Cost & Management Accounting - PYQs

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Introduction to Cost & Management Accounting

Question – 1 **[Nov 20]** **[RTP Nov 19] [RTP May 20] [RTP Nov 22] [MTP Nov 21]**
Differentiate between "Cost Accounting and Management Accounting".

Answer

	Basis	Cost Accounting	Management Accounting
1.	Nature	It records the quantitative aspect only.	It records both qualitative an quantitative aspect.
2.	Objective	It records the cost of producing a product and providing a service.	It provides information to management for planning and co-ordination.
3.	Area	It only deals with cost ascertainment	It is wider in scope as it includes financial accounting, budgeting, taxation, planning etc.
4.	Recording of data	It uses both past and present figures	It is focused with the projection of figures for future.
5.	Development	Its development is related to industrial revolution.	It develops in accordance to the need of modern business world.
6.	Rules & Regulations	It follows certain principles and procedures for recording costs of different products.	It does not follow any specific rules and regulations.

Question – 2 **[RTP Nov 23]**
Narrate the objectives of cost accounting.

Answer
The main objectives of introduction of a Cost Accounting System in a manufacturing organization are as follows:

(i) **Ascertainment of cost:** The main objective of a Cost Accounting system is to ascertain cost for cost objects. Costing may be post completion or continuous but the aim is to arrive at a complete and accurate cost figure to assist the users to compare, control and make various decisions.

(ii) **Determination of selling price:** Cost Accounting System in a manufacturing organisation enables to determine desired selling price after adding expected profit margin with the cost of the goods manufactured.

(iii) **Cost control and Cost reduction:** Cost Accounting System equips the cost controller to adhere and control the cost estimate or cost budget and assist them to identify the areas of cost reduction.

(iv) **Ascertainment of profit of each activity:** Cost Accounting System helps to classify cost on the basis of activity to ascertain activity wise profitability.

(v) **Assisting in managerial decision making:** Cost Accounting System provides relevant cost information and assists managers to make various decisions.

Question – 3 [May 22] [RTP Nov 18] [MTP Nov 19] [MTP Nov 22]

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

Answer

(a) **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.

(b) **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.

(c) **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.

(d) **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.

(e) **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.

(f) **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.

Question – 4 [MTP Nov 18] [MTP Jan 25]

Discuss the prerequisite of installing cost accounting system.

OR As a consultant hired by a manufacturing company, how would you go about assessing the critical factors for designing and implementing a cost accounting system?

Answer

Before setting up a system of cost accounting the under mentioned factors should be studied:

(i) **Objective:** The objective of costing system, for example whether it is being introduced for fixing prices or for insisting a system of cost control.

(ii) **Nature of Business or Industry:** The Industry in which business is operating. Every business industry has its own peculiarity and objectives. According to its cost information requirement cost accounting methods are followed. For example, an oil refinery maintains process wise cost accounts to find out cost incurred on a particular process say in crude refinement process etc.

(iii) **Organisational Hierarchy:** Costing system should fulfil the information requirements of different levels of management. Top management is concerned with the corporate strategy, strategic level management is concerned with marketing strategy, product diversification, product pricing etc. Operational level management needs the information on standard quantity to be consumed, report on idle time etc.

(iv) **Knowing the product:** Nature of product determines the type of costing system to be implemented. The product which has by-products requires costing system which account for by-products as well. In case of perishable or short self- life, marginal costing method is required to know the contribution and minimum price at which it can be sold.

(v) **Knowing the production process:** A good costing system can never be established without the complete knowledge of the production process. Cost apportionment can be done on the most appropriate and scientific basis if a cost accountant can identify degree of effort or resources consumed in a particular process. This also includes some basic technical know-how and process peculiarity.

(vi) **Information synchronisation:** Establishment of a department or a system requires substantial amount of organisational resources. While drafting a costing system, information needs of various other departments should be taken into account. For example, in a typical business organisation accounts department needs to submit monthly stock statement to its lender bank, quantity wise stock details at the time of filing returns to tax authorities etc.

(vii) **Method of maintenance of cost records:** The manner in which Cost and Financial accounts could be inter-locked into a single integral accounting system and how the results of separate sets of accounts i.e. cost and financial, could be reconciled by means of control accounts.

(viii) **Statutory compliances and audit**: Records are to be maintained to comply with statutory requirements and applicable cost accounting standards to be followed.

(ix) **Information Attributes:** Information generated from the Costing system should possess all the attributes of information i.e. complete, accurate, timeliness, relevant etc. to have an effective management information system (MIS).

<u>Question – 5</u> [MTP Sep 24]

Management of Tillu manufacturing co. is thinking of installing a costing system its company. What practical difficulties management will expect and how management will overcome the same?

<u>Answer</u>

The Practical difficulties with which a Cost Accountant is usually confronted with while installing a costing system in a manufacturing company are as follows:

(i) **Lack of top management support:** Installation of a costing system does not receive the support of top management. They consider it as interference in their work. They believe that such, a system will involve additional paperwork. They also have a misconception in their minds that the system is meant for keeping a check on their activities.

(ii) **Resistance from cost accounting departmental staff:** The staff resist because of fear of loosing their jobs and importance after the implementation of the new system.

(iii) **Non co-operation from user departments:** The foremen, supervisor and other staff members may not cooperate in providing requisite data, as this would not only add to their responsibilities but will also increase paper work of the entire team as well.

(iv) **Shortage of trained staff:** Since cost accounting system's installation involves specialized work, there may be a shortage of trained staff.

To overcome these practical difficulties, necessary steps required are:

- Sell the idea to top management and convince them of the utility of the system.

- Resistance and non co-operation can be overcome by behavioural approach. To deal with the staff concerned effectively.
- Proper training should be given to the staff at each level
- Regular meetings should be held with the cost accounting staff, user departments, staff and top management to clarify their doubts/ misgivings.

Question – 6 [May 18]

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

Answer

The operational level staffs like supervisors, foreman, team leaders require 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.
(iv) to know divisional (responsibility centre) profitability etc.

Question – 7 [MTP Jan 25]

Cost and Management Accounting information is used by different stakeholders. The users of the information can be broadly categorized into internal and external to the entity.

Give two examples of internal users and three examples of external users and explain how they are concerned with the Cost and Management Accounting information.

Answer

Internal users, who use the Cost and Management Accounting information may include the followings:

(a) Policy Makers - The policy makers are those who formulate strategies
   (i) to achieve the goals (short & long term both) to fulfil the objectives of the organisation.
   (ii) to position the organisation into the competitive market environment.
   (iii) to design the organisational structure to get the policy and strategies implemented. etc.

(b) Managers - The managers use the information
   (i) to know the cost of a cost object and cost centre
   (ii) to know the price for the product or service
   (iii) to measure and evaluate performance of responsibility centres
   (iv) to the know the profitability-product-wise, department- wise, customer-wise etc.
   (v) to evaluate the strategic options and to make decisions

(c) Operational level staff - The operational level staff like supervisors, foreman, team leaders require 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.

(iv) to know divisional (responsibility centre) profitability etc.

(d) Employees - Employees are concerned with the information related with time and attendance, incentives for work, performance standards etc.

External users, who use the Cost and Management Accounting information may include the followings:

(a) **Regulatory Authorities-** Regulatory Authorities are concerned with cost accounting data and information for different purpose which includes tariff determination, providing subsidies, rate fixation etc. To do this the regulatory bodies require information on the basis of some standards and format in this regard.

(b) **Auditors-** The auditors while conducting audit of financial accounts or for some other special purpose audit like cost audit etc. require information related with costing and reports reviewed by management etc.

(c) **Shareholders-** Shareholders are concerned with information that effect their investment in the entity. Management communicates to the shareholders through periodic communique, annual reports etc. regarding new orders received, product expansion, market share for products etc.

Question – 8 [RTP Dec 21]

'Like other branches of accounting, cost accounting also has certain limitations.' Explain the limitations.

Answer

The limitations of cost accounting are as follows:

(i) **Expensive:** It is expensive because analysis, allocation and absorption of overheads requires considerable amount of additional work, and hence additional money.

(ii) **Requirement of reconciliation:** The results shown by cost accounts differ from those shown by financial accounts. Thus, preparation of reconciliation statements is necessary to verify their accuracy.

(iii) **Duplication of work**: It involves duplication of work as organization has to maintain two sets of accounts i.e. Financial Accounts and Cost Accounts.

Question – 9 [May 19] [Dec 21] [May 24] [RTP Nov 18] [RTP May 19] [RTP Dec 21] [RTP Nov 22] [RTP May 23] [MTP Nov 18] [MTP May 21]

Differentiate between cost control and cost reduction.

Answer

Cost Control	Cost Reduction
1. Cost control aims at maintaining the costs in accordance with the established standards.	1. Cost reduction is concerned with reducing costs. 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 preventive function.	4. Cost reduction is a corrective function. It operates even when an efficient cost control system exists.
5. Cost control ends when targets are achieved.	Cost reduction has no visible end.

Question – 10 [MTP Oct 20]

Discuss the steps to be followed to exercise control over cost.

