

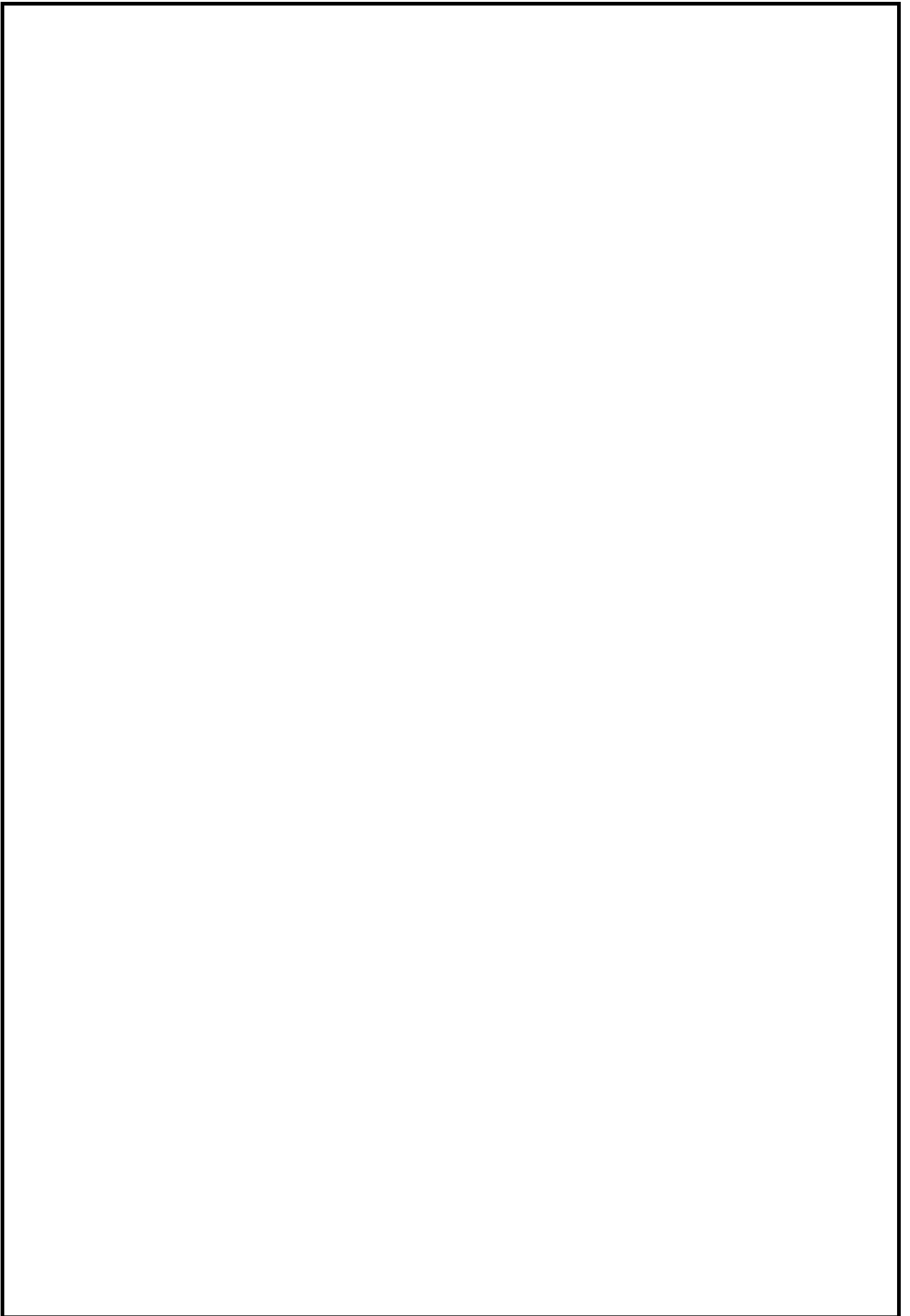
————— C.A. INTERMEDIATE —————
COST AND MANAGEMENT ACCOUNTING

Theory Questions and Answers Book

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February - 2024



A1. INTRODUCTION TO COST AND MANAGEMENT ACCOUNTING

RECENT EXAM - THEORY QUESTIONS & ANSWERS

ICAI - EXAM

Q1. Date: NB Pg. No. Stars: Exam: Inter [May 18, Q.6(a)] [5 Marks]

Why are cost and management accounting information are required by the staff at operational level? Describe.

Ans.

Operational level staffs- The operational level staffs like supervisors, foreman, team leaders are requiring information

- (i) to know the objectives and performance goals for them
- (ii) to know product and service specifications like volume, quality and process etc.
- (iii) to know the performance parameters against which their performance is measured and evaluated. *SH. Costing*
- (iv) to know divisional (responsibility centre) profitability etc.

Q2. Date: NB Pg. No. Stars: Exam: Inter [May 18, Q.6(e)(i)] [5 Marks]

Explain: Opportunity Cost

Ans.

Opportunity Cost - This cost refers to the value of sacrifice made or benefit of opportunity foregone in accepting an alternative course of action. For example, a firm financing its expansion plan by withdrawing money from its bank deposits. In such a case the loss of interest on the bank deposit is the opportunity cost for carrying out the expansion plan.

Q3. Date: NB Pg. No. Stars: Exam: Inter [Nov. 18, Q.6(a)] [5 Marks]

Mention and explain types of responsibility centres.

Ans.

There are four types of responsibility centres:

- (i) **Cost Centres:** The responsibility centre which is held accountable for incurrence of costs which are under its control. The performance of this responsibility centre is measured against pre-determined standards or budgets. The cost centres are of two types:
 - (a) Standard Cost Centre and (b) Discretionary Cost Centre
- (ii) **Revenue Centres:** The responsibility centres which are accountable for generation of revenue for the entity. Sales Department for example, is the responsible for achievement of sales target and revenue generation. Though, revenue centres does not have control on the all expenditures it incurs but some time expenditures related with selling activities like commission to sales person etc. are incurred by revenue centres.

(iii) **Profit Centres:** These are the responsibility centres which have both responsibility of generation of revenue and incurrence of expenditures. Since, managers of profit centres are accountable for both costs as well as revenue, profitability is the basis for measurement of performance of these responsibility centres. Examples of profit centres are decentralised branches of an organisation.

(iv) **Investment Centres:** These are the responsibility centres which are not only responsible for profitability but also has the authority to make capital investment decisions. The performance of these responsibility centres is measured based on Return on Investment (ROI) besides profit. *ROCE > Cost of Capital*

Q4. Date: NB Pg. No. Stars: Exam: Inter [May 19, Q.6(a)] [5 Marks]

Differentiate between cost control and cost reduction.

Ans.

Difference between Cost Control and Cost Reduction

Cost Control	Cost Reduction
1. Cost control aims at maintaining the costs in accordance with the established standards.	1. Cost reduction is concerned with <u>reducing costs</u> . It challenges all standards and endeavours to better them continuously.
2. Cost control seeks to attain lowest possible cost under existing conditions.	2. Cost reduction recognises no condition as permanent, since a change will result in lower cost.
3. In case of Cost Control, emphasis is on past and present.	3. In case of cost reduction it is on present and future.
4. Cost Control is a <u>preventive</u> function.	4. Cost reduction is a <u>corrective</u> function. It operates even when an efficient cost control system exists.
5. Cost control ends when <u>targets are achieved</u> .	5. Cost reduction has <u>no visible end</u> .

Q5. Date: NB Pg. No. Stars: Exam: Inter [Nov. 19, Q.6(d)] [5 Marks]

Mention the Cost Unit of the following Industries:

- (i) Electricity
- (ii) Automobile
- (iii) Cement
- (iv) Steel
- (v) Gas
- (vi) Brick, Making
- (vii) Coal Mining
- (viii) Engineering
- (ix) Professional Services
- (x) Hospital.

Ans.

Cost Unit of Industries:

S. No.	Industry	Cost Unit Basis
(i)	Electricity	Kilowatt-hour (kWh)
(ii)	Automobile	Number
(iii)	Cement	Ton/ per bag etc.
(iv)	Steel	Ton
(v)	Gas	Cubic feet
(vi)	Brick-making	1,000 bricks
(vii)	Coal mining	Tonne/ton
(viii)	Engineering	Contract, job
(ix)	Professional services	Chargeable hour, job, contract
(x)	Hospitals	Patient day

Q6. Date: NB Pg. No. Stars: Exam: Inter [Nov. 20, Q.6(a)] [5 Marks]

Differentiate between "Cost Accounting and Management Accounting.



Ans.

Difference between Cost Accounting and Management Accounting

	Basis	Cost Accounting	Management Accounting
(i)	Nature	It records the <u>quantitative aspect only</u> .	It records both <u>qualitative and quantitative aspect</u> .
(ii)	Objective	It records the cost of producing a product and providing a service.	It Provides information to management for planning and <u>co-ordination</u> .
(iii)	Area	It only deals with <u>cost Ascertainment</u> .	It is wider in scope as it includes financial <u>accounting</u> , budgeting, taxation, planning etc.
(iv)	Recording of data	It uses both <u>past and present figures</u> .	It is focused with the <u>projection of figures for future</u> .
(v)	Development	Its development is related to <u>industrial revolution</u> .	It develops in accordance to the need of <u>modern business world</u> .
(vi)	Rules and Regulation	It follows certain principles and procedures for recording costs of different products.	It does not follow any specific rules and regulations.

