is new to the market. It is expected to enjoy a long-term demand. Competition is expected very soon, since the product will be desirable to most customers.
III. Stock of processed ready-to-eat products, whose shelf-life will soon be over in the next 2 months. The product is going to be discontinued.
IV. A company sells a homogenous product in a highly competitive market.

Question 26. **(Marks :4)**
What are the steps involved in the simulation process?

Question 27. **(Marks :4)**
What are the limitations of the learning curve theory?

Question 28. **(Marks :4)**
Briefly explain the phases in the life cycle of a product?

Question 29. **(Marks:4)**
Explain briefly Pareto Analysis and mention some of its uses?

Question 30. **(Marks:4)**
Explain the concept of Just In Time approach in a production process

Question 31. **(Marks :2)**
Two companies H and L have the same values for turnover and net profit and make a similar product. H has a higher P/V ratio than L. Which company will perform better when :

I. The market demand is high?
II. The market demand is low?

Question Paper May' 2011

Question 32. **(Marks :5)**
Pick out from each of the following items, costs that can be classified under **'Committed Fixed Costs'** or **'Discreationary Fixed Costs'**

I. Annual increase of salary and wages of administrative staff by 5% as per agreement.
II. New advertisement for existing products is recommended by the Marketing Department for achieving sales quantities that were budgeted for at the beginning of the year.
III. Rents paid for the factory premises for the past 6 months and the rents payable for the next six months . Production is going on in the factory.
IV. Research costs on a product that has reached 'maturity' phase in its life cycle and the research costs which may be needed on introducing a cheaper substitute into the market for facing competiton.
V. Legal consultancy fees payable for patent rights on a new product. Patenting rights have been applied for.

Question 33. **(Marks :3)**
State any three differences between PERT and CPM.

Question 34. **(Marks :5)**
What are the disadvantages of Cost Plus Pricing?

Question 35. **(Marks :3)**
Classify the following measures under appropriate categories in a balanced score card for a banking company which excels in its home loan products :

I. A new product related to life insurance is being considered for a tie-up with the successful housing loan disbursements.
E.g. Every housing loan applicant to be advised to take a life policy or compelled to take a fire insurance policy.
II. How different sectors of housing loans with different interst rates have been sanctioned, their volumes of growth in the past 4 quarters.

iii. How many days are taken to service a loan, how many loans have taken longer, what additional loans are to be released soon etc.

Question 36. **(Marks :4)**
Classify the following items under the three measures used in the theory of constraints:

I. Research and Development Cost
II. Rent/ Utilities
III. Raw Materials used for production
IV. Depreciation
V. Labour Cost
VI. Stock of Raw Materials
VII. Sales
VIII. Cost of Equipments and Buildings

Question 37. **(Marks :4)**
Will the initial solution for a minimization transportation problem obtained by Vogel's Approximation Method and the Least Cost Method be the same ? Why?

Question 38. **(Marks :4)**
Name any four stages in the process of Bench Marking.

Question 39. **(Marks :5)**
Explain the pre-requisites for successful operation of material requirement planning.

Question Paper Nov' 2010

Question 40. **(Marks :5)**
What are the steps involved in Zero-base budgeting?

Question 41. **(Marks :4)**
List out the remedies available for difficulties experienced during implementation of "**PRAISE**" ?

Question 42. **(Marks :4)**
Explain the major components of Balanced Store Card?

Question 43. **(Marks :4)**
List the 5 steps involved in the methodology of Critical Path Analysis ?

Question 44. **(Marks :4)**
What are the steps involved in carrying out Monte Carlo Simulation Model ?

Question 45. **(Marks :5)**
Discuss various forecasting methods using time series?

Question 46. **(Marks :4)**
Mention the data required to operate the material requirement planning system ?

Question 47. **(Marks :4)**
"Customer Profile is important in charging cost." Explain this statement in the light of customer costing in service sector.

Question 48. **(Marks :4)**
Explain distinctive features of Learning Curve Theory in Manufacturing Environment? Explain the Learning Curve Ratio.

Question Paper May' 2010

Question 49. **(Marks :3)**
Identify the characteristics movement such as regular, irregular, cyclical, seasonal, long term trend, short term etc. of time series in the following situations :

I. A factory delaying its production due to demolition of factory shed in earthquake.
II. An era of depression in business.
III. The country needs more and more food grains due to constant growth of population.
IV. Decline in death rate due to availability of proper health care facilities.
V. A continuous increase in demand of small cars.
VI. A demand of gold products is increasing during the festival time.

Question 50. **(Marks :4)**
What are the essential requisites for the installation of Uniform Costing System?

Question 51. **(Marks :4)**
What is Back flushing in JIT? State the problems that must be addressed for the effective functioning of the system.