Answer

To exercise control over cost, following steps are followed:

(i) Determination of pre-determined standard or results: Standard cost or performance targets for a cost object or a cost centre is set before initiation of production or service activity. These are desired cost or result that need to be achieved.

(ii) Measurement of actual performance: Actual cost or result of the cost object or cost centre is measured. Performance should be measured in the same manner in which the targets are set i.e. if the targets are set up operation-wise, and then the actual costs should also be collected and measured operation-wise to have a common basis for comparison.

(iii) Comparison of actual performance with set standard or target: The actual performance so measured is compared against the set standard and desired target. Any deviation (variance) between the two is noted and reported to the appropriate person or authority.

(iv) Analysis of variance and action: The variance in results so noted are further analysed to know the reasons for variance and appropriate action is taken to ensure compliance in future. If necessary, the standards are further amended to take developments into account.

Question – 11 [May 23]

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

Answer

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

(a) **Product -** Smart phone, Tablet computer, SUV Car, Book etc.

(b) **Service -** An airline flight from Delhi to Mumbai, Concurrent audit assignment, Utility bill payment facility etc.

(c) **Project -** Metro Rail project, Road projects etc.

(d) **Activity –** Quality inspection of materials, Placing of orders etc.

(e) **Process -** Refinement of crudes in oil refineries, melting of billets or ingots in rolling mills etc.

(f) **Department -** Production department, Finance & Accounts, Safety etc.

Question – 12 [Nov 18] [MTP Sep 24]

Mention and explain types of responsibility centres.

Answer

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.

Question – 13 [RTP May 18] [RTP Nov 20] [RTP Sep 24] [MTP May 21]

Discuss the Standard and Discretionary Cost Centres.

Answer

Standards Cost Centres: Cost Centre where output is measurable and input required for the output can be specified. Based on a well-established study, an estimate of standard units of input to produce a unit of output is set. The actual cost for inputs is compared with the standard cost. Any deviation (variance) in cost is measured and analysed into controllable and uncontrollable cost. The manager of the cost centre is supposed to comply with the standard and held responsible for adverse cost variances. The input-output ratio for a standard cost centre is clearly identifiable.

Discretionary cost centre – The cost centre whose output cannot be measured in financial terms, thus input-output ratio cannot be defined. The cost of input is compared with allocated budget for the activity. Example of discretionary cost centres are Research & Development department, Advertisement department where output of these department cannot be measured with certainty and co-related with cost incurred on inputs.

Question – 14 [July 21]

Specify the types of Responsibility centres 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 organization.

(iv) Maharana, Navratna and Miniratna public sector undertaking (PSU) of Central Government.
(v) Sales Department of an organization.

Answer

(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)	Maharana, Navratna and Miniratna public sector undertaking (PSU) of Central Government	:	Investment Centre
(v)	Sales Department of an organization	:	Revenue Centre

Question – 15 [Jan 21] [RTP May 20] [RTP May 22] [RTP May 24] [MTP May 19]
Give any five examples of the impact of use of Information Technology in Cost Accounting.

Answer
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.

Question – 16 [Sep 24]
Describe any five benefits of the Digital Costing System.

Answer

Benefits of Digital Costing System are as follows:

(i) Ascertainment of cost with certainty on a cost object. This helps to analyse the activities for cost allocation and apportionment.

(ii) Analysis of data on time spent on each activity to study and formulate incentive plans.

(iii) Helps in material requirement planning and scheduling the material procurement. Data on resource consumption can be analysed for resource optimisation and finding the possibilities for zero wastage and Just-in Time (JIT).

(iv) Helps to identify and eliminate the non-value-added activities.

(v) Data on resource consumption is helpful in setting the standards and measurement of variances on real time basis.

(vi) Data on current market prices of material and consumables helps to estimate cost and setting standards on Marked to Market (M2M) basis.

(vii) Extrapolation of data on customer behaviour towards the products to predict the market demand. It is helpful is preparation of budgets and planning of production.

(viii) A better analysis of cost behaviour improves the cost benefit analysis and equipping the management in informed decision making.

Question – 17 [May 18]

Explain opportunity cost.

Answer

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.

Question – 18 [Nov 23]

Explain very briefly the following terms used in Cost and Management Accounting:

(i) Pre-determined Cost

(ii) Estimated Cost

(iii) Imputed Cost

(iv) Discretionary Cost

Answer

(i) Pre- Determined Cost - A cost which is computed in advance before production or operations start, on the basis of specification of all the factors affecting cost, is known as a pre-determined cost.

(ii) Estimated Cost - Estimated cost is "the expected cost of manufacture, or acquisition, often in terms of a unit of product computed on the basis of information available in advance of actual production or purchase". Estimated costs are prospective costs since they refer to prediction of costs.

(iii) Imputed Cost - Imputed costs do not involve any immediate cash payment. Implicit costs are not recorded in the books of account but yet, they are important for certain types of managerial decisions such as equipment replacement and relative profitability of two alternative courses of action. They are also known as economic costs. These cost are similar to opportunity cost.

(iv) **Discretionary Cost -** Discretionary costs are not tied to a clear cause and effect relationship between inputs and outputs. They arise from periodic decisions regarding the maximum outlay to be incurred. Examples are -advertising, public relations, training etc.

<u>Question – 19</u> [RTP Nov 18] [RTP May 22] [RTP May 24] [MTP May 19]

Define controllable cost and uncontrollable cost.

<u>Answer</u>

Controllable Costs: - Cost that can be controlled, typically by a cost, profit or investment centre manager is called controllable cost. Controllable costs incurred in a particular responsibility centre can be influenced by the action of the executive heading that responsibility centre. For example, direct costs comprising direct labour, direct material, direct expenses and some of the overheads are generally controllable by the shop level management.

Uncontrollable Costs - Costs which cannot be influenced by the action of a specified member of an undertaking are known as uncontrollable costs. For example, expenditure incurred by, say, the tool room is controllable by the foreman in-charge of that section but the share of the tool-room expenditure which is apportioned to a machine shop is not to be controlled by the machine shop foreman.

<u>Question – 20</u> [RTP May 19] [RTP May 21] [MTP May 18] [MTP Nov 21]

Discuss cost classification based on variability and controllability.

<u>Answer</u>

Cost classification based on variability

(a) **Fixed Costs** – These are the costs which are incurred for a period, and which, within certain output and turnover limits, tend to be unaffected by fluctuations in the levels of activity (output or turnover). They do not tend to increase or decrease with the changes in output. For example, rent, insurance of factory building etc., remain the same for different levels of production.

(b) **Variable Costs** – These costs tend to vary with the volume of activity. Any increase in the activity results in an increase in the variable cost and vice-versa. For example, cost of direct labour, etc.

(c) **Semi-variable Costs** – These costs contain both fixed and variable components and are thus partly affected by fluctuations in the level of activity. Examples of semi variable costs are telephone bills, gas and electricity etc.

Cost classification based on controllability - Refer Question 9

<u>Question – 21</u> [MTP Nov 22]

Explain the difference between product cost and period cost.

<u>Answer</u>

Product cost are those costs that are identified with the goods purchased or produced for resale. In a manufacturing organisation they are attached to the product and that are included in the inventory valuation for finished goods, or for incomplete goods. Product cost is also known as inventoriable cost. Under absorption costing method it includes direct material, direct labour, direct expenses, directly attributable costs (variable and non-variable) and other production *manufacturing) overheads. Under marginal costing method Product costs includes all variable production (manufacturing) overheads. Under marginal costing method Product costs includes all variable production costs and the all fixed costs are deduction from the contribution.

Period costs are the costs, which are not assigned to the products but are charged as expense against revenue fo the period in which they are incurred. General Administration, marketing, sales and distribution overheads are recognized as period costs.

Question – 22 [MTP Sep 24]

What are the principles of estimation of costs and benefits?

Answer

After identification of the costs and benefits, it is now required to be quantified i.e., the cost and benefit should be measured and estimated. The estimation is done by following the two principles as discusses
below:

(i) **Variability:** Variability means by how much a cost or benefit increased or decreased due to the choice of the option. Variable costs are the cost which differs under the different volume or activities. On the other hand, fixed costs remain same irrespective of volume and activities.

(ii) **Traceability:** Traceability of cost means degree of relationship between the cost and the choice of the option. Direct costs are directly assigned to the option on the other hand indirect costs needs to be apportioned to the option on some reasonable basis.

Question – 23 [Dec 21] [MTP May 18]

Briefly explain the 'techniques of costing'.

Answer

(1) Uniform Costing - 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.

Advantages of such a system are:

(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.

(2) Marginal Costing - 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.

(3) Standard Costing and Variance Analysis - It is the name given to the technique whereby *standard costs are pre-determined and subsequently compared with the recorded actual costs.* 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.

(4) Historical Costing - It is the ascertainment of costs after they have been incurred. This type of costing has limited utility.

- *Post Costing*: It means ascertainment of cost after production is completed.
- *Continuous costing*: Cost is ascertained as soon as the job is completed or even when the job is in progress.

(5) 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.

(6) 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.