Q7. Date: NB Pg. No. Stars: Exam: Inter [Nov. 20, Q.6(d)] [5 Marks]

State the Method of Costing to be used in the following industries:

- (i) Real Estate
- (ii) Motor repairing workshop
- (iii) Chemical Industry
- (iv) Transport service
- (v) Assembly of bicycles
- (vi) Biscuits manufacturing Industry
- (vii) Power supply Companies
- (viii) Car manufacturing Industry
- (ix) Cement Industry
- (x) Printing Press

Ans.

Method of costing used in different industries:

S. No.	Industries	Method of Costing
(i)	Real Estate	Contract Costing
(ii)	Motor Repairing Workshop	Job Costing
(iii)	Chemical Industry	Process Costing
(iv)	Transport Service	Service/Operating Costing
(v)	Assembly of Bicycles	Unit/ Single/Output/Multiple Costing
(vi)	Biscuits Manufacturing Industry	Batch Costing
(vii)	Power Supply Companies	Service/Operating Costing
(viii)	Car Manufacturing Industry	Multiple Costing
(ix)	Cement Industry	Unit/Single/Output Costing
(x)	Printing Press	Job Costing

Q8. Date: NB Pg. No. Stars: Exam: Inter [Jan. 21, Q.6(d)] [5 Marks]

State the method of costing that would be most suitable for:

- (i) Oil Refinery
- (ii) Interior Decoration
- (iii) Airlines Company
- (iv) Advertising
- (v) Car Assembly

Ans.

Method of Costing

S.No.	Industry	Method of Costing
(i)	Oil Refinery	Process Costing
(ii)	Interior Decoration	Job Costing
(iii)	Airlines Company	Operation/ Service Costing
(iv)	Advertising	Job Costing
(v)	Car Assembly	Multiple Costing

Q9. Date:	NB Pg. No.	Stars:	Exam: Inter [Jan. 21, Q.6(e)] [5 Marks]
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Give any five examples of the impact of use of Information Technology in Cost Accounting.

Ans.

Example of Impact of Information Technology in cost accounting may include the following:

- (i) After the introduction of ERPs, different functional activities get integrated and as a consequence a *single entry into the accounting system* provides custom made reports for every purpose and saves an organisation from preparing different sets of documents. Reconciliation process of results of both cost and financial accounting systems become simpler and less sophisticated.
- (ii) A move towards *paperless environment* can be seen where documents like Bill of Material, Material Requisition Note, Goods Received Note, labour utilisation report etc. are no longer required to be prepared in multiple copies, the related department can get *e-copy* from the system.
- (iii) Information Technology with the help of *internet* (including intranet and extranet) helping in resource procurement and mobilisation. For example, production department can get materials from the stores without issuing material requisition note physically. Similarly, purchase orders can be initiated to the suppliers with the help of extranet. This enables an entity to shift towards Just-in-Time (JIT) approach of inventory management and production.
- (iv) Cost information for a cost centre or cost object is ascertained with accuracy in timely manner. Each cost centre and cost object is *codified* and all related costs are assigned to the cost objects or cost centres using assigned codes. This automates the cost accumulation and ascertainment process. *The cost information can be customised as per the requirement.* For example, when an entity manufacture or provide services, are able to know information job-wise, batch-wise, process-wise, cost centre wise etc.
- (v) *Uniformity* in preparation of report, budgets and standards can be achieved with the help of IT. ERP software plays an important role in bringing uniformity irrespective of location, currency, language and regulations.
- (vi) Cost and revenue variance reports are generated in *real time basis* which enables the management to take control measures immediately.
- (vii) IT enables an entity to monitor and analyse each process of manufacturing or service activity closely to eliminate non value added activities.

Q10. Date: NB Pg. No. Stars: Exam: Inter [Jul. 21, Q.6(a)] [5 Marks]

Specify the types of Responsibility centers under the following situations:

- (i) Purchase of bonds, stocks, or real estate property.
- (ii) Ticket counter in a Railway station.
- (iii) Decentralized branches of an organizations
- (iv) Maharatna, Navratna and Miniratna public sector undertaking (PSU) of Central Government.
- (v) Sales Department of an organization.

Ans.

Particulars	Types of Responsibility Centre
(i) Purchase of bonds, stocks, or real estate property.	Investment Centre
(ii) Ticket counter in a Railway station.	Revenue Centre
(iii) Decentralized branches of an organization.	Profit Centre
(iv) Maharatna, Navratna and Miniratna public sector undertaking (PSU) of Central Government.	Investment Centre
(v) Sales Department of an organization.	Revenue Centre

Q11. Date: NB Pg. No. Stars: Exam: Inter [Dec. 21, Q.6(a)] [5 Marks]

Briefly explain the 'techniques of costing'.

Ans.

Techniques	Description
Uniform Costing	<p>When a number of firms in an industry agree among themselves to follow the same system of costing in detail, adopting common terminology for various items and processes they are said to follow a system of uniform costing.</p> <p>Advantages of such a system are:</p> <ol style="list-style-type: none"> i. A comparison of the performance of each of the firms can be made with that of another, or with the average performance in the industry. ii. Under such a system, it is also possible to determine the cost of production of goods which is true for the industry as a whole. It is found useful when tax-relief or protection is sought from the Government.
Marginal Costing	<p>It is defined as the ascertainment of marginal cost by differentiating between fixed and variable costs. It is used to ascertain effect of changes in volume or type of output on profit.</p>

Standard Costing and Variance Analysis	It is the name given to the technique whereby <i>standard costs are pre-determined and subsequently compared with the recorded actual costs</i> . It is thus a technique of cost ascertainment and cost control. This technique may be used in conjunction with any method of costing. However, it is especially suitable where the manufacturing method involves production of standardised goods of repetitive nature.
Historical Costing	It is the ascertainment of costs after they have been incurred. This type of costing has limited utility. <ul style="list-style-type: none"> • <i>Post Costing</i>: It means ascertainment of cost after production is completed. • <i>Continuous costing</i>: Cost is ascertained as soon as the job is completed or even when the job is in progress.
Absorption Costing	It is the practice of charging all costs, both variable and fixed to operations, processes or products. This differs from marginal costing where fixed costs are excluded.
Direct costing	Direct costing is a specialized form of cost analysis that only uses variable costs to make decisions. It does not consider fixed costs, which are assumed to be associated with the time periods in which they are incurred.

Q12. Date: NB Pg. No. Stars: Exam: Inter [Dec. 21, Q.6(e)] [5 Marks]

“Describe the difference between ‘Cost Control’ and ‘Cost Reduction’.

Ans.

Cost Control	Cost Reduction
1. Cost control aims at <i>maintaining the costs</i> in accordance with the established standards.	1. Cost reduction is concerned with <i>reducing costs</i> . It challenges all standards and endeavours to improve them continuously
2. Cost control seeks to <i>attain lowest possible cost</i> under existing conditions.	2. Cost reduction recognises no condition as permanent, since a <i>change will result in lower cost</i> .
3. In case of cost control, emphasis is on <i>past and present</i>	3. In case of cost reduction, it is on <i>present and future</i> .
4. Cost control is a <i>preventive</i> function	4. Cost reduction is a <i>corrective</i> function. It operates even when an efficient cost control system exists.
5. Cost control ends when targets are achieved.	5. Cost reduction has no visible end and is a <i>continuous process</i> .

Q13. Date: NB Pg. No. Stars: Exam: Inter [May 22, Q.6(e)] [5 Marks]

Identify the methods of costing from the following statements:

- (i) Costs are directly charged to a group of products
- (ii) Nature of the product is complex and method cannot be ascertained.
- (iii) Cost is ascertained for a single product.
- (iv) All costs are directly charged to a specific job.
- (v) Costs are charged to operations and averaged over units produced.

Ans.

Method of costing followed:

Situation	Method of costing
(i) Costs are directly charged to a group of products.	Batch costing
(ii) Nature of the product is complex and method cannot be ascertained.	Multiple costing
(iii) Cost is ascertained for a single product.	Unit/ Single/Output costing
(iv) All costs are directly charged to a specific job.	Job costing
(v) Costs are charged to operations and averaged over units produced.	Process costing

Q14. Date: NB Pg. No. Stars: Exam: Inter [Nov 22, Q.6(e)] [5 Marks]

Mention the cost units (physical measurements) for the following Industry/product:

- | | |
|-------------------|--------------------------|
| (i) Automobile | (ii) Gas |
| (iii) Brick works | (iv) Power |
| (v) Steel | (vi) Transport (by road) |
| (vii) Chemical | (viii) Oil |
| (ix) Brewing | (x) Cement |

Ans.

