Important Theory Questions

Q1 Nov'18

Explain 'Activity Based Budgeting'.

Reference	What's New
Activity Based Costing	

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.

Q2 May'18

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

Reference	What's New
Basic of Cost Accounting	

Answer

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

(i) to know the **objectives and performance goals** for them

(ii) to know **product and service specifications** like volume, quality and process etc.

(iii) to know the **performance parameters** against which their performance is measured and evaluated.

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

Q3 — May'18

Explain Opportunity Cost

Reference	What's New
Basic of Cost Accounting	

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.

Q4 — RTP May'18; RTP Nov'20

Discuss on Discretionary Cost Centre and Investment Centre

Reference	What's New
Basic of Cost Accounting	

Answer

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 corelated with cost incurred on inputs.

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 are measured on the basis of Return on Investment (ROI) besides profit. Examples of investment centres are Maharatna, Navratna and Miniratna companies of Public Sector Undertakings of Central Government.

Q5 RTP May'18; RTP Nov'20

Describe Operation costing with two examples of industries where operation costing is applied.

Reference	What's **New**
Basic of Cost Accounting	

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.

Q6 RTP Nov'18; MTP Oct'19

Discuss the essential features of a good cost accounting system.

Reference	What's **New**
Basic of Cost Accounting	

Answer

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

(i) **Informative and simple:** Cost and management 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 meticulous and unnecessary details.

(ii) **Accurate and authentic:** The data to be used by the cost and management accounting system should be accurate and authenticated; otherwise it may distort the output of the system and a wrong decision may be taken.

(iii) **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.

(iv) **Integrated and inclusive:** The cost and management 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.

(v) **Flexible and adaptive:** The cost and management accounting system should be flexible enough to make necessary amendments and modification in the system to incorporate changes in technological, reporting, regulatory and other requirements.

(vi) **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.

Q7 RTP Nov'18; MTP Aug'18; RTP May'19; MTP April'19; May'19

Distinguish between Cost Control and Cost Reduction.

Reference	What's New
Basic of Cost Accounting	

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.	5. Cost reduction has **no visible end**.

Q8 RTP Nov'18; MTP Mar'19

Explain the difference between controllable & uncontrollable costs?

Reference	What's New
Basic of Cost Accounting	

Answer

Controllable costs and Uncontrollable 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.

Costs which **cannot be influenced** by the action of a specified member of an undertaking are known as **uncontrollable costs**.

Q9 RTP Nov'19; RTP May'20

Differentiate between Cost Accounting and Management Accounting.

Reference	What's New
Basic of Cost Accounting	

Answer

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

Q10 — MTP Mar'18

Discuss cost classification based on variability.

Reference
Basic of Cost Accounting

What's **New**

Answer

Cost classification based on variability

(i) **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.

(ii) **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.

(iii) **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.

Q11 MTP Mar'18

Discuss the four different methods of costing alongwith their applicability to concerned industry?

Reference	What's **New**
Basic of Cost Accounting	

Answer

Four different methods of costing along with their applicability to concerned industry have been discussed as below:

(i) **Job Costing:** The objective under this method of costing is to ascertain the cost of each **job order**. A job card is prepared for each job to accumulate costs. The cost of the job is determined by adding all costs against the job it has incurred. This method of costing is used in printing press, foundries and general engineering workshops, advertising etc.

(ii) **Batch Costing:** This system of costing is used where small components/ parts of the same kind are required to be manufactured in **large quantities**. Here batch of similar products is treated as a job and cost of such a job is ascertained as discussed under (1), above. If in a cycle manufacturing unit, rims are produced in batches of 2,500 units each, then the cost will be determined in relation to a batch of 2,500 units.

(iii) **Contract Costing:** If a job is very big and takes a **long time for its completion**, then method used for costing is known as Contract Costing. Here the cost of each contract is ascertained separately. It is suitable for firms engaged in the construct ion of bridges, roads, buildings etc.

(iv) **Operating Costing:** The method of Costing used in **service rendering** undertakings is known as operating costing. This method of costing is used in undertakings like transport, supply of water, telephone services, hospitals, nursing homes etc.

Q12 MTP Aug'18

Discuss the prerequisite of installing cost accounting system.

Reference	What's **New**
Basic of Cost Accounting	

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).

Q13 MTP Oct'18

State the limitations of cost and management accounting.

Reference	What's **New**
Basic of Cost Accounting	

Answer

Like other branches of accounting, cost and management accounting is also having certain limitations. The **limitations** of cost and management accounting are as follows:

1. **Expensive:** It is expensive because analysis, allocation and absorption of overheads require considerable amount of additional work, and hence additional money.
2. **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.
3. **Duplication of Work:** It involves duplication of work as organization has to maintain two sets of accounts i.e. Financial Account and Cost Account.
4. **Inefficiency:** Costing system itself does not control costs but its usage does.

Q14 MTP Mar'19

Discuss the impact of Information Technology in Cost Accounting.

Reference	What's **New**
Basic of Cost Accounting	

Answer

The impact of IT in cost accounting may include the followings:

(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) helps 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 object or cost centre. This process **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, it can 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**.

Q15 — MTP Apr'19

State Direct Expenses with examples.

Reference	What's New
Basic of Cost Accounting	

Answer

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:

(a) Royalty paid/ payable for production or provision of service;

(b) Hire charges paid for hiring specific equipment;

(c) Cost for product/ service specific design or drawing;

(d) Cost of product/ service specific software;

(e) Other expenses which are directly related with the production of goods or provision of service.