Question – 24 [Nov 19]

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

Answer

Industries	Cost Unit	Industries	Cost Unit
(i) Electricity	Kilowatt-hour	(ii) Automobile	Number
(iii) Cement	Ton/per bag	(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) Hospital	Patient day

Question – 25 [Nov 20]

State the method of costing to be used in the following industries:

(i) Real estates	(ii) Motor repairing workshop
(iii) Chemical industry	(iv) Transport service
(v) Assembly of bicycles	(vi) Biscuit manufacturing industry
(vii) Power supply companies	(viii) Car manufacturing industry
(ix) Cement industry	(x) Printing press

Answer

Industries	Method of costing	Industries	Method of costing
(i) Real estates	Contract costing	(ii) Motor repairing workshop	Job costing
(iii) Chemical industry	Process costing	(iv) Transport service	Service or Operating costing
(v) Assembly of bicycles	Unit or single or output or multiple costing	(vi) Biscuit manufacturing industry	Batch costing
(vii) Power supply companies	Service or operating costing	(viii) Car manufacturing industry	Multiple costing
(ix) Cement industry	Unit or single or output or multiple costing	(x) Printing press	Job costing

Question – 26 [Jan 21]

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

(i) Oil refinery
(ii) Interior decoration
(iii) Airlines company
(iv) Advertising
(v) Car Assembly

Answer

(i) Oil refinery : Process Costing
(ii) Interior decoration : Job Costing
(iii) Airlines company : Operation or Service Costing
(iv) Advertising : Job Costing
(v) Car Assembly : Multiple Costing

Question – 27 [May 22]

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) Costs 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.

Answer

(i) Batch costing
(ii) Multiple costing
(iii) Unit or single or output costing
(iv) Job costing
(v) Process costing

Question – 28 [Nov 22] [RTP Nov 22]

Mention the cost unit of the following industries:

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

Answer

Item	Cost Unit	Item	Cost Unit
(i) Automobile	Number	(ii) Gas	Cubic feet
(iii) Brick works	1,000 bricks	(iv) Power	Kilo-watt hours
(v) Steel	Tonne	(vi) Transport (by road)	Passenger-kilometer
(vii) Chemical	Litre, gallon etc.	(viii) Oil	Barrel, tonne, litre
(ix) Brewing	Barrel	(x) Cement	Ton or per bag etc.

Question – 29 [RTP May 23]

Mention the cost unit of the following industries:

(i) Transport	(ii) Power
(iii) Hotel	(iv) Hospital
(v) Steel	(vi) Coal mining
(vii) Professional services	(viii) Gas
(ix) Engineering	(x) Oil

Answer

Item	Cost Unit	Item	Cost Unit
(i) Transport	Passenger-kilometer	(ii) Power	Kilo-watt hour
(iii) Hotel	Room day	(iv) Hospital	Patient day
(v) Steel	Ton	(vi) Coal mining	Ton
(vii) Professional services	Chargeable hour, job, contract	(viii) Gas	Cubic feet
(ix) Engineering	Contract, job	(x) Oil	Barrel, tonne, litre

Question – 30 [MTP Nov 22] [MTP Nov 22]

List out cost unit examples of the following service industry:
Hospital, Electricity supply service, Cinema, Canteen, Hotels

Answer

Service Industry	Cost Unit
Hospital	Patient per day or room per day or per bed
Electricity supply service	Kilowatt-hour (kWh)
Cinema	Per ticket
Canteen	Per item, per meal etc.
Hotels	Guest Days or Room days

Question – 31 [May 22]
State the method of costing in the following industries:
Sugar manufacturing, Bridge manufacturing, Advertising, Car assembly

Answer

Industry	Method of costing
Sugar manufacturing	Process costing
Bridge construction	Contract costing
Advertising	Job costing
Car Assembly	Multiple Costing (combination of any method)

Question – 32 [MTP Jan 25]
Identify the method of costing in the following cases and give one example of industry where this method is followed:

(i) Cost of each job is ascertained separately. It is suitable in all cases where work is undertaken on receiving a customer's order.
(ii) Cost of completing each stage of work is ascertained.
(iii) Each group is treated as a unit of cost and thus separately costed. Here cost per unit is determined by dividing the cost of the group by the number of units produced.
(iv) A combination of two or more methods of costing.

Answer

S. No.	Method of Costing	Example of Industry
(i)	Job costing	Printing press
(ii)	Process costing	Paper and pulp
(iii)	Batch costing	Bakery
(iv)	Multiple costing	Bicycles

Question – 33 [MTP May 22]
Some of the items of PR Company, a manufacturer of corporate office furniture, are provided below. As the company is in the process of developing a formal cost accounting system, you are required to classify the items into three categories namely: (i) Cost tracing (ii) Cost allocation (iii) Non-manufacturing item.

Carpenter wages, Depreciation-office building, Glue for assembly, Lathe department supervisor, Metal brackets for drawers, Factory washroom supplies, Lumber, Samples for trade shows, Lathe depreciation, Lathe operator wages.

Answer

Item	Cost Tracing	Cost Allocation	Non-manufacturing
Carpenter wages	Yes		
Depreciation -office building			Yes
Glue for assembly		Yes	
Lathe department supervisor		Yes	

Metal brackets for drawers	Yes		
Factory washroom supplies		Yes	
Lumber	Yes		
Sample for trade shows			Yes
Lathe depreciation		Yes	
Samples for trade shows		Yes	

Cost Sheet

<u>Question – 1</u> [MTP Nov 21]

How do you deal with the following in cost accounts?

(a) Fringe benefits

(b) Bad debts

<u>Answer</u>

(a) **Fringe benefits:** These are the additional payments or facilities provided to the workers apart from their salary and direct cost-allowances like house rent, dearness and city compensatory allowances. These benefits are given in the form of overtime, extra shift duty allowance, holiday pay, pension facilities etc.

These indirect benefits stand to improve the morale, loyalty and stability of employees towards the organisation. If the amount of fringe benefit is considerably large, it may be recovered as direct charge by means of a supplementary wage or labour rate; otherwise, these may be collected as part of production overheads.

(b) **Bad debts:** There is no unanimity among different authors of Cost Accounting about the treatment of bad debts. One view is that 'bad debts' should be excluded from cost. According to this view bad debts are financial losses and therefore, they should not be included in the cost of a particular job or product.

According to another view it should form part of selling and distribution overheads, especially when they arise in the normal course of trading. Therefore, bad debts should be treated in cost accounting in the same way as any other selling and distribution cost. However extra ordinarily large bad debts should not be included in cost accounts.

Material Cost

Question – 1 [Nov 19]

Define Inventory Control and give its objectives. List down the basis to be adopted for Inventory Control.

Answer

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:

(a) By setting quantitative levels
(b) On the basis of relative classification
(c) Using ratio analysis
(d) Physical control

Question – 2 [Jan 21]

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.

Answer

S. No.	Items	Treatment
(i)	Detention charges/Fines	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 container	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 loss	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.

Question – 3 **[May 22]**

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

Answer

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)	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	**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.

		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.
(v)	Basic Custom Duty	Basic Custom duty is paid on import of goods from outside India. It is added with the purchase cost.

<u>Question – 4</u> [MTP Nov 22]

Brief the treatment of following while calculating purchase cost of material.
Trade discount, Cash discount, Penalty, Insurance charges, Commission paid

<u>Answer</u>

Items	Treatment
Trade Discount	Trade discount is deducted from the purchase price if it is not shown as deduction in the invoice.
Cash discount	Cash discount is not deducted from the purchase price. It is treated as interest and finance charges. It is ignored.
Penalty	Penalty of any type is not included with the cost of purchase
Insurance charges	Insurance charges are paid for protecting goods during transit. It is added with the cost of purchase.
Commission paid	Commission or brokerage paid is added with the cost of purchase.

<u>Question – 5</u> [Dec 21]

What is Bill of Material? Describe the uses of Bill of Material in following departments:

(i) Purchases Department
(ii) Production Department
(iii) Stores Department
(iv) Cost/Accounting Department

<u>Answer</u>

Bill of Material: It is a detailed list specifying the standard quantities and qualities of materials and components required for producing a product or carrying out of any job.

Uses of Bill of Material in different department:

Department	Usage
Purchase Department	Materials are procured (purchased) on the basis of specifications mentioned in it.
Production Department	Production is planned according to the nature, volume of the materials required to be used. Accordingly, material requisition lists are prepared.
Stores Department	It is used as a reference document while issuing materials to the requisitioning department.
Cost Accounting Department	It is used to estimate cost and profit. Any purchase, issue and usage are compared/verified against this document.

Question- 6 [MTP Nov 19] [MTP Oct 20]
Distinguish between Bill of Material and Material Requisition Note.

Answer

S. No.	Bills of Material	Material Requisition Note
1	It is document or list of material prepared by the engineering/drawing department.	It is prepare by the foreman of the consuming department.
2	It is a complete schedule of component parts and raw materials required for a particular job or work order.	It is a department authorizing Store-keeper to issue material to be consuming department.
3	It often serves the purpose of a Store Requisition as it shows the complete schedule of materials required for a particular job i.e. it can replace stores requisition.	It cannot replace a bill of material.
4	It can be used for the purpose of quotation.	It is useful in arriving historical cost only.
5	It helps in keeping a quantitative control on materials drawn through Stores Requisition.	It shows the material actually drawn from stores.