Industry or Product	Cost Units
Automobile	Number
Gas	Cubic feet
Brick works	1,000 bricks
Power	Kilo-watt hour (kWh)
Steel	Tonne
Transport (by road)	Passenger- kilometer or Tonne-kilometer
Chemical	Litre, gallon, kilogram, tonne etc.
Oil	Barrel, tonne, litre
Brewing	Barrel
Cement	Ton/ per bag etc.

Q15. Date: NB Pg. No. Stars: Exam: Inter [May 23, Q.6(a)] [5 Marks]

Define cost objects and give examples of any four cost objects,

Ans.

Definition of cost objects

Cost object is anything for which a separate measurement of cost is required. Cost object may be a product, a service, a project, a customer, a brand category, an activity, a department or a programme etc.

Examples of cost objects

Product	Smart phone, Tablet computer, SUV Car, Book etc.
Service	An airline flight from Delhi to Mumbai, Concurrent audit assignment, Utility bill payment facility etc.
Project	Metro Rail project, Road projects etc.
Activity	Quality inspection of materials, Placing of orders etc.
Process	Refinement of crudes in oil refineries, melting of billets or ingots in rolling mills etc.
Department	Production department, Finance & Accounts, Safety etc.



Additional Questions

Notes:

- ① objectives of costing
- ② scope of cost Accounting
- ③ cost Accounting and financial Accounting difference
- ④ functions of cost and management Accounting
- ⑤ users of Accounting
- ⑥ Essentials of cost Accounting System
- ⑦ factors to consider while installing cost Accounting System
- ⑧ Limitations of cost Accounting
- ⑨ Controllable and uncontrollable

A2. COST SHEET

RECENT EXAM – THEORY QUESTIONS & ANSWERS

☞ ICAI - EXAM ☞

Q1.	Date:	NB Pg. No.	Stars:	Exam: Inter [May 19, Q.6(D)] [5 Marks]
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Explain Direct Expenses and how these are measured and their treatment in cost accounting.

Ans.

Direct Expense: Expenses other than direct material cost and direct employee cost, which are incurred to manufacture a product or for provision of service and can be directly traced in an economically feasible manner to a cost object. The following costs are examples for direct expenses:

- (i) Royalty paid/ payable for production or provision of service;
- (ii) Hire charges paid for hiring specific equipment;
- (iii) Cost for product/ service specific design or drawing;
- (iv) Cost of product/ service specific software;
- (v) Other expenses which are directly related with the production of goods or provision of service.

The above list of expenses is not exhaustive; any other expenses which are directly attributable to the production or service are also included as direct expenses.

Measurement of Direct Expenses

The direct expenses are measured at invoice or agreed price net of rebate or discount but includes duties and taxes (for which input credit not available), commission and other directly attributable costs.

In case of sub-contracting, where goods are get manufactured by job workers independent of the principal entity, are measured at agreed price. Where the principal supplies some materials to the job workers, the value of such materials and other incidental expenses are added with the job charges paid to the job workers.

Treatment of Direct Expenses

Direct Expenses forms part the prime cost for the product or service to which it can be directly traceable and attributable. In case of lump-sum payment or one time payment, the cost is amortised over the estimated production volume or benefit derived. If the expenses incurred are of insignificant amount i.e. not material, it can be treated as part of overheads.



B1. MATERIAL COST

RECENT EXAM – THEORY QUESTIONS & ANSWERS

☞ ICAI - EXAM ☞

Q1. Date: NB Pg. No. Stars: Exam: Inter [May 18, Q.6(b)] [5 Marks]

Explain 'Just In Time' (JIT) approach of inventory management.

Ans.

Just in Time (JIT) Inventory Management

JIT is a system of inventory management with an approach to have a zero inventories in stores. According to this approach material should only be purchased when it is actually required for production.

JIT is based on two principles

- (i) Produce goods only when it is required and
- (ii) the products should be delivered to customers at the time only when they want.

It is also known as 'Demand pull' or 'Pull through' system of production. In this system, production process actually starts after the order for the products is received. Based on the demand, production process starts and the requirement for raw materials is sent to the purchase department for purchase. This can be understood with the help of the following diagram:



Q2. Date: NB Pg. No. Stars: Exam: Inter [May 18, Q.6(e)(ii)] [5 Marks]

Explain: FIFO and LIFO method of stores issue.

Ans.

First-in First-out (FIFO) method: It is a method of pricing the issues of materials, in the order in which they are purchased. In other words, the materials are issued in the order in which they arrive in the store or the items longest in stock are issued first. Thus each issue of material only recovers the purchase price which does not reflect the current market price. This method is considered suitable in times of falling price because the material cost charged to production will be high while the replacement cost of materials will be low.

Last-in-First-out (LIFO) method: It is a method of pricing the issues of materials. This method is based on the assumption that the items of the last batch (lot) purchased are the first to be issued. Therefore, under this method the prices of the last batch (lot) are used for pricing the issues, until it is exhausted, and so on. If however, the quantity of issue is more than the quantity of the latest lot than earlier (lot) and its price will also be taken into consideration. During inflationary period or period of rising prices, the use of LIFO would help to ensure that the cost of production determined on the above basis is approximately the current one.

Q3. Date: NB Pg. No. Stars: Exam: Inter [Nov. 18, Q.6(b)] [5 Marks]

Explain obsolescence and circumstances under which materials become obsolete. State the steps to be taken for its treatment.

Ans.

Obsolescence: Obsolescence is defined as "the loss in the intrinsic value of an asset due to its supersession".

Materials may become obsolete under any of the following **circumstances**:

- (i) where it is a spare part, or a component of a machinery used in manufacture and that machinery becomes obsolete;
- (ii) where it is used in the manufacture of a product which has become obsolete;
- (iii) where the material itself is replaced by another material due to either improved quality or fall in price.

Treatment: In all three cases, the value of the obsolete material held in stock is a total loss and immediate steps **should be taken to dispose it off** at the best available price. The loss arising out of obsolete materials on **abnormal loss does not form part of the cost of manufacture.**

Q4. Date: NB Pg. No. Stars: Exam: Inter [Nov. 19, Q.6(c)] [5 Marks]

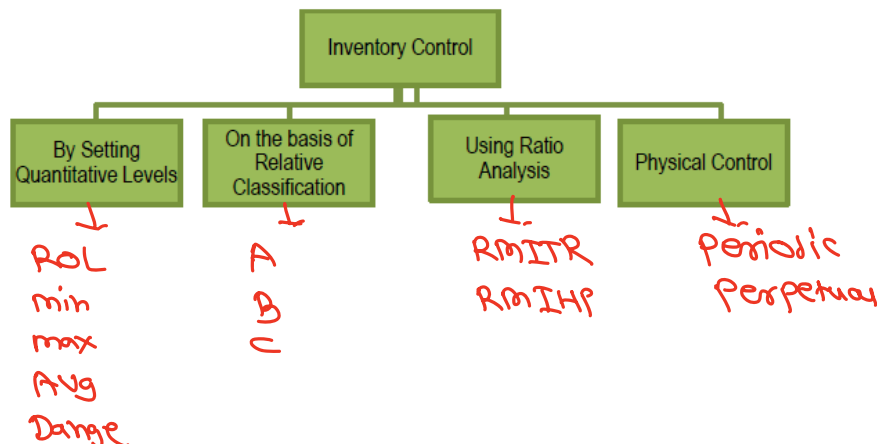
Define Inventory Control and give its objectives.

List down the basis to be adopted for Inventory Control.

Ans.

Inventory Control: The Chartered Institute of Management Accountants (CIMA) defines Inventory Control as "The function of ensuring that sufficient goods are retained in stock to meet all requirements without carrying unnecessarily large stocks."

The **objective** of inventory control is to make a balance between sufficient stock and over-stock. The stock maintained should be sufficient to meet the production requirements so that uninterrupted production flow can be maintained. Insufficient stock not only pause the production but also cause a loss of revenue and goodwill. On the other hand, Inventory requires some funds for purchase, storage, maintenance of materials with a risk of obsolescence, pilferage etc. A trade-off between Stock-out and Over-stocking is required. The management may employ various methods of Inventory control to have a balance. Management may adopt the following **basis** for Inventory control:



Q5. Date: NB Pg. No. Stars: Exam: Inter [Jan. 21, Q.6(a)] [5 Marks]

State how the following items are treated in arriving at the value of cost of material purchased:

- (i) Detention Charges/Fines
- (ii) Demurrage
- (iii) Cost of Returnable containers
- (iv) Central Goods and Service Tax (CGST)
- (v) Shortage due to abnormal reasons.

Ans.