Question 52. **(Marks :5)**
What are the applications of incremental/ differential costs?

Question 53. **(Marks :5)**
Brief the principles associated with synchronous manufacturing?

Question 54. **(Marks :4)**
What do you mean by Degeneracy in transportation problem? How this can be solved?

Question 55. **(Marks :4)**
What is Price Discrimination? Under what circumstances it is possible?

RTP-November-13

Question 56.
"Hard Rock Coconut" is an exclusive resort located in a famous Island of Pacific Ocean that vows to isolate its guests from the hustle and bustle of everyday life. Its leading principle is "all contemporary amenity wrapped in old-world charisma". Each of the resort's 18 villas has a separate theme like Castle, Majestic, Ambassador, Royal Chateau, Coconut, Lemon, Balinese etc and guests often ask for a specific villa when they make reservations. Villas are Ideal for families or friends travelling together and these villas feature luxurious accommodation spanning two floors. Since it is located within a 300-acre estate on white sand beach, the resort offers its guests a wide variety of outdoor activities such as horseback riding, hiking, diving, snorkeling, sailing, golf and so on. Guests could also while away the day relaxing in the pool and availing themselves of the resort's world-famous spa "Hard Coco Spa". The dining room, which only has three tables for the public, is acceptable proud of its 4-star rating.

You are required to develop a balanced scorecard for "Hard Rock Coconut". It is sufficient to give two measures in each of the four perspectives.

Question 57.
Global Multinational Ltd. (GML) has two Divisions 'Dx' and 'Dz' with full profit responsibility. The Division 'Dx' produces Component 'X' which it sells to 'outside' customers only. The Division 'Dz' produces a product called the 'Z' which incorporates Component 'X' in its design. 'Dz' Division is currently purchasing required units of Component 'X' per year from an outside supplier at market price.

New CEO for Indian Operations has explored that 'Dx' Division has enough capacity to meet entire requirements of Division 'Dz' and accordingly he requires internal transfer between the divisions at marginal cost from the overall company's perspective.

Manager of Division 'Dx' claims that transfer at marginal cost are unsuitable for performance evaluation since they don't provide an incentive to the division to transfer goods internally. He stressed that transfer price should be 'Cost plus a Mark-Up'.

New CEO worries that transfer price suggested by the manager of Division 'Dx' will not induce managers of both Divisions to make optimum decisions. You are requested to help him out of the problem.

Question 58.
State the type of errors in logical sequencing may arise while drawing a network diagram?

Question 59.
"Target Costing is less useful in situations where the majority of costs are not locked in during the design phase"-Explain with example.

Question 60.
X Ltd wants to enter into market with a new product 'Gamma'. You are required to help management of X Ltd. In deciding pricing strategy if:

I. Demand of the 'Gamma is elastic ;
II. Good Possibility of substantial savings on large scale production ; and
III. There is threat of Competition.

Question 61.
Write a short note on:

I. Inter firm comparison
II. Simulation
III. Standard, ex post and ex ante
IV. Six Sigma

V. Just-in-time Production and purchasing.

RTP-May-2013

Question 62.
Explain with diagram the value chain activities within the firm with suitable classifications under primary and support activities and also the industry value chain indicating what the end use consumer pays for.

Question 63.
Differentiate between 'Value- Added' and Non value- Added' activities in the context of Activity Based Costing. Give examples of Value added and Non – Value- Added activities.

Question 64.
Explain with one example each that sunk cost is irrelevant in making decisions, but irrelevant cost are not sunk costs.

Question 65.
I. Explain, how Cost Volume Profit (CPV) – based sensitivity analysis can help managers cope with uncertainty.
II. In what circumstances it may be justifiable to sell at a price below marginal cost?

Question 66.
Explain 'Dummy activity' in the context of a network ?

Question 67.
"**CPM is a deterministic model. However, PERT is a probabilistic model"-** Explain

Model Test Paper –Nov-13

Question 68
What is Disinvestments Strategy? Highlight the main reason for disinvestments.

Question 69
What is Uniform Costing ? Why is it recommended?

Question 70
Give an appropriate Cost Unit for each of the following services sectors:
(i) Hotel
(ii) School
(iii) Hospital
(iv) Accounting Firm
(v) Transport
(vi) Staff Canteen
(vii) Machine Maintenance
(viii) Computer Department

Question 71
Explain the following in the context of a network:
(i) Dependency Rule
(ii) Dummy Activity

Question 72
What are the various formulae used in calculating the budget ratios?

Question 73
Explain the essential features of Life- Cycle Costing.

Question 74
Explain briefly the concepts of Opportunity costs & Relevant costs.

Question 75
Explain - Six Sigma.