Question – 7 [MTP May 22]
Distinguish between Bin card and Stores ledger.

Answer

S. No.	Bin Card	Stores Ledger
1	It is maintained by the storekeeper in the store.	It is maintained in cost accounting department.
2	It contains only quantitative details of material received, issued and returned to stores.	It contains information both in quantity and value.
3	Entries are made when transaction takes place.	It is always posted after the transaction.
4	Each transaction is individually posted.	Transactions may be summarized and then posted.
5	Inter-department transfers do not appear in Bin Card	Material transfers from one job to another job are recorded for costing purpose.

Question – 8 [May 18] [Nov 22]
Explain 'Just In Time' (JIT) approach of inventory management.

OR 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.

Answer

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.

Question – 9 [July 21]

Write a short note on VED analysis of Inventory Control.

Answer

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.

Question – 10 [MTP Jan 25]

You are managing the inventory for a manufacturing company and notice that certain items in the store are not being utilized frequently, leading to increased holding costs. How would you identify slow- moving and non-moving items, and what strategies would you implement to minimize such stocks effectively?

Answer

The existence of slow moving and non-moving item of stores can be detected in the following ways.

(i) By preparing and perusing periodic reports showing the status of different items or stores.

(ii) By calculating the inventory turnover period of various items in terms of number of days/ months of consumption.

(iii) By computing inventory turnover ratio periodically, relating to the issues as a percentage of average stock held.

(iv) By implementing the use of a well-designed information system.

Necessary steps to reduce stock of slow moving and non-moving item of stores:

(i) Proper procedure and guidelines should be laid down for the disposal of non-moving items, before they further deteriorate in value.

(ii) Diversify production to use up such materials.

(iii) Use these materials as substitute, in place of other materials.

Question – 11 [Nov 18]

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

Answer

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.

Question – 12 [May 24]

Distinguish between Waste and Scrap. Discuss the treatment of normal and abnormal scrap in Cost Accounts.

Answer

S. No.	Waste	Scrap
1.	The portion of raw material which is lost during storage/production and discarded.	The output which is discarded and disposed off without further treatment.
2.	It is connected with raw material or inputs to the production process.	It is the loss connected with output.
3.	Waste of materials may be visible or invisible.	Scraps are generally identifiable and has physical substance.
4.	Generally, waste has no recoverable value.	Scraps are termed as by-products and has small recoverable value.

Treatment of Scrap

Normal- The cost of scrap is borne by good units and income arises on account of realisable value is deducted from the cost.

Abnormal- The scrap account should be charged with full cost. The credit is given to the job or process concerned. The profit or loss in the scrap account, on realisation, will be transferred to the Costing Profit and Loss Account.

Question – 13 **[May 18]**

Explain FIFO and LIFO method of stores issue.

Answer

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.

Question – 14 **[Nov 23]**

State with reasons whether the following independent statements are true or false:

(i) Under LIFO method, in the period of falling prices, lower income is reported and income-tax liability is reduced.

(ii) Under VED analysis, inventories are classified on the basis of cost of individual items.

(iii) Material requisition note is prepared by the store keeper.

(iv) Simple average pricing method is suitable when quantity purchased under each lot is different and prices fluctuate considerably.

(v) Bin card and stores ledger are maintained by the purchasing department.

Answer

S. No.	True/False	Reason
(i)	False	Under LIFO method, in case of falling prices profit tends to rise due to lower material cost, thus income tax liability is increased.
(ii)	False	Under VED Analysis, inventories are classified on the basis of its criticality for the production function and final product.
(iii)	False	Material Requisition Note is prepared by the production or other consuming department. It is a voucher used to get material issued from store.
(iv)	False	Simple average pricing method is suitable when the materials are received in uniform lots of similar quantity, and prices do not fluctuate considerably.
(v)	False	Bin card is maintained by the storekeeper in the store. While Stores ledger is maintained in cost accounting department.

Employee Cost & Direct Expenses

Question – 1 **[May 19]** **[MTP Nov 22]**
Explain Direct Expenses and how these are measured and their treatment in cost accounting.

Answer
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 etc.

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.

Question – 2 **[Nov 20]**
Discuss any four objectives of 'Time keeping' in relation to attendance and payroll procedures.

Answer
The objectives of time-keeping in relation to attendance and payroll procedures are as follows:
(i) For the preparation of payrolls.
(ii) For calculating overtime.

(iii) For ascertaining and controlling employee cost.
(iv) For ascertaining idle time.
(v) For disciplinary purposes.
(vi) For overhead distribution

Question – 3 [MTP Sep 24]
Discuss the objectives of time keeping & time booking.

Answer
Objectives of time keeping and time booking: Time keeping has the following two objectives:
(i) Preparation of Payroll: Wage bills are prepared by the payroll department on the basis of information provided by the time keeping department.
(ii) Computation of Cost: Labour cost of different jobs, departments or cost centers are computed by costing department on the basis of information provided by the time keeping department.

The objectives of time booking are as follows:
(i) To ascertain the labour time spent on a job and the idle labour hours.
(ii) To ascertain labour cost of various jobs and products.
(iii) To calculate the amount of wages and bonus payable under the wage incentive scheme.
(iv) To compute and determine overhead rates and absorption of overheads under the labour and machine hour method.
(v) To evaluate the performance of labour by comparing actual time booked with standard or budgeted time.

Question – 4 [Dec 21]
Discuss the steps involved in setting labour time standards.

Answer
The following are the steps involved in setting labour standards:
(a) **Standardisation:** Products to be produced are decided based on production plan and customer's order.
(b) **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.
(c) **Standardisation of methods:** Selection of proper machines to use proper sequence and method of operations.
(d) **Manufacturing layout:** A plan of operation for each product listing the operations to be performed is prepared.
(e) **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.
(f) **Training and trial:** Workers are trained to do the work and time spent at the time of trial run is noted down.

Question – 5 [Nov 23]

What do you mean by employee productivity? Point out the factors which must be taken into consideration for increasing employee productivity.

Answer

Productivity is generally determined by the input/output ratio.

In case of employees, it is calculated as: $\frac{\text{Standard time for doing actual work}}{\text{Actual time taken}}$

Employee productivity is used for measuring the efficiency of individual workers. It is an index of efficiency in the utilisation of human resources, materials, capital, power and all kinds of services and facilities.

It is measured by the output in relation to input. Productivity can be improved by reducing the input for a certain quantity or value of output or by increasing the output from the same given quantity or value of input.

The important factors which must be taken into consideration for increasing employee productivity are as follows:

(1) Employing only those workers who possess the right type of skill.

(2) Placing a right type of person to a right job.

(3) Training young and old workers by providing them the right types of opportunities.

(4) Taking appropriate measures to avoid the situation of excess or shortage of employees.

(5) Carrying out work study for fixation of wages and for the simplification and standardisation of work.

Question – 6 [MTP Sep 24]

Explain the efficiency rating procedures of the employees.

Answer

Efficiency is usually related with performance and may be computed by comparing the time taken with the standard time allotted to perform the given job/task.

If the time taken by a worker on a job equals or less than the standard time, then he is rated efficient. In case he takes more time than the standard time he is rated as inefficient.

For efficiency rating of employees the following procedures may be followed:

1) Determining standard time/performance standards: The first step is to determine the standard time taken by a worker for performing a particular job/task. The standard time can be determined by using Time & Motion study or Work study techniques. While determining the standard time for a job/task a heterogeneous group of workers is taken and contingency allowances are added for determining standard time.

2) Measuring Actual Performance of workers: For computing efficiency rating it is necessary to develop a procedure for recording the actual performance of workers. The system developed should record the output of each worker along with the time taken by him.

3) Computation of efficiency rating: The efficiency rating of each worker can be computed by using the formula: Efficiency % = $\frac{Time\ allowed\ as\ per\ standard}{Time\ taken} \times 100$

Question – 7 [May 23]

How does the high employee turnover increase the cost of production? Explain.

Answer

High employee turnover increase the cost of production as the replacement cost increases.

Replacement costs are the costs which arise due to employee turnover. If employees leave soon after they acquire the necessary training and experience of good work, additional costs will have to be incurred on new workers, i.e., cost of recruitment, training and induction, abnormal breakage and scrap and extra wages and overheads due to the inefficiency of new workers.

It is obvious that a company will incur very high replacement costs if the rate of employee turnover is high. Similarly, only adequate preventive costs can keep Employee turnover at a low level. Each company must, therefore, work out the optimum level of Employee turnover keeping in view its personnel policies and the behaviour of replacement cost and preventive costs at various levels of Employee turnover rates.

Question – 8 [MTP Nov 19]

Discuss the remedial steps to be taken to minimize labour turnover.

Answer

The following steps are useful for minimizing labour turnover:

(a) Exit interview: An interview to be arranged with each outgoing employee to ascertain the reasons of his leaving the organization.

(b) Job analysis and evaluation to ascertain the requirement of each job.