Treatment of items in arriving at the value of cost of material Purchased

S. No.	Items	Treatment
(i)	Detention charges/ Fine	Detention charges/ fines imposed for non-compliance of rule or law by any statutory authority. It is an abnormal cost and not included with cost of purchase.
(ii)	Demurrage	Demurrage is a penalty imposed by the transporter for delay in uploading or offloading of materials. It is an abnormal cost and not included with cost of purchase.
(iii)	Cost of returnable containers	Treatment of cost of returnable containers are as follows: Returnable Containers: If the containers are returned and their costs are refunded, then cost of containers should not be considered in the cost of purchase. If the amount of refund on returning the container is less than the amount paid, then, only the short fall is added with the cost of purchase.
(iv)	Central Goods and Service Tax (CGST)	Central Goods and Service Tax (CGST) is paid on manufacture and supply of goods and collected from the buyer. It is excluded from the cost of purchase if the input credit is available for the same. Unless mentioned specifically CGST is not added with the cost of purchase.
(v)	Shortage due to abnormal reasons	Shortage arises due to abnormal reasons such as material mishandling, pilferage, or due to any avoidable reasons are not absorbed by the good units. Losses due to abnormal reasons are debited to costing profit and loss account.

Q6. Date: NB Pg. No. Stars: Exam: Inter [Jul. 21, Q.6(e)] [5 Marks]

Write a short note on VED analysis of Inventory Control.

Ans.

Vital, Essential and Desirable (VED): Under this system of inventory analysis, inventories are classified on the basis of its criticality for the production function and final product. Generally, this classification is done for spare parts which are used for production.

- (i) **Vital-** Items are classified as vital when its unavailability can interrupt the production process and cause a production loss. Items under this category are strictly controlled by setting re-order level.
- (ii) **Essential-** Items under this category are essential but not vital. The unavailability may cause sub standardisation and loss of efficiency in production process. Items under this category are reviewed periodically and get the second priority.
- (iii) **Desirable-** Items under this category are optional in nature; unavailability does not cause any production or efficiency loss.

Q7. Date: NB Pg. No. Stars: Exam: Inter [May 22, Q.6(b)] [5 Marks]

Write down the treatment of following items associated with purchase of materials.

- (i) Cash discount
- (ii) IGST
- (iii) Demurrage
- (iv) Shortage
- (v) Basic Custom Duty

Ans.

Treatment of items associated with purchase of materials is tabulated as below

S. No.	Items	Treatment
(i)	Cash Discount	Cash discount is not deducted from the purchase price. It is treated as interest and finance charges. It is ignored.
(ii)	Integrated Goods and Service Tax (IGST)	Integrated Goods and Service Tax (IGST) is paid on inter-state supply of goods and provision of services and collected from the buyers. It is excluded from the cost of purchase if credit for the same is available. Unless mentioned specifically it should not form part of cost of purchase.
(iii)	Demurrage	Demurrage is a penalty imposed by the transporter for delay in uploading or offloading of materials. It is an abnormal cost and not included with cost of purchase

(iv)	Shortage	<p>Shortage in materials are treated as follows:</p> <p>Shortage due to normal reasons: Good units absorb the cost of shortage due to normal reasons. Losses due to breaking of bulk, evaporation, or due to any unavoidable conditions etc. are the reasons of normal loss.</p> <p>Shortage due to abnormal reasons: Shortage arises due to abnormal reasons such as material mishandling, pilferage, or due to any avoidable reasons are not absorbed by the good units. Losses due to abnormal reasons are debited to costing profit and loss account.</p>
(v)	Basic Custom Duty	Basic Custom duty is paid on import of goods from outside India. It is added with the purchase cost.

Q8. Date: NB Pg. No. Stars: Exam: Inter [Nov. 22, Q.6(a)] [5 Marks]

Which system of inventory management is known as 'Demand pull' or 'Pull through' system of production? Explain. Also, specify the two principles on which this system is based.

Ans.

Just in Time (JIT) Inventory Management is also known as 'Demand pull' or 'Pull through' system of production. In this system, production process actually starts after the order for the products is received. Based on the demand, production process starts and the requirement for raw materials is sent to the purchase department for purchase.

It is a system of inventory management with an approach to have a zero inventories in stores. According to this approach material should only be purchased when it is actually required for production.

JIT is based on two principles

- (i) Produce goods only when it is required and
- (ii) the products should be delivered to customers at the time only when they want.



B2. LABOUR COSTING

RECENT EXAM – THEORY QUESTIONS & ANSWERS

☞ ICAI - EXAM ☞

Q1. Date: NB Pg. No. Stars: Exam: Inter [Jul. 21, Q.6(c)] [5 Marks]

Rowan Premium Bonus system does not motivate a highly efficient worker as a less efficient worker and a highly efficient worker can obtain same bonus under this system. Discuss with an example.

Ans. $(\text{Hrs worked} \times \text{Hrsly Rate}) + \frac{\text{AH}}{\text{SH}} (\text{Hrs saved} \times \text{Rate per Hour})$

Rowan Premium Plan: According to this system a standard time allowance is fixed for the performance of a job and bonus is paid if time is saved.

Under Rowan System, the bonus is that proportion of the time wages as time saved bears to the standard time.

$$\text{Bonus} = \frac{\text{Time Saved}}{\text{Time Allowed}} \times \text{Time taken} \times \text{Rate per hour}$$

Example explaining highly efficient worker and less efficient worker obtaining same bonus:

Time rate (per Hour)	₹ 60
Time allowed	8 hours ✓
Time taken by 'X'	6 hours ✓
Time taken by 'Y'	2 hours ✓

$$\text{Bonus} = \frac{\text{Time Saved}}{\text{Time Allowed}} \times \text{Time taken} \times \text{Rate per hour}$$

6 Hrs ← For 'X' = $\frac{2 \text{ hours}}{8 \text{ hours}} \times 6 \text{ hours} \times ₹ 60 = ₹ 90$ $\frac{6}{8} \times (2 \times 60) = 90$

2 Hrs ← For 'Y' = $\frac{6 \text{ hours}}{8 \text{ hours}} \times 2 \text{ hours} \times ₹ 60 = ₹ 90$ $\frac{2}{8} \times (6 \times 60) = 90$

From the above example, it can be concluded that a highly efficient worker may obtain same bonus as less efficient worker under this system.

Q2. Date: NB Pg. No. Stars: Exam: Inter [May 22, Q.6(c)] [5 Marks]

Explain the treatment of Overtime Premium in following situations:

- (i) SV & Co. wants to grab some special orders, and overtime is required to meet the same.
- (ii) Dept. X has to work overtime to make up a shortfall in production due to some fault of management in dept. Y.
- (iii) S Ltd. has to work overtime regularly throughout the year as a policy due to the workers' shortage.
- (iv) Due to flood in Odisha, RS Ltd. has to work overtime to complete the job.
- (v) A customer requested the company MN Ltd. to expedite the job because of his urgency of work.

Ans.

Treatment of Overtime premium in different situations

Situation	Treatment
(i) SV & Co. wants to grab some special orders, and overtime is required to meet the same.	If overtime is required to cope with general production programmes or for meeting urgent orders, the overtime premium should be treated as overhead cost of the particular department or cost centre which works overtime.
(ii) Dept. X has to work overtime to make up a shortfall in production due to some fault of management in dept. Y.	If overtime is worked in a department due to the fault of another department, the overtime premium should be charged to the latter department (Y).
(iii) S Ltd. has to work overtime regularly throughout the year as a policy due to the workers' shortage.	The overtime premium is treated as a part of employee cost and job is charged at an effective average wage rate.
(iv) Due to flood in Odisha, RS Ltd. has to work overtime to complete the job.	Overtime worked on account of abnormal conditions such as flood, earthquake etc., should not be charged to cost, but to Costing Profit and Loss Account.
(v) A customer requested the company MN Ltd. to expedite the job because of his urgency of work.	Where overtime is worked at the request of the customer, overtime premium is also charged to the job/ customer directly.



B3. OVERHEADS: ABSORPTION COSTING

RECENT EXAM – THEORY QUESTIONS & ANSWERS

ICAI - EXAM

Q1. Date: NB Pg. No. Stars: Exam: Inter [Nov. 18, Q.6(c)] [5 Marks]

State the bases of apportionment of following overhead costs:

- (i) Air-conditioning
- (ii) Time keeping
- (iii) Depreciation of plant and machinery
- (iv) Power /steam consumption
- (v) Electric power (Machine operation).

Ans.

Overhead Cost	Bases of Apportionment
(i) Air- conditioning	Floor area, or <u>volume of department</u>
(ii) Time keeping	Number of workers
(iii) Depreciation of plant and machinery	Capital values
(iv) Power/steam consumption	Technical estimates → <u>H.P x m/c Hrs</u>
(v) Electric power (machine operation)	<u>Horse power of machines, or Number of machine hour, or value of machines or units consumed.</u> <u>Kilo-watt hours.</u>

Q2. Date: NB Pg. No. Stars: Exam: Inter [Jan. 21, Q.6(c)] [5 Marks]

Explain Blanket Overhead Rate and Departmental Overhead Rate. How they are calculated? State the conditions required for the application of Blanket Overhead Rate.

Ans.

Blanket Overhead Rate: Blanket overhead rate refers to the computation of one single overhead rate for the whole factory.

This overhead rate is computed as follows:

$$\text{Blanket Rate} = \frac{\text{Total overheads for the factory}}{\text{Total number of units of base for the factory}}$$

Departmental Overhead Rate: It refers to the computation of one single overhead rate for a particular production unit or department.