(c) Organization should make use of a scientific system of recruitment, placement and promotion for employees.

(d) Organization should create healthy atmosphere, providing education, medical and housing facilities for workers.

(e) Committee for settling workers grievances.

Question – 9 [RTP May 19] [MTP July 20] [MTP Nov 22]

Discuss the accounting treatment of idle time and overtime wages.

Answer

Treatment of Idle time

Normal idle time is treated as a part of the cost of production. Thus, in the case of direct workers, an allowance for normal idle time is built into the labour cost rates. In the case of indirect workers, normal idle time is spread over all the products or jobs through the process of absorption of factory overheads.

Treatment of Overtime premium

- If overtime is resorted to at the desire of the customer, then the overtime premium may be charged to the job directly.
- If overtime is required to cope with general production program or for meeting urgent orders, the overtime premium should be treated as overhead cost of particular department or cost center which works overtime.
- Overtime worked on account of abnormal conditions should be charged to costing Profit & Loss Account.
- If overtime is worked in a department due to the fault of another department the overtime premium should be charged to the latter department.

Question – 10 [May 24]

Describe briefly idle time and explain the treatment of idle time in cost accounts in following situations:

(i) The setting up time for the machine in case of Direct Worker Mr. A.
(ii) Normal break time for lunch in case of Indirect Worker Mr. B.
(iii) Time lost due to breakdown of machine in case of Worker Mr. C.

Answer

The time during which no production is carried-out because the worker remains idle but are paid. In other words, it is the difference between the time paid and the time booked. Idle time can be normal or abnormal.

Situation	Idle time	Treatment
The setting up time for the machine in case of Direct Worker Mr. A	Normal idle time	It is treated as a part of cost of production. It is to be considered while setting of standard hours or standard rate.
Normal break time for lunch in case of Indirect Worker Mr. B.	Normal idle time	It is to be considered for the computation of overhead rate.
Time lost due to breakdown of machine in case of Worker Mr. C.	Abnormal idle time	It is to be shown as a separate item in the Costing Profit and Loss Account.

Question – 11 [May 22]

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.

Answer

S. No.	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.

Question – 12 **[July 21]**

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.

Answer

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.

Bonus = $\frac{Time\ Saved}{Time\ Allowed}$ × Time taken × 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

Bonus for 'X' = $\frac{2\ hours}{8\ hours}$ × 6 hours × `60 = `90

Bonus for 'Y' = $\frac{6\ hours}{8\ hours}$ × 2 hours × `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.

Question – 13 [MTP May 22]
Brief out the advantages and disadvantages of Halsey Premium Plan.

Answer
Advantages
1) Time rate is guaranteed while there is opportunity for increasing earnings by increasing production.
2) The system is equitable in as much as the employer gets a direct return for his efforts in improving production methods and providing better equipment.

Disadvantages
1) Incentive is not so strong as with piece rate system. In fact, the harder the worker works, the lesser he gets per piece.
2) The sharing principle may not be liked by employees.

Overheads

<u>Question – 1</u> [RTP Nov 23]
Distinguish between cost allocation and cost absorption.

<u>Answer</u>
Cost allocation is the allotment of whole item of cost to a cost centre or a cost unit. In other words, it is the process of identifying, assigning or allowing cost to a cost centre or a cost unit.

Cost absorption is the process of absorbing all indirect costs or overhead costs allocated or apportioned over particular cost center or production department by the units produced.

<u>Question – 2</u> [MTP Jan 25]
Discuss in brief three main methods of allocating support departments costs to operating departments.

<u>Answer</u>
The three main methods of allocating support departments costs to operating departments are:

(i) **Direct re-distribution method:** Under this method, support department costs are directly apportioned to various production departments only. This method does not consider the service provided by one support department to another support department.

(ii) **Step method:** Under this method the cost of the support departments that serves the maximum numbers of departments is first apportioned to other support departments and production departments. After this the cost of support department serving the next largest number of departments is apportioned. In this manner we finally arrive on the cost of production departments only.

(iii) **Reciprocal service method:** This method recognises the fact that where there are two or more support departments they may render services to each other and, therefore, these inter-departmental services are to be given due weight while re-distributing the expenses of the support departments. The methods available for dealing with reciprocal services are:
(a) Simultaneous equation method
(b) Repeated distribution method
(c) Trial and error method

<u>Question – 3</u> [Nov 18]
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)

Answer

Overheads	Basis of Apportionment
(i) Air-conditioning	Floor area or volume of department
(ii) Time keeping	Number of workers
(iii) Depreciation of plant & machinery	Capital values
(iv) Power/steam consumption	Technical estimates
(v) Electric power (machine operation)	Horse power of machines or number of hours or units consumed or kilo-watt hours

Question – 4 [May 23]

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	

Answer

Cost of service department		Basis
(i)	Maintenance and repair shop	Direct labour hours, machine hours, direct labour wages, assets value × hours worked
(ii)	Hospital and Dispensary	No. of employee, No. of direct workers etc.
(iii)	Fire protection	Capital values
(iv)	Stores Department	No. of requisitions, weight or value of materials issued
(v)	Transport Department	Crane hours, truck hours, truck milage, truck tonnage, truck ton-hours, tonnage handled, No. of package of standard size
(vi)	Computer section	Computer hours, specific allocation to departments
(vii)	Power house (electric power cost)	Horse power, kwh, Horse power × machine hours, kwh × machine hours
(viii)	Inspection	Inspection hours, number of inspections
(ix)	Tool room	Direct labour hours, machine hours, direct labour wages, Assets value × hours worked
(x)	Time keeping	No. of card punched, no. of employees

Question – 5 [Jan 21] [MTP May 18]

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

OR Explain Single and Multiple Overhead Rates.

Answer

Blanket overhead rate refers to the computation of one single overhead rate for the whole factory. This overhead rate is computed as follows:

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

Departmental Overhead Rate 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:

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

Conditions required for the Application of Blanket Overhead:

(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.

Question – 6 [RTP Nov 23]

Explain the treatment of over and under absorption of overheads in cost accounts.

Answer

(i) Writing off to costing P&L A/c: Small difference between the actual and absorbed amount should simply be transferred to costing P&L A/c, if difference is large then investigate the causes and after that abnormal loss/ gain shall be transferred to costing P&L A/c.

(ii) Use of supplementary Rate: Under this method the balance of under and over absorbed overheads may be charged to cost of W.I.P., finished stock and cost of sales proportionately with the help of supplementary rate of overhead.

(iii) Carry Forward to Subsequent Year: Difference should be carried forward in the expectation that next year the position will be automatically corrected.

Question – 7 [May 23]

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

Answer

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)	Time lost due to scheduled preventive or planned maintenance	xxx	
(ii)	Number of shifts or machine hours or man hours	xxx	
(iii)	Holidays, normal shut down days, normal idle time	xxx	
(iv)	Normal time lost in batch change over	xxx	xxx
Normal Capacity			**xxx**

Question – 8 [RTP Nov 23]

How would you account for idle capacity cost in cost accounting?

Answer

Idle capacity costs are treated in the following ways in Cost Accounts:

(i) **If the idle capacity cost is due to unavoidable reasons:** A supplementary overhead rate may be used to recover the idle capacity cost. In this case, the costs are charged to the production capacity utilised.

(ii) **If the idle capacity cost is due to avoidable reasons:** Such as faulty planning, etc. the cost should be charged to Costing Profit and Loss Account.

(iii) **If the idle capacity cost is due to trade depression, etc.:** Being abnormal in nature the cost should also be charged to the Costing Profit and Loss Account.

(iv) **If the idle capacity cost is due to seasonal factors**, then the cost should be charged to cost of production by inflating overhead rate.

Activity Based Costing

Question – 1 **[Nov 23]**

What is meant by cost driver? Give its different categories. Suggest suitable cost drivers (at least two) in the following business functions:

(i) Distribution

(ii) Research and Development

(iii) Customer services

Answer

A Cost driver is a factor or variable which effect level of cost. Generally, it is an activity which is responsible for cost incurrence. Level of activity or volume of production is the example of a cost driver. An activity may be an event, task, or unit of work etc.

There are two categories of cost driver.

- **Resource Cost Driver -** It is a measure of the quantity of resources consumed by an activity. It is used to assign the cost of a resource to an activity or cost pool.
- **Activity Cost Driver -** It is a measure of the frequency and intensity of demand, placed on activities by cost objects. It is used to assign activity costs to cost objects.

Business function	Cost driver
Distribution	Number of units distributed, number of customers
Research and Development	Number of research projects, personnel hours on a project, technical complexities of the projects.
Customer service	Number of service calls, number of products serviced, hours spent in servicing of products.

Question – 2 **[Nov 20]**

Describe the various levels of activities under 'ABC' methodology.

Answer

Level of Activities	Meaning
Unit level activities	These are those activities for which the consumption of resources can be identified with the number of units produced.
Batch level activities	The activities such as setting up of a machine or processing a purchase order are performed each time a batch of goods is produced. The cost of batch related activities varies with number of batches made, but is common (or fixed) for all units within the batch.
Product level activities	These are the activities which are performed to support different products in product line.
Facilities level activities	These are the activities which cannot be directly attributed to individual products. These activities are necessary to sustain

	the manufacturing process and are common and joint to all products manufactured.

Question – 3 [MTP Nov 22]

Write down the corresponding cost drivers related to the following activity pools:
Inspecting and testing costs, Setting up machines cost, Machining costs, Supervising costs, Ordering and Receiving material costs.

Answer

Activity Cost Pools	Related Cost Drivers
Inspecting and testing costs	Number of test
Setting up machines cost	Number of set-ups
Machining costs	Machine hours
Supervising costs	Direct labour hours
Ordering and receiving material cost	Number of purchase orders

Question – 4 [Nov 22]

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

(i) Research and Development
(ii) Design of Products, Services and Procedures
(iii) Customer Service
(iv) Marketing
(v) Distribution

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

Answer

Business functions	Cost Driver
Research & development	• Number of research projects • Personnel hours on a project • Technical complexities of the project
Design of products, services and procedures	• Number of products in design • Number of parts per product • Number of engineering hours
Customer service	• Number of service calls • Number of products serviced • Hours spent on servicing products
Marketing	• Number of advertisements • Number of sales personnel • Sales revenue
Distribution	• Number of units distributed • Number of customers • Weight of items distributed

Question – 5 [May 23]

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

Answer

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.

Question – 6 [Nov 18]

Explain 'Activity Based Budgeting'.

Answer

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.

Batch Costing

Question – 1 [May 18]
Explain 'Job Costing' and 'Batch Costing'.

Answer
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.

Question – 2 [May 24] [MTP Nov 22]
Describe Unit Costing and Batch Costing. Give three examples of industries for each method where these are used.

Answer
Unit costing is that method of costing where the output produced is identical and each unit of output requires identical cost. Under this method costs, are collected and analysed element wise and then total cost per unit is ascertained by dividing the total cost with the number of units produced.

Such a method of costing is used in the industries like paper, cement, steel works, mining, breweries etc.

Batch Costing is a type of specific order costing where articles are manufactured in predetermined lots, known as batch. Cost per unit in a batch is ascertained by dividing the total cost of a batch by the number of units produced in that batch.

Such a method of costing is used in the case of pharmaceutical or drug industries, readymade garment industries, industries, manufacturing electronic parts of T.V. radio sets etc.

Question – 3 [MTP May 18] [MTP May 22]
State how Economic Batch Quantity is determined?

Answer

In batch costing the most important problem is the determination of 'Economic Batch Quantity' The determination of economic batch quantity involves two types of costs viz, (i) set up cost and (ii) carrying cost. With the increase in the batch size, there is an increase in the carrying cost but the set-up cost per unit of the product is reduced; this situation is reversed when the batch size is reduced. Thus there is one particular batch size for which both set up and carrying costs are minimum. This size of a batch is known as economic or optimum batch quantity.

Economic batch quantity can be determined with the help of a table, graph or mathematical formula. The mathematical formula usually used for its determination is as follows:

$$EBQ = \sqrt{\frac{2 \times A \times S}{C}}$$

Where, A = Annual demand for the product

S = Setting cost per batch

C = Carrying cost per unit per annum

Job Costing

Question – 1 **[Nov 23]**
Explain in brief Job Costing.

Answer
Job costing is the method of costing required to be done for unique products manufactured done against specific orders. In this method of costing, cost of each job is ascertained separately.

Question – 2 **[May 22]**
Distinguish between Job costing and Process Costing. (Any five points of differences)

Answer

S. No.	Job Costing	Process Costing
1	A job is carried out or a product is produced by specific orders.	The process of producing the product has a continuous flow and the product produced is homogeneous.
2	Costs are determined for each job.	Costs are compiled on time basis i.e., for production of a given accounting period for each process or department.
3	Each job is separate and independent of other jobs.	Products lose their individual identity as they are manufactured in a continuous flow.
4	Each job or order has a number and costs are collected against the same job number.	The unit cost of process is an average cost for the period.
5	Costs are computed when a job is completed. The cost of a job may be determined by adding all costs against the job.	Costs are calculated at the end of the cost period. The unit cost of a process may be computed by dividing the total cost for the period by the output of the process during that period.
6	As production is not continuous and each job may be different, so more managerial attention is required for effective control.	Process of production is usually standardized and is therefore, quite stable. Hence control here is comparatively easier.

Question – 3 **[Sep 24]** **[RTP Nov 18] [RTP Dec 21] [RTP May 23] [MTP Nov 19] [MTP July 20]**
Define Job costing and explain differences between job and batch Costing.

Answer
Job Costing is defined as “the category of basic costing methods which is applicable where the work consists of separate contracts, jobs or batches, each of which is authorised by specific order or contract.” According to this method, costs are collected and accumulated according to jobs,

contracts, products or work orders. Each job or unit of production is treated as a separate entity for the purpose of costing.

S. No.	Job Costing	Batch Costing
1.	Method of costing used for non-standard and non-repetitive products produced as per customer specifications and against specific orders.	Homogeneous products produced in a continuous production flow in lots.
2.	Cost determined for each job	Cost determined in aggregate for the entire batch and then arrived at on per unit basis.
3.	Jobs are different from each other and independent of each other. Each job is unique	Products produced in a batch are homogeneous and lack of individuality.

Cost Accounting System

Question – 1 [May 19] [MTP May 22]
Explain integrated accounting system and state its advantages.

Answer
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.

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".

Question – 2 [Nov 20] [RTP May 23] [MTP May 22] [MTP Sep 24]
Explain what are the pre-requisites of integrated accounting.

Answer
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.

Question – 3 [Nov 22]

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.

Answer

(i) Financial Accounts
(ii) Financial Accounts
(iii) Financial Accounts
(iv) Cost Accounts
(v) Cost Accounts
(vi) Financial Accounts
(vii) Financial Accounts
(viii) Cost Accounts
(ix) Financial Accounts
(x) Cost Accounts

Question – 4 [RTP Jan 25] [MTP Oct 20] [MTP Nov 22]

List down certain financial expenses and income included in Financial Accounts only.

Answer

Items included in Financial Accounts only-

(A) Purely Financial Expenses:
- (i) Interest on loans or bank mortgages
- (ii) Expenses and discounts on issue of shares, debentures etc.
- (iii) Other capital losses i.e., loss by fire not covered by insurance etc.
- (iv) Losses on the sales of fixed assets and investments
- (v) Income tax, donations, subscriptions
- (vi) Expenses of the company's share transfer office, if any.

(B) Purely Financial Income
- (i) Interest received on bank deposits, loans and investments
- (ii) Dividends received
- (iii) Profits on the sale of fixed assets and investments
- (iv) Transfer fee received
- (v) Rent receivables.

Question – 5 **[RTP May 22] [RTP May 24] [MTP May 19]**

"Is reconciliation of cost accounts and financial accounts necessary in case of integrated accounting system?" Explain.

Answer

In integrated accounting system cost and financial accounts are kept in the same set of books. Such a system will have to afford full information required for Costing as well as for Financial Accounts. In other words, information and data should be recorded in such a way so as to enable the firm to ascertain the cost (together with the necessary analysis) of each product, job, process, operation or any other identifiable activity. It also ensures the ascertainment of marginal cost, variances, abnormal losses and gains. In fact all information that management requires from a system of Costing for doing its work properly is made available. The integrated accounts give full information in such a manner so that the profit and loss account and the balance sheet can be prepared according to the requirements of law and the management maintains full control over the liabilities and assets of its business.

Since, only one set of books are kept for both cost accounting and financial accounting purpose so there is no necessity of reconciliation of cost and financial accounts.

Service Costing

Question – 1 [RTP May 18] [RTP Nov 20]
Describe Operation costing with two examples of industries where operation costing is applied.

Answer
This product costing system is used when an entity produces more than one variant of final product using different materials but with similar conversion activities. Which means conversion activities are similar for all the product variants but materials differ significantly. Operation Costing method is also known as Hybrid product costing system as materials costs are accumulated by job order or batch wise but conversion costs i.e. labour and overheads costs are accumulated by department, and process costing methods are used to assign these costs to products. Moreover, under operation costing, conversion costs are applied to products using a predetermined application rate. This predetermined rate is based on budgeted conversion costs. The two example of industries are Ready made garments and Jewellery making.

Question – 2 [Nov 19] [MTP Jan 25]
Describe Composite Cost unit as used in Service Costing and discuss the ways of computing it .

Answer
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) 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.:
$\sum$ (Weight Carried × Distance)$_1$ + (Weight Carried × Distance)$_2$ +….+ (Weight Carried × 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.
$\sum$ (Distance$_1$ + Distance$_2$ + ……………..+ Distance$_n$) × $\left(\frac{W_1+W_2+\cdots..+W_n}{n}\right)$

Question – 3 **[RTP Sep 24] [MTP May 21]**
Differentiate between service coting and product costing.