This overhead rate is determined by the following formula:

$$\text{Departmental overhead Rate} = \frac{\text{Overheads of department or cost centre}}{\text{Corresponding base}}$$

Conditions required for the Application of Blanket Overhead:

A blanket rate should be applied in the following cases:

- (1) Where only one major product is being produced.
- (2) Where several products are produced, but
 - (a) All products pass through all departments; and
 - (b) All products are processed for the same length of time in each department.

Q3. Date: NB Pg. No. Stars: Exam: Inter [May 23. Q.6(b)] [5 Marks]

Explain what is meant by Practical capacity and Normal capacity. How is normal capacity determined?

Ans.

Meaning of Practical capacity and Normal capacity

Practical capacity is defined as actually utilised capacity of a plant. It is also known as operating capacity. This capacity takes into account loss of time due to repairs, maintenance, minor breakdown, idle time, set up time, normal delays, Sundays and holidays, stock taking etc. Generally, practical capacity is taken between 80 to 90% of the rated capacity. It is also used as a base for determining overhead rates. Practical capacity is also called net capacity or available capacity.

Normal capacity is the volume of production or services achieved or achievable on an average over a period under normal circumstances taking into account the reduction in capacity resulting from planned maintenance.

Normal capacity is determined as under:

Installed capacity		xxx
Adjustments for:		
(i) <u>Time lost due to scheduled preventive or planned maintenance</u>	xxx	
(ii) <u>Number of shifts or machine hours or man hours</u>		
(iii) <u>Holidays, normal shut down days, normal idle time</u>	xxx	
(iv) <u>Normal time lost in batch change over</u>	xxx	xxx
Normal Capacity		xxx

Q4. Date: NB Pg. No. Stars: Exam: Inter [May 23, Q.6(d)] [5 Marks]

Suggest any one basis of re-apportionment of service department overheads over production departments in the following instances:

Cost of Service Department	Basis
(i) Maintenance and Repair Shop	
(ii) Hospital and Dispensary	
(iii) Fire Protection	
(iv) Stores Department	
(v) Transport Department	
(vi) Computer Section	
(vii) Power House (Electric Power Cost)	
(viii) Inspection	
(ix) Tool Room	
(x) Time-keeping	

Ans.

Basis of re-apportionment of service department overheads over production departments

Cost of the Service Departments:	Basis
(i) Maintenance and Repair shop	<u>Direct labour hours, Machine hours, Direct labour wages, Asset value x Hours worked</u>
(ii) Hospital and Dispensary	<u>No. of employees, No. of direct workers etc.</u>
(iii) Fire Protection	<u>Capital values</u>
(iv) Stores Department	<u>No. of requisitions, Weight or value of Materials issued.</u>
(v) Transport Department	<u>Crane hours, Truck hours, Truck mileage, Truck tonnage, Truck ton- hours, Tonnage handled. No. of packages of Standard size</u>
(vi) Computer Section	<u>Computer hours, Specific allocation to departments</u>
(vii) Power House (Electric Power Cost)	<u>Horse power, Kwh, Horse power x Machine hours, Kwh x Machine hours</u>
(viii) Inspection	<u>Inspection hours, number of inspections.</u>
(ix) Tool room	<u>Direct labour hours, Machine hours, Direct labour wages, Asset value x Hours worked</u>
(x) Time-keeping	<u>No. of card punched, No. of employees</u>



B4. ACTIVITY BASED COSTING

RECENT EXAM – THEORY QUESTIONS & ANSWERS

☞ ICAI - EXAM ☞

Q1. Date: NB Pg. No. Stars: Exam: Inter [Nov. 18, Q.6(e)] [5 Marks]

Explain 'Activity Based Budgeting'.

Ans.

Activity Based Budgeting (ABB)

- Activity based budgeting analyse the resource input or cost for each activity.
- It provides a framework for estimating the amount of resources required in accordance with the budgeted level of activity.
- Actual results can be compared with budgeted results to highlight both in financial and non-financial terms those activities with major discrepancies from budget for potential reduction in supply of resources.
- It is a planning and control system which seeks to support the objectives of continuous improvement.
- It means planning and controlling the expected activities of the organization to derive a cost-effective budget that meet forecast workload and agreed strategic goals.
- ABB is the reversing of the ABC process to produce financial plans and budgets.

Q2. Date: NB Pg. No. Stars: Exam: Inter [Nov. 22, Q.6(c)] [5 Marks]

PP Limited is in the process of implementation of Activity Based Costing System in the organisation. For this purpose, it has identified the following Business Functions in its organisation:

- Research and Development
- Design of Products, Services and Procedures
- Customer Service
- Marketing
- Distribution

You are required to specify two cost drivers for each Business Function Identified above.

Ans.

Business functions	Cost Driver
Research and Development	<ul style="list-style-type: none"> • Number of research projects • Personnel hours on a project • Technical complexities of the project

Design of products, services and procedures	<ul style="list-style-type: none"> • Number of products in design • Number of parts per product • Number of engineering hours
Customer Service	<ul style="list-style-type: none"> • Number of service calls • Number of products serviced • Hours spent on servicing products
Marketing	<ul style="list-style-type: none"> • Number of advertisements • Number of sales personnel • Sales revenue
Distribution	<ul style="list-style-type: none"> • Number of units distributed • Number of customers • Weight of items distributed

(Any two cost drivers of each business function)

Q3. Date: NB Pg. No. Stars: Exam: Inter [May 23, Q.6(c)] [5 Marks]

What is meant by Activity Based Management (ABM) and discuss how Activity Based Management can be used in the business?

Ans. Meaning of Activity Based Management (ABM)

The term Activity based management (ABM) is used to describe the cost management application of ABC. The use of ABC as a costing tool to manage costs at activity level is known as Activity Based Cost Management (ABM). ABM is a discipline that focuses on the efficient and effective management of activities as the route to continuously improving the value received by customers. ABM utilizes cost information gathered through ABC.

Activity based management can be used in the following ways:

- (i) **Cost Reduction:** ABM helps the organisation to identify costs against activities and to find opportunities to streamline or reduce the costs or eliminate the entire activity, especially if there is no value added.
- (ii) **Business Process Re-engineering:** Business process re-engineering involves examining business processes and making substantial changes to how organisation currently operates. ABM is a powerful tool for measuring business performance, determining the cost of business output and is used as a means of identifying opportunities to improve process efficiency and effectiveness.
- (iii) **Benchmarking:** Benchmarking is a process of comparing of ABC-derived activity costs of one segment of company with those of other segments. It requires uniformity in the definition of activities and measurement of their costs.
- (iv) **Performance Measurement:** Many organisations are now focusing on activity performance as a means of facing competitors and managing costs by monitoring the efficiency and effectiveness of activities.



B5. COST ACCOUNTING SYSTEM

RECENT EXAM – THEORY QUESTIONS & ANSWERS

☞ ICAI - EXAM ☞

Q1. Date: NB Pg. No. Stars: Exam: Inter [May 19, Q.6(c)] [5 Marks]

Explain integrated accounting system and state its advantages.

Ans.

Integrated Accounting System: Integrated Accounts is the name given to a system of accounting, whereby cost and financial accounts are kept in the same set of books. Obviously, then there will be no separate sets of books for Costing and Financial records. Integrated accounts provide or meet out fully the information requirement for Costing as well as for Financial Accounts. For Costing it provides information useful for ascertaining the cost of each product, job, and process, operation of any other identifiable activity and for carrying necessary analysis. Integrated accounts provide relevant information which is necessary for preparing profit and loss account and the balance sheets as per the requirement of law and also helps in exercising effective control over the liabilities and assets of its business.

Advantages of Integrated Accounting System

The main advantages of Integrated Accounts are as follows:

- (i) **No need for Reconciliation** - The question of reconciling costing profit and financial profit does not arise, as there is only one figure of profit.
- (ii) **Less efforts** - Due to use of one set of books, there is a significant saving in efforts made.
- (iii) **Less time consuming** - No delay is caused in obtaining information as it is provided from books of original entry.
- (iv) **Economical process** - It is economical also as it is based on the concept of "Centralisation of Accounting function".

Q2. Date: NB Pg. No. Stars: Exam: Inter [Nov. 20, Q.6(c)] [5 Marks]

Explain what are the pre-requisites of integrated accounting.

Ans.

The essential pre-requisites for integrated accounts include the following steps:

- The management's decision about the extent of integration of the two sets of books. Some concerns find it useful to integrate up to the stage of prime cost or factory cost while other prefer full integration of the entire accounting records.
- A suitable coding system must be made available so as to serve the accounting purposes of financial and cost accounts.

- An agreed routine, with regard to the treatment of provision for accruals, prepaid expenses, other adjustment necessary for preparation of interim accounts.
- Perfect coordination should exist between the staff responsible for the financial and cost aspects of the accounts and an efficient processing of accounting documents should be ensured.
- Under this system there is no need for a separate cost ledger. Of course, there will be a number of subsidiary ledgers; in addition to the useful Customers' Ledger and the Bought Ledger, there will be: (a) Stores Ledger; (b) Stock Ledger and (c) Job Ledger.