Answer
Service costing differs from product costing (such as job or process costing) in the following ways due to some basic and peculiar nature.
(i) Unlike products, services are intangible and cannot be stored, hence, there is no inventory for the services.
(ii) Use of Composite cost units for cost measurement and to express the volume of outputs.
(iii) Unlike a product manufacturing, employee (labour) cost constitutes a major cost element than material cost.
(iv) Indirect costs like administration overheads are generally have a significant proportion in total cost of a service as unlike manufacturing sector, service sector heavily depends on support services and traceability of costs to a service may not economically feasible

Question – 4 **[July 21]**
What do you understand by Build-Operate-Transfer (BOT) approach in Service Costing? How is the Toll rate computed?

Answer
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 = $\frac{Total\ cost+Profit}{Number\ of\ vehicles}$

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.

Question – 5 **[Sep 24]**
Explain Build-Operate-Transfer (BOT) approach and classify the following expenses in Capital Cost or Operating and Maintenance Cost for Toll Roads:
(i) Land acquisition
(ii) Interest expenses incurred for servicing term loans
(iii) Material and Labour
(iv) Toll collection expenses

(v) Contingency allowance
(vi) Periodic painting cost of railings etc.

Answer

Meaning – Refer Question – 2

S. No.	Expenses	Classification
(i)	Land acquisition	Capital cost
(ii)	Interest expenses incurred for servicing term loans	Operating and maintenance cost
(iii)	Material and labour	Capital cost
(iv)	Toll collection expenses	Operating and maintenance cost
(v)	Contingency allowance	Capital cost
(vi)	Periodic painting cost of railings etc.	Operating and maintenance cost

Question – 6 [RTP Nov 22]

Health Wealth Hospital is interested in estimating the cost for each patient stay. The hospital offers general health care facility i.e. only basic services. You are required to:

(i) Classify each of the following costs as either direct or indirect with respect to each patient.
(ii) Classify each of the following costs are either fixed or variable with respect to hospital costs per day.

Item	Direct	Indirect	Fixed	Variable
Electronic monitoring				
Meals for patients				
Nurses' salaries				
Parking maintenance				
Security				

Answer

Item	Direct	Indirect	Fixed	Variable
Electronic monitoring	Yes			Yes
Meals for patients	Yes			Yes
Nurses' salaries		Yes	Yes	
Parking maintenance		Yes	Yes	
Security		Yes	Yes	

Process Costing

Question – 1 [Nov 23]
Explain in brief Process Costing.

Answer
Process costing is a method of costing used in industries where the material has to pass through two or more process for being converted into a final product. Here the cost of completing each stage of work is ascertained, like cost of making pulp and cost of making paper from pulp.

Question – 2 [RTP Jan 25]
Discuss normal and abnormal process loss and enumerate their treatment in cost accounts.

Answer
Normal Process Loss: It is also known as normal wastage. It is defined as the loss of material which is inherent in the nature of work. Such a loss can be reasonably anticipated from the nature of the material, nature of operation, the experience and technical data. It is unavoidable because of nature of the material or the process. It also includes units withdrawn from the process for test or sampling.

Treatment 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.

Abnormal Process Loss: It is also known as abnormal wastage. It is defined as the loss in excess of the pre-determined loss (Normal process loss). This type of loss may occur due to the carelessness of workers, a bad plant design or operation, sabotage etc. Such a loss cannot obviously be estimated in advance. But it can be kept under control by taking suitable measures.

Treatment 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.

Question – 3 [May 23]
How will you treat normal loss, abnormal loss and abnormal gain in process costing? Explain.

Answer
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.

Question – 4 [RTP Nov 19]

Explain the term Equivalent units used in process industries.

Answer

Equivalent units or equivalent production units, means converting the incomplete production units into their equivalent completed units. Under each process, an estimate is made of the percentage completion of work-in-process with regard to different elements of costs, viz., material, labour and overheads. It is important that the estimate of percentage of completion should be as accurate as possible. The formula for computing equivalent completed units is:

Equivalent completed units = (Actual no. of units in the process) × (% of work competed)

For instance, if 25% of work has been done on the average of units still under process, then 200 such units will be equal to 50 completed units and the cost of work-in- process will be equal to the cost of 50 finished units.

Question – 5 [MTP May 22]

What is inter-process profit? State its advantages and disadvantages.

Answer

To control cost and to measure performance, different processes within an organization are designated as separate profit centres. In this type of organizational structure, the output of one process is transferred to the next process not at cost but at market value or cost plus a percentage of profit. The difference between cost and the transfer price is known as inter -process profits.

Advantages:

1) Comparison between the cost of output and its market price at the stage of completion is facilitated.
2) Each process is made to stand by itself as to the profitability.

Disadvantages:

1) The use of inter-process profits involves complication.
2) The system shows profits which are not realised because of stock not sold out.

Joint & By-Product

Question – 1 **[Dec 21]**
Narrate the terms 'Joint Products' and 'By-Products' with an example of each term.

Answer
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.

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.

Question – 2 **[Nov 23]**
Explain in brief Co-Products.

Answer
Co-products may be defined as Two or more products which are contemporary but do not emerge necessarily from the same material in the same process.

Question – 3 **[Nov 18] [Sep 24] [RTP May 20] [RTP Dec 21] [RTP Jan 25] [MTP July 20] [MTP Sep 24]**
How are By-products treated in Costing?
OR Anju Ltd. is engaged in production of butter. While producing butter buttermilk is also produced. Buttermilk is identified as by-product of butter. What is the treatment of buttermilk in the cost accounts of Anju Ltd.

Answer
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.

Question – 4 [RTP May 21] [RTP May 24] [RTP Sep 24] [MTP Nov 18] [MTP May 21] [MTP Nov 21]

How apportionment of joint costs upto the point of separation amongst the joint products using market value at the point of separation and net realizable value method is done? Discuss.

Answer

Market value at the point of separation: This method is used for apportionment of joint costs to joint products upto the split off point. It is difficult to apply if the market value of the product at the point of separation is not available. It is useful method where further processing costs are incurred disproportionately.

Net realizable value Method: From the sales value of joint products (at finished stage) the followings are deducted:

- Estimated profit margins
- Selling & distribution expenses, if any
- Post split off costs.

The resultant figure so obtained is known as net realizable value of joint products. Joint costs are apportioned in the ratio of net realizable value.

Marginal Costing

Question – 5 [May 19]
What are the limitations of marginal costing?

Answer

(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.

Question – 6 [RTP Jan 25]
Discuss advantages of marginal costing.

Answer

1) **Simplified Pricing Policy:** The marginal cost remains constant per unit of output whereas the fixed cost remains constant in total. Since marginal cost per unit is constant from period to period within a short span of time, firm decisions on pricing policy can be taken.

2) **Proper recovery of Overheads:** Overheads are recovered in costing on the basis of pre-determined rates. If fixed overheads are included on the basis of pre-determined rates, there will be under- recovery of overheads if production is less or if overheads are more. There

will be over- recovery of overheads if production is more than the budget or actual expenses are less than the estimate. This creates the problem of treatment of such under or over-recovery of overheads. Marginal costing avoids such under or over recovery of overheads.

3) **Shows Realistic Profit:** Advocates of marginal costing argues that under the marginal costing technique, the stock of finished goods and work-in-progress are carried on marginal cost basis and the fixed expenses are written off to profit and loss account as period cost. This shows the true profit of the period.
4) **How much to produce:** Marginal costing helps in the preparation of break-even analysis which shows the effect of increasing or decreasing production activity on the profitability of the company.
5) **More control over expenditure:** Segregation of expenses as fixed and variable helps the management to exercise control over expenditure. The management can compare the actual variable expenses with the budgeted variable expenses and take corrective action through analysis of variances.
6) **Helps in Decision Making:** Marginal costing helps the management in taking a number of business decisions like make or buy, discontinuance of a particular product, replacement of machines, etc.
7) **Short term profit planning:** It helps in short term profit planning by B.E.P charts.

Question – 7 [MTP May 21]

Discuss basic assumptions of cost volume profit analysis.

Answer

1) **Changes in the levels of revenues and costs arise only because of changes in the number of product (or service) units produced and sold** – for example, the number of television sets produced and sold by Sony Corporation or the number of packages delivered by Overnight Express. The number of output units is the only revenue driver and the only cost driver. Just as a cost driver is any factor that affects costs, a revenue driver is a variable, such as volume, that causally affects revenues.
2) **Total costs can be separated into two components**; a fixed component that does not vary with output level and a variable component that changes with respect to output level. Furthermore, variable costs include both direct variable costs and indirect variable cost of a product. Similarly, fixed costs include both direct fixed costs and indirect fixed costs of a product.
3) When represented graphically, **the behaviours of total revenues and total costs are linear** (meaning they can be represented as a straight line) in relation to output level within a relevant range (and time period).
4) **Selling price, variable cost per unit, and total fixed costs (within a relevant range and time period) are known and constant**.
5) The analysis either covers a single product or assumes that **the proportion of different products when multiple products are sold will remain constant** as the level of total units sold changes.
6) All revenues and costs can be added, subtracted, and compared **without taking into account the time value of money.**

Question – 8 [July 21]

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

Answer

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 × contribution per unit

It also can be calculated as: Margin of Safety = $\frac{Profit}{PV\ Ratio}$

Question – 9 [Nov 20]

Differentiate between "Marginal and Absorption Costing".