Q3. Date: NB Pg. No. Stars: Exam: Inter [May 22, Q.6(a)] [5 Marks]

Briefly explain the essential features of a good Cost Accounting System.

Ans.

The essential features, which a good cost accounting system should possess, are as follows:

- Informative and simple:** Cost accounting system should be tailor-made, practical, simple and capable of meeting the requirements of a business concern. The system of costing should not sacrifice the utility by introducing inaccurate and unnecessary details.
- Accurate and authentic:** The data to be used by the cost accounting system should be accurate and authenticated; otherwise it may distort the output of the system and a wrong decision may be taken.
- Uniformity and consistency:** There should be uniformity and consistency in classification, *treatment and reporting of cost data and related information*. This is required for benchmarking and comparability of the results of the system for both horizontal and vertical analysis.
- Integrated and inclusive:** The cost accounting system should be integrated with other systems like financial accounting, taxation, statistics and operational research etc. to have a complete overview and clarity in results.
- Flexible and adaptive:** The cost accounting system should be flexible enough to *make necessary amendment and modifications* in the system to incorporate changes in technological, reporting, regulatory and other requirements.
- Trust on the system:** Management should have trust on the system and its output. For this, an active role of management is required for the development of such a system that reflects a strong conviction in using information for decision making.

Q4. Date: NB Pg. No. Stars: Exam: Inter [Nov. 22, Q.6(b)] [5 Marks]

Indicate, for following items, whether to be shown in the Cost Accounts or Financial Accounts:

- (i) Preliminary expenses written off during the year
- (ii) Interest received on bank deposits
- (iii) Dividend, interest received on investments
- (iv) Salary for the proprietor at notional figure though not incurred
- (v) Charges in lieu of rent where premises are owned
- (vi) Rent receivables
- (vii) Loss on sale of Fixed Assets
- (viii) Interest on capital at notional figure though not incurred
- (ix) Goodwill written off
- (x) Notional Depreciation on the assets fully depreciated for which book value is Nil.

Ans.

S. No.	Items	Accounts
(i)	Preliminary expenses written off during the year	Financial Accounts
(ii)	Interest received on bank deposits	Financial Accounts
(iii)	Dividend, interest received on investments	Financial Accounts
(iv)	Salary for the proprietor at notional figure though not incurred	Cost Accounts
(v)	Charges in lieu of rent where premises are owned	Cost Accounts
(vi)	Rent receivables	Financial Accounts
(vii)	Loss on the sales of Fixed Assets	Financial Accounts
(viii)	Interest on capital at notional figure though not incurred	Cost Accounts
(ix)	Goodwill written off	Financial Accounts
(x)	Notional Depreciation on the assets fully depreciated for which book value is nil	Cost Accounts



C1. JOB, UNIT & BATCH COSTING

RECENT EXAM – THEORY QUESTIONS & ANSWERS

ICAI - EXAM

Q1.	Date:	NB Pg. No.	Stars:	Exam: Inter [May 18, Q.6(d)] [5 Marks]
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Explain 'Job Costing' and 'Batch Costing'.

Ans.

Job costing: In this method of costing, cost of each job is ascertained separately. It is suitable in all cases where work is undertaken on receiving a customer's order like a printing press, motor work shop, etc. This method of costing is used for non- standard and non- repetitive products produced as per customer specifications and against specific orders. Jobs are different from each other and independent of each other. Each Job is unique.

Batch Costing: It is the extension of Job costing. Homogeneous products are produced in a continuous production flow in lots. A batch may represent a number of small orders passed through the factory in batch. Each batch here is treated as a unit of cost and thus separately costed. Here cost per unit is determined by dividing the cost of the batch by number of units produced in the batch.



C2. PROCESS & OPERATION COSTING

RECENT EXAM – THEORY QUESTIONS & ANSWERS

ICAI - EXAM

Q1.	Date:	NB Pg. No.	Stars:	Exam: Inter [May 23, Q.6(e)] [5 Marks]
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How will you treat normal loss, abnormal loss and abnormal gain in process costing? Explain

Ans.

Treatment of normal loss, abnormal loss and abnormal gain in process costing

Treatment of Normal loss in Cost Accounts: The cost of normal process loss in practice is **absorbed by good units produced under the process**. The amount realised by the sale of normal process loss units should be credited to the process account.

Treatment of Abnormal loss in Cost Accounts: The cost of an abnormal process loss unit is equal to the cost of a good unit. The total cost of abnormal process loss is credited to the process account from which it arises. Cost of abnormal process loss is not treated as a part of the cost of the product. In fact, the total cost of abnormal process loss is debited to costing profit and loss account.

Treatment of Abnormal Gain in Cost Accounts: The process account under which abnormal gain arises is **debited with the abnormal gain and credited to abnormal gain account** which will be closed by transferring to the Costing Profit and Loss account. The cost of **abnormal gain is computed on the basis of normal production**.



C3. JOINT PRODUCT & BY PRODUCT (JPBP)

RECENT EXAM – THEORY QUESTIONS & ANSWERS

☞ ICAI - EXAM ☞

Q1. Date: NB Pg. No. Stars: Exam: Inter [Nov. 18, Q.6(d)] [5 Marks]

How are By-products treated in Costing?

Ans.

Treatment of by-product cost in Cost Accounting:

By-product cost can be dealt in cost accounting in the following ways:

- (a) **When they are of small total value:** When the by-products are of small total value, the amount realised from their sale may be dealt in any one the following two ways:
1. The sales value of the by-products may be credited to the Costing Profit and Loss Account and no credit be given in the Cost Accounts. The credit to the Costing Profit and Loss Account here is treated either as miscellaneous income or as additional sales revenue.
 2. The sale proceeds of the by-product may be treated as deductions from the total costs. The sale proceeds in fact should be deducted either from the production cost or from the cost of sales.
- (b) **When the by-products are of considerable total value:** Where by-products are of considerable total value, they may be regarded as joint products rather than as by-products. To determine exact cost of by-products the costs incurred upto the point of separation, should be apportioned over by-products and joint products by using a logical basis.
- (c) **Where they require further processing:** In this case, the net realisable value of the by-product at the split-off point may be arrived at by subtracting the further processing cost from the realisable value of by-products.

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Q2. Date:	NB Pg. No.	Stars:	Exam: Inter [Dec. 21, Q.6(b)] [5 Marks]
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Narrate the terms 'Joint Products' and 'By-Products' with an example of each term.

Ans.

- (i) **Joint Products** - Joint products represent "two or more products separated in the course of the same processing operation usually requiring further processing, each product being in such proportion that no single product can be designated as a major product".

In other words, two or more products of equal importance, produced, simultaneously from the same process, with each having a significant relative sale value are known as joint products.

For example, in the oil industry, gasoline, fuel oil, lubricants, paraffin, coal tar, asphalt and kerosene are all produced from crude petroleum. These are known as joint products.

- (ii) **By-Products** - These are defined as "products recovered from material discarded in a main process, or from the production of some major products, where the material value is to be considered at the time of severance from the main product." Thus, by-products emerge as a result of processing operation of another product or they are produced from the scrap or waste of materials of a process. In short, a by-product is a secondary or subsidiary product which emanates as a result of manufacture of the main product.

The point at which they are separated from the main product or products is known as split-off point. The expenses of processing are joint till the split –off point.

Examples of by-products are molasses in the manufacture of sugar, tar, ammonia and benzole obtained on carbonisation of coal and glycerine obtained in the manufacture of soap.



C4. SERVICE COSTING

RECENT EXAM – THEORY QUESTIONS & ANSWERS

ICAI - EXAM

Q1. Date: NB Pg. No. Stars: Exam: Inter [Nov. 19, Q.6(a)] [5 Marks]

Describe Composite Cost unit as used in Service Costing and discuss the ways of computing it.

Ans.

Composite Cost Unit: Sometime two measurement units are combined together to know the cost of service or operation. These are called composite cost units. For example, a public transportation undertaking would measure the operating cost per passenger per kilometre.

Examples of Composite units are Ton- km., Quintal- km, Passenger-km., Patient-day etc.

Composite unit may be computed in two ways:

- (i) Absolute (Weighted Average) basis.
- (ii) Commercial (Simple Average) basis.

In both bases of computation of service cost unit, weightage is also given to qualitative factors rather quantitative (which are directly related with variable cost elements) factors alone.

- (i) **Weighted Average or Absolute basis** – It is summation of the products of qualitative and quantitative factors. For example, to calculate absolute Ton-Km for a goods transport is calculated as follows.:

$$\sum (\text{Weight Carried} \times \text{Distance})_1 + (\text{Weight Carried} \times \text{Distance})_2 + \dots + (\text{Weight Carried} \times \text{Distance})_n$$

Similarly, in case of Cinema theatres, price for various classes of seats are fixed differently. For example–

First class seat may be provided with higher quality service and hence charged at a higher rate, whereas Second Class seat may be priced less. In this case, appropriate weight to be given effect for First Class seat and Second Class seat – to ensure proper cost per composite unit.

- (ii) **Simple Average or Commercial basis** – It is the product of average qualitative and total quantitative factors. For example, in case of goods transport, Commercial Ton-Km is arrived at by multiplying total distance km., by average load quantity.

$$\sum (\text{Distance}_1 + \text{Distance}_2 + \dots + \text{Distance}_n) \times \left(\frac{W_1 + W_2 + \dots + W_n}{n} \right)$$

In both the example, variable cost is dependent of distance and is a quantitative factor. Since, the weight carried does not affect the variable cost hence and is a qualitative factor.

Q2. Date: NB Pg. No. Stars: Exam: Inter [Jul. 21, Q.6(d)] [5 Marks]

What do you understand by Build-Operate-Transfer (BOT) approach in Service Costing? How is the Toll rate computed?

Ans.

Build-Operate-Transfer (BOT) Approach: In recent years a growing trend emerged among Governments in many countries to solicit investments for public projects from the private sector under BOT scheme. **BOT is an option for the Government to outsource public projects to the private sector.**

With BOT, the private sector designs, finances, constructs and operate the facility and eventually, after specified concession period, the ownership is transferred to the Government. Therefore, BOT can be seen as a developing technique for infrastructure projects by making them amenable to private sector participation.

Toll Rate: In general, the toll rate should have a direct relation with the benefits that the road users would gain from its improvements. The benefits to road users are likely to be in terms of fuel savings, improvement in travel time and good riding quality.

To compute the toll rate, following formula may be used

$$= \frac{\text{Total Cost} + \text{Profit}}{\text{Number of Vehicles}}$$

Or, to compute the toll rate following formula with rounding off to nearest multiple of five has been adopted: User fee = Total distance x Toll rate per km.



D1. STANDARD COSTING

RECENT EXAM – THEORY QUESTIONS & ANSWERS

☞ ICAI - EXAM ☞

Q1.	Date:	NB Pg. No.	Stars:	Exam: Inter [Dec. 21, Q.6(c)] [5 Marks]
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Discuss the steps involved in setting labour time standards.

Ans.

Procedure of Setting Labour Time Standards

The following are the steps involved in setting labour standards:

- Standardisation:** Products to be produced are decided based on production plan and customer's order.
- Labour specification:** Types of labour and labour time is specified. Labour time specification is based on past records and it takes into account normal wastage of time.
- Standardisation of methods:** Selection of proper machines to use proper sequence and method of operations.
- Manufacturing layout:** A plan of operation for each product listing the operations to be performed is prepared.
- Time and motion study:** It is conducted for selecting the best way of completing the job or motions to be performed by workers and the standard time which an average worker will take for each job. This also takes into account the learning efficiency and learning effect.
- Training and trial:** Workers are trained to do the work and time spent at the time of trial run is noted down.
- Budgetary Control System:** It is the system of management control and accounting in which all the operations are forecasted and planned in advance to the extent possible and the actual results compared with the forecasted and planned results.

Components of Budgetary Control System: The policy of a business for a defined period is represented by the master budget, the detailed components of which are given in a number of individual budgets called functional budgets. These functional budgets are broadly grouped under the following heads:

- Physical budgets:** Those budgets which contain information in quantitative terms such as the physical units of sales, production etc. This may include quantity of sales, quantity of production, inventories, and manpower budgets are physical budgets.
- Cost budgets:** Budgets which provides cost information in respect of manufacturing, administration, selling and distribution, etc. for example, manufacturing costs, selling costs, administration cost, and research and development cost budgets are cost budgets.



STANDARD COSTING

3. **Profit budgets:** A budget which enables the ascertainment of profit. For example, sales budget, profit and loss budget, etc.
4. **Financial budgets:** A budget which facilitates in ascertaining the financial position of a concern, for example, cash budgets, capital expenditure budget, budgeted balance sheet etc.

Q2. Date:	NB Pg. No.	Stars:	Exam: Inter [May 22, Q.6(d)] [5 Marks]
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Discuss briefly some of the criticism which may be levelled against the Standard Casting System.

Ans.

Criticism of Standard Costing

- (i) **Variation in price:** One of the chief problem faced in the operation of the standard costing system is the precise estimation of likely prices or rate to be paid. The variability of prices is so great that even actual prices are not necessarily adequately representative of cost. But the use of sophisticated forecasting techniques should be able to cover the price fluctuation to some extent. Besides this, the system provides for isolating uncontrollable variances arising from variations to be dealt with separately.
- (ii) **Varying levels of output:** If the standard level of output set for pre-determination of standard costs is not achieved, the standard costs are said to be not realised. However, the statement that the capacity utilisation cannot be precisely estimated for absorption of overheads may be true only in some industries of jobbing type. In vast majority of industries, use of forecasting techniques, market research, etc., help to estimate the output with reasonable accuracy and thus the variation is unlikely to be very large. Prime cost will not be affected by such variation and, moreover, variance analysis helps to measure the effects of idle time.
- (iii) **Changing standard of technology:** In case of industries that have frequent technological changes affecting the conditions of production, standard costing may not be suitable. This criticism does not affect the system of standard costing. Cost reduction and cost control is a cardinal feature of standard costing because standards once set do not always remain stable. They have to be revised.
- (iv) **Attitude of technical people:** Technical people are accustomed to think of standards as physical standards and, therefore, they will be misled by standard costs. Since technical people can be educated to adopt themselves to the system through orientation courses, it is not an insurmountable difficulty.
- (v) **Mix of products:** Standard costing presupposes a pre-determined combination of products both in variety and quantity. The mixture of materials used to manufacture the products may vary in the long run but since standard costs are set normally for a short period, such changes can be taken care of by revision of standards.
- (vi) **Level of Performance:** Standards may be either too strict or too liberal because they may be based on (a) theoretical maximum efficiency, (b) attainable good performance or (c) average past performance. To overcome this difficulty, the management should give thought to the selection of a suitable type of standard. The type of standard most effective in the control of costs is one which represents an attainable level of good performance.

- (vii) **Standard costs cannot possibly reflect the true value in exchange:** If previous historical costs are amended roughly to arrive at estimates for ad hoc purposes, they are not standard costs in the strict sense of the term and hence they cannot also reflect true value in exchange. In arriving at standard costs, however, the economic and technical factors, internal and external, are brought together and analysed to arrive at quantities and prices which reflect optimum operations. The resulting costs, therefore, become realistic measures of the sacrifices involved.
- (viii) **Fixation of standards may be costly:** It may require high order of skill and competency. Small concerns, therefore, feel difficulty in the operation of such system.



D2. MARGINAL COSTING

RECENT EXAM – THEORY QUESTIONS & ANSWERS

☞ ICAI - EXAM ☞

Q1. Date: NB Pg. No. Stars: Exam: Inter [May 19, Q.6(e)] [5 Marks]

What are the limitations of marginal costing?

Ans.

Limitations of Marginal Costing

- (i) **Difficulty in classifying fixed and variable elements:** It is difficult to classify exactly the expenses into fixed and variable category. Most of the expenses are neither totally variable nor wholly fixed. For example, various amenities provided to workers may have no relation either to volume of production or time factor.
- (ii) **Dependence on key factors:** Contribution of a product itself is not a guide for optimum profitability unless it is linked with the key factor.
- (iii) **Scope for Low Profitability:** 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.
- (iv) **Faulty valuation:** 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.
- (v) **Unpredictable nature of Cost:** 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. Fixed cost may change from one period to another. For example, salaries bill may go up because of annual increments or due to change in pay rate etc. The variable costs do not remain constant per unit of output. There may be changes in the prices of raw materials, wage rates etc. after a certain level of output has been reached due to shortage of material, shortage of skilled labour, concessions of bulk purchases etc.
- (vi) **Marginal costing ignores time factor and investment:** The marginal cost of two jobs may be the same but the time taken for their completion and the cost of machines used may differ. The true cost of a job which takes longer time and uses costlier machine would be higher. This fact is not disclosed by marginal costing.
- (vii) **Understating of W-I-P:** Under marginal costing stocks and work in progress are understated.

Q2. Date: NB Pg. No. Stars: Exam: Inter [Nov. 20, Q.6(e)] [5 Marks]

Differentiate between "Marginal and Absorption Costing".

Ans.

Difference between Marginal costing and Absorption costing

S. No.	Marginal costing	Absorption costing
1.	Only variable costs are considered for product costing and inventory valuation.	Both fixed and variable costs are considered for product costing and inventory valuation.
2.	Fixed costs are regarded as period costs. The Profitability of different products is judged by their P/V ratio.	Fixed costs are charged to the cost of production. Each product bears a reasonable share of fixed cost and thus the profitability of a product is influenced by the apportionment of fixed costs.
3.	Cost data presented highlight the total contribution of each product.	Cost data are presented in conventional pattern. Net profit of each product is determined after subtracting fixed cost along with their variable costs.
4.	The difference in the magnitude of opening stock and closing stock does not affect the unit cost of production.	The difference in the magnitude of opening stock and closing stock affects the unit cost of production due to the impact of related fixed cost.
5.	In case of marginal costing the cost per unit remains the same, irrespective of the production as it is valued at variable cost	In case of absorption costing the cost per unit reduces, as the production increases as it is fixed cost which reduces, whereas, the variable cost remains the same per unit.