Answer

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 cots.
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.

Standard Costing

Question – 1 [May 22]

Discuss briefly some of the criticism which may be levelled against the Standard Costing System.

Answer

(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.

Question – 2 [Sep 24] [RTP Sep 24] [MTP May 21]

Define the terms:

(i) Controllable variance

(ii) Uncontrollable variance

Answer

(i) Controllable variances are those which can be controlled under the normal operating conditions if a responsibility centre takes preventive measures and acts prudently. Responsibility centres are answerable for all adverse variances which could have been controlled.

(ii) Uncontrollable variances: Uncontrollable variances are those which occurs due to conditions which are beyond the control of a responsibility centre and cannot be controlled even though all preventive measures are in place.

Budget & Budgetary Control

Question – 1 [Dec 21]

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

Answer

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.

(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.

Question – 2 [MTP Oct 20]

Describe objectives of Budgetary control system.

Answer

1. **Portraying with precision the overall aims of the business** and determining targets of performance for each section or department of the business.
2. **Laying down the responsibilities** of each of the executives and other personnel so that everyone knows what is expected of him and how he will be judged. Budgetary control is one of the few ways in which an objective assessment of executives or department is possible.
3. **Providing a basis for the comparison** of actual performance with the predetermined targets and investigation of deviation, if any, of actual performance and expenses from the budgeted figures. This naturally helps in adopting corrective measures.

4. **Ensuring the best use of all available resources** to maximise profit or production, subject to the limiting factors. Since budgets cannot be properly drawn up without considering all aspects usually there is good co-ordination when a system of budgetary control operates.
5. **Co-ordinating the various activities of the business**, and centralising control and yet enabling management to decentralise responsibility and delegate authority in the overall interest of the business.
6. **Engendering a spirit of careful forethought**, assessment of what is possible and an attempt at it. It leads to dynamism without recklessness. Of course, much depends on the objectives of the firm and the vigour of its management.
7. Providing a **basis for revision** of current and future policies.
8. **Drawing up long range plans** with a fair measure of accuracy.
9. **Providing a yardstick** against which actual results can be compared.

Question – 3 [MTP May 21] [MTP Jan 25]

Describe the steps necessary for establishing a good budgetary control system.

OR As a consultant, a client has approached you to set up a budgetary control system in their organization. What sequential steps would you follow to design, implement, and monitor the system?

Answer

1) Determining the objectives to be achieved, over the budget period, and the policy or policies that might be adopted for the achievement of these objectives.
2) Determining the activities that should be undertaken for the achievement of the objectives.
3) Drawing up a plan or a scheme of operation in respect of each class of activity, in quantitative as well as monetary terms for the budget period.
4) Laying out a system of comparison of actual performance by each person, or department with the relevant budget and determination of causes for the variation, if any.
5) Ensuring that corrective action will be taken where the plan has not been achieved and, if that is not possible, for the revision of the plan.

Question – 4 [Jan 21] [MTP Jan 25]

State the limitations of Budgetary Control System.

Answer

(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.

(5) **Not a substitute for management -** Budget is only a managerial tool and must be intelligently applied for management to get benefited. Budgets are not a substitute for good management.

(6) **Rigid document -** Budgets are sometime considered as rigid documents. But in reality, an organisation is exposed to various uncertain internal and external factors. Budget should be flexible enough to incorporate ongoing developments in the internal and external factors affecting the very purpose of the budget.

Question – 5 [May 19]

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

Answer

(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.

Question – 6 [MTP Nov 18] [MTP May 22]

Explain the difference between fixed and flexible budget.

Answer

S. No.	Fixed Budget	Flexible Budget
1	It does not change with actual volume of activity achieved. Thus is known as rigid or inflexible budget.	It can be re-casted on the basis of activity level to be achieved. Thus it is not rigid.

2	It operates on one level of activity and under one set of conditions. It assumes that there will be no change in the prevailing conditions, which is unrealistic.	It consists of various budgets for different levels of activity.
3	Here as all costs like - fixed, variable and semi-variable are related to only one level of activity so variance analysis does not give useful information.	Here analysis of variance provides useful information as each cost is analysed according to its behaviour.
4	If the budgeted and actual activity levels differ significantly, then the aspects like cost ascertainment and price fixation do not give a correct picture.	Flexible budgeting at different levels of activity facilitates the ascertainment of cost, fixation of selling price and tendering of quotations.
5	Comparison of actual performance with budgeted targets will be meaningless specially when there is a difference between the two activity levels.	It provides a meaningful basis of comparison of the actual performance with the budgeted targets.

Question – 7 [MTP Sep 24]

Fixed budgets are very simple to understand and less time consuming, however, only flexible budgets are more realistic and practicable because it gives due consideration to behaviour of revenue and cost at different levels of activity. But still there are certain demerits of both the budgets. narrate the same.

Answer

Demerits of Fixed Budget

1) It does not suite a dynamic organization and may give misleading results. A poor or good performance may remain un-noticed.
2) It is not suitable for long period.
3) It is also found unsuitable particularly when the business conditions are changing constantly.
4) Accurate estimates are not possible.

Demerits of Flexible Budget

1) The formulation of flexible budget is possible only when there is proper accounting system maintained, perfect knowledge about the factors of production and various business circumstances is available.
2) Flexible Budget also requires the system of standard costing in business.
3) It is very expensive and labour oriented.

Question – 8 [Nov 22] [RTP Nov 19] [RTP May 21] [MTP Nov 21]

Define Budget Manual. What are the salient features of Budget Manual?

Answer

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 organization 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'.

Typical budget manual may include the following: **(Mention any 4)**

(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.

Question – 9 [Sep 24]

Define the following terms:

(i) Budget manual
(ii) Performance budgeting
(iii) Budget period

Answer

(i) **Budget Manual** – Refer Question - 3

(ii) **Performance budgeting** – It involves evaluation of the performance of an organisation in the context of both specific as well as overall objectives of the organisation. Performance Budgeting provide a meaningful relationship between estimated inputs and expected outputs as an integral part of the budgeting system. A performance budget is one which presents the purposes and objectives for which funds are required, the costs of the programmes proposed for achieving those objectives, and quantitative data measuring the accomplishments and work performed under each programme. Thus, PB is a technique of presenting budgets for costs and revenues in terms of functions. Programmes and activities correlate the physical and financial aspect of the individual items comprising the budget.

(iii) **Budget period** – The period covered by a budget is known as budget period. There is no general rule governing the selection of the budget period. In practice the Budget Committee determines the length of the budget period suitable for the business. Normally, a calendar year or a period co-terminus with the financial year is adopted. The budget period for the calendar or financial year is then divided into shorter periods; it may be monthly or quarterly or for such periods as coincide with period of trading activity of the business.

Question – 10 [May 24]

Discuss Feedback Control and Feedforward Control system of budgetary control.

Answer

Feedback Control: The feedback system of budgetary control, the actual results for the budgeted period are collected and compared with the budgeted figures. The exercise of variance identification is done after the completion of the budget period. The variances are reported and based on the report corrective actions are taken, responsibility is fixed and based on experience, modification in future targets is implemented. As the name suggests, it is an Ex-post Corrective control system of budget.

This system of budgetary control is common in organistions where Management Information System (MIS) is not so robust and where data is obtained only after the finalisation of books of account. Though this type of control system is less expensive to maintain but has limitations.

Feedforward Control: This the opposite of feedback control system of budgetary control. It is Ex-Ante Preventive control mechanism of budgetary control. The budgets are set at the inception of the budgeted period and the actual results are continuously monitored and compared. The targets are kept realistic as far as possible and the targets are reviewed and reset if necessary.

This budgetary control system requires a robust MIS supported by integrated ERP system enabling an entity to get data as and when desired basis. This system is very expensive and beneficial for the organisations where the business environment is dynamic and information has important role in getting edge in competition and todays data warfare.

Question – 11 [Nov 19] [MTP July 20] [MTP Nov 21]

Define Zero Base Budgeting and mention its various stages.

Answer

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

Question – 12 [RTP May 18] [RTP Nov 20]

State the advantages of Zero Based Budgeting.

Answer

The advantages of zero-based budgeting are as follows:

- It provides a systematic approach for the evaluation of different activities and rank them in order of preference for the allocation of scarce resources.
- 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 possible way.

- It provides an opportunity to the management to allocate resources for various activities only after having a thorough cost-benefit-analysis. The chances of arbitrary cuts and enhancement are thus avoided.
- The areas of wasteful expenditure can be easily identified and eliminated.
- Departmental budgets are closely linked with corporation objectives.
- The technique can also be used for the introduction and implementation of the system of ‘management by objective.’ Thus, it cannot only be used for fulfillment of the objectives of traditional budgeting but it can also be used for a variety of other purposes.

Question – 13 [May 18]

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

Answer

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. If facilitates the close linkage of departmental budgets with corporate objectives.
- It helps in the introduction of a system of Management by Objectives

Question – 14 [Nov 20]

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

Answer

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.