Q3. Date: NB Pg. No. Stars: Exam: Inter [Jul. 21, Q.6(b)] [5 Marks]

What is Margin of Safety? What does a large Margin of Safety indicates? How can you calculate Margin of Safety?

Ans.

Margin of Safety: The margin of safety can be defined as the difference between the expected level of sale and the breakeven sales.

The larger the margin of safety, the higher is the chances of making profits.

The Margin of Safety can be **calculated by** identifying the difference between the projected sales and breakeven sales in units multiplied by the contribution per unit. This is possible because, at the breakeven point all the fixed costs are recovered and any further contribution goes into the making of profits.

Margin of Safety = (Projected sales – Breakeven sales) in units x contribution per unit

It also can be calculated as:

$$\text{Margin of Safety} = \frac{\text{Profit}}{\text{P/V Ratio}}$$



D3. BUDGETS AND BUDGETARY CONTROL

RECENT EXAM – THEORY QUESTIONS & ANSWERS

ICAI - EXAM

Q1. Date: NB Pg. No. Stars: Exam: Inter [May 18, Q.6(c)] [5 Marks]

Why is 'Zero Base Budgeting' (ZBB) considered superior to 'Traditional Budgeting'? Explain.

Ans.

Zero based budgeting is superior to traditional budgeting: Zero based budgeting is superior to traditional budgeting in the following manner:

- It provides a systematic approach for evaluation of different activities.
- It ensures that the function undertaken are critical for the achievement of the objectives.
- It provides an opportunity for management to allocate resources to various activities after a thorough – cost benefit analysis.
- It helps in the identification of wasteful expenditure and then their elimination. It facilitates the close linkage of departmental budgets with corporate objectives.
- It helps in the introduction of a system of Management by Objectives

Q2. Date: NB Pg. No. Stars: Exam: Inter [May 19, Q.6(b)] [5 Marks]

What are the cases when a flexible budget is found suitable?

Ans.

Flexible budgeting may be resorted to under following situations:

- (i) In the case of new business venture due to its typical nature it may be difficult to forecast the demand of a product accurately.
- (ii) Where the business is dependent upon the mercy of nature e.g., a person dealing in wool trade may have enough market if temperature goes below the freezing point.
- (iii) In the case of labour-intensive industry where the production of the concern is dependent upon the availability of labour.

Suitability for flexible budget:

1. Seasonal fluctuations in sales and/or production, for example in soft drinks industry;
2. a company which keeps on introducing new products or makes changes in the design of its products frequently;
3. industries engaged in make-to-order business like ship building;
4. an industry which is influenced by changes in fashion; and
5. General changes in sales.

Q3. Date: NB Pg. No. Stars: Exam: Inter [Nov. 19, Q.6(e)] [5 Marks]

Define Zero Base Budgeting and mention its various stages.

Ans.

Zero-based Budgeting: (ZBB) is an emergent form of budgeting which arises to overcome the limitations of incremental (traditional) budgeting system. Zero-based Budgeting (ZBB) is **defined** as 'a method of budgeting which requires each cost element to be specifically justified, although the activities to which the budget relates are being undertaken for the first time, without approval, the budget allowance is zero'.

ZBB is an activity based budgeting system where budgets are prepared for each activities rather than functional department. Justification in the form of cost benefits for the activity is required to be given. The activities are then evaluated and prioritized by the management on the basis of factors like synchronisation with organisational objectives, availability of funds, regulatory requirement etc.

ZBB is suitable for both corporate and non-corporate entities. In case of non-corporate entities like Government department, local bodies, not for profit organisations, where these entities need to justify the benefits of expenditures on social programmes like mid-day meal, installation of street lights, provision of drinking water etc.

ZBB involves the following stages:

- (i) Identification and description of Decision packages
- (ii) Evaluation of Decision packages
- (iii) Ranking (Prioritisation) of the Decision packages
- (iv) Allocation of resources

Q4. Date: NB Pg. No. Stars: Exam: Inter [Nov. 20, Q.6(b)] [5 Marks]

What are the important points an organization should consider if it wants to adopt Performance Budgeting?

Ans.

For an enterprise that wants to adopt Performance Budgeting, it is thus imperative that:

- the objectives of the enterprise are spelt out in concrete terms.
- the objectives are then translated into specific functions, programmes, activities and tasks for different levels of management within the realities of fiscal constraints.
- realistic and acceptable norms, yardsticks or standards and performance indicators should be evolved and expressed in quantifiable physical units.
- a style of management based upon decentralised responsibility structure should be adopted, and
- an accounting and reporting system should be developed to facilities monitoring, analysis and review of actual performance in relation to budgets.

Q5. Date: NB Pg. No. Stars: Exam: Inter [Jan. 21, Q.6(b)] [5 Marks]

State the limitations of Budgetary Control System.

Ans.

Limitations of Budgetary Control System

Points	Description
1. Based on Estimates	Budgets are based on a series of estimates, which are based on the conditions prevalent or expected at the time budget is established. It requires revision in plan if conditions change.
2. Time factor	Budgets cannot be executed automatically. Some preliminary steps are required to be accomplished before budgets are implemented. It requires proper attention and time of management. Management must not expect too much during the initial development period.
3. Co-operation Required	Staff co-operation is usually not available during the initial budgetary control exercise. In a decentralised organisation, each unit has its own objective and these units enjoy some degree of discretion. In this type of organisation structure, coordination among different units is required. The success of the budgetary control depends upon willing co-operation and teamwork,
4. Expensive	The implementation of budget is somewhat expensive. For successful implementation of the budgetary control, proper organisation structure with responsibility is prerequisite. Budgeting process start from the collection of information to for preparing the budget and performance analysis. It consumes valuable resources (in terms of qualified manpower, equipment, etc.) for this purpose; hence, it is an expensive process.

Q6. Date: NB Pg. No. Stars: Exam: Inter [Dec. 21, Q.6(d)] [5 Marks]

What is 'Budgetary Control System' and discuss the components of the same.

Ans.

Budgetary Control System: It is the system of management control and accounting in which all the operations are forecasted and planned in advance to the extent possible and the actual results compared with the forecasted and planned results.

Components of Budgetary Control System: The policy of a business for a defined period is represented by the master budget, the detailed components of which are given in a number of individual budgets called functional budgets. These functional budgets are broadly grouped under the following heads:

1. **Physical budgets:** Those budgets which contain information in quantitative terms such as the physical units of sales, production etc. This may include quantity of sales, quantity of production, inventories, and manpower budgets are physical budgets.
2. **Cost budgets:** Budgets which provides cost information in respect of manufacturing, administration, selling and distribution, etc. for example, manufacturing costs, selling costs, administration cost, and research and development cost budgets are cost budgets.

Q7. Date:	NB Pg. No.	Stars:	Exam: Inter [Nov. 22, Q.6(d)] [5 Marks]
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Define Budget Manual. What are the salient features of Budget Manual?

Ans.

Budget Manual: The budget manual is a booklet specifying the objectives of an organisation in relation to its strategy. The budget is made to decide how much an organisation would earn and spend and in what manner. In the budget, the organisation sets its priorities too.

Effective budgetary planning relies on the provision of adequate information to the individuals involved in the planning process. Many of these information needs are contained in the budget manual. A budget manual is a collection of documents that contains key information for those involved in the planning process.

CIMA London defines budget manual as, 'A document which sets out the responsibilities of the persons engaged in, the routines of, and the forms and records required for, budgetary control'.

Contents of a budget manual: Typical budget manual may include the following:

- (i) A statement regarding the objectives of the organisation and how they can be achieved through budgetary control;
- (ii) A statement about the functions and responsibilities of each executive, both regarding preparation and execution of budgets;
- (iii) Procedures to be followed for obtaining the necessary approval of budgets. The authority of granting approval should be stated in explicit terms. Whether, one two or more signatures are required on each document should be clearly stated;
- (iv) A form of organisation chart to show who are responsible for the preparation of each functional budget and the way in which the budgets are interrelated.
- (v) A timetable for the preparation of each budget.
- (vi) The manner of scrutiny and the personnel to carry it out;
- (vii) Reports, statements, forms and other record to be maintained.
- (viii) The accounts classification to be employed. It is necessary that the framework within which the costs, revenue and other financial accounts are classified must be identical both in the accounts and budget department.
- (ix) The reporting of the remedial action.

- (x) The manner in which budgets, after acceptance and issuance, are to be revised or amended, these are included in budgets and on which action can be taken only with the approval of top management
- (xi) This will prevent the formation of a 'bottleneck' with the late preparation of one budget holding up the preparation of all others.
- (xii) Copies of all forms to be completed by those responsible for preparing budgets, with explanations concerning their completion.
- (xiii) A list of the organization's account codes, with full explanations of how to use them.
- (xiv) Information concerning key assumptions to be made by managers in their budgets, for example the rate of inflation, key exchange rates, etc.

(Any four points)