Q16 MTP Apr'19

Explain the difference between product cost and period cost.

Reference	What's New
Basic of Cost Accounting	

Answer

Product costs 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 costs and the all fixed costs are deducted from the contribution.

Periods costs are the costs, **which are not assigned to the products** but are **charged as expense against revenue of the period in** which they are incurred. General Administration, marketing, sales and distributor overheads are recognized as period costs.

Q17 Nov'18

Mention and **explain** types of responsibility centres.

Reference	What's New
Basic of Cost Accounting	

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.

Q18 May'19

Explain how Direct Expenses are measured and their treatment in cost accounting.

Reference	What's **New**
Basic of Cost Accounting	

Answer

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.

Q 19 RTP May'18; May' 18; RTP Nov'20

State the advantages of Zero-based budgeting.

Reference	What's **New**
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.

Q 20 RTP Nov'19

Explain the meaning of Budget Manual.

Reference	What's **New**
Budgeting	

Answer

Budget Manual: A budget manual is a collection of documents that contains key information for those involved in the planning process. Typical contents could include the following:

- An introductory **explanation of the budgetary planning and control process**, including a statement of the budgetary objective and desired results.

- A **form of organisation chart** to show **who is responsible** for the preparation of each functional budget and the way in which the budgets are interrelated.
- A **timetable** for the preparation of each budget. This will prevent the formation of a 'bottleneck' with the late preparation of one budget holding up the preparation of all others.
- **Copies of all forms** to be completed by those responsible for preparing budgets, **with explanations** concerning their completion.
- A **list of the organization's account codes**, with full explanations of how to use them.

Q 21 MTP Aug'18

Explain the difference between fixed budget and flexible budget

Reference
Budgeting

What's **New**

Answer

Difference between Fixed and Flexible Budgets:

Sl. No.	Fixed Budget	Flexible Budget
1.	It **does not change** with actual volume of activity achieved. Thus it 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.

Q 22 May'19

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

Reference	What's New
Budgeting	

Answer

Flexible budgeting may be resorted to under following situations:

(i) In the case of **new business venture** due to its typical nature it may be difficult to forecast the demand of a product accurately.

(ii) Where the business is dependent upon the **mercy of nature** e.g., a person dealing in wool trade may have enough market if temperature goes below the freezing point.

(iii) In the case of **labour-intensive industry** where the production of the concern is dependent upon the availability of labour.

Suitability for flexible budget:

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

Q 23 Nov'19

Define Zero Base Budgeting and mention its various stages.

Reference	What's New
Budgeting	

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

Q 24 RTP May'18; MTP Mar'19; RTP Nov'20

Describe the three advantages of Cost-plus contract.

Reference	What's New
Contract Costing	

Answer

Cost plus contracts have the following advantages:

(a) The Contractor is assured of a fixed percentage of profit. There is **no risk of incurring any loss** on the contract.

(b) It is useful specially when the **work to be done is not definitely fixed at the time of making the estimate**.

(c) Contractee can **ensure himself about 'the cost of the contract'**, as he is empowered to examine the books and documents of the contractor to ascertain the veracity of the cost of the contract.

Q 25 MTP Mar'19

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

Reference	What's **New**
Control Accounts	

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. Hence, reconciliation is not required.

Q 26 May'19

Explain integrated accounting system and state its advantages.

Reference	What's **New**
Control Accounts	

Answer

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

Advantages of Integrated Accounting System

The main advantages of Integrated Accounts are as follows:

(i) **No need for Reconciliation** - The question of reconciling costing profit and finan-cial 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".

Q 27 — MTP Oct'18

State the advantages of Cost-Sheets

Reference	What's **New**
Cost Sheet	

Answer

The main advantages of a Cost Sheet are as follows:

(i) It provides the **total cost** figure as well as **cost per unit** of production.

(ii) It helps in cost comparison.

(iii) It facilitates the **preparation of cost estimates** required for submitting tenders.

(iv) It provides sufficient help in arriving at the figure of **selling price**.

(v) It facilitates cost control by disclosing **operational efficiency**.

Q 28 — MTP Aug'18

Describe net realizable value method of apportioning joint costs to by-products

Reference	What's **New**
Joint and By Products	**Reverse cost accounting**

Answer

Net Realisable Value method: The realisation on the disposal of the by-product may be deducted from the total cost of production so as to arrive at the cost of the main product. For example, the amount realised by the sale of molasses in a sugar factory goes to reduce the cost of sugar produced in the factory.

When the by-product requires some additional processing and expenses are incurred in making it saleable to the best advantage of the concern, the expenses so incurred should be deducted from the total value realised from the sale of the by-product and only **the net realisations should be deducted from the total cost of production to arrive at the cost of production of the main product**. Separate accounts should be maintained for collecting additional expenses incurred on:

(i) further processing of the by-product, and

(ii) selling, distribution and administration expenses attributable to the by-product.

Q29 — Nov'18

How are By-products treated in Costing?

Reference	What's **New**
Joint and By Products	

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 and then treated based on small value or large value as above.

Q 30 — MTP Oct'19

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

Reference	What's New
Labour	

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**.

Q 31 — May'19

What are the limitations of marginal costing?

Reference	What's New
Marginal Costing	

Answer

Limitations of Marginal Costing

(i) **Difficulty in classifying fixed and variable elements:** It is difficult to classify exactly the expenses into fixed and variable category. **Most of the expenses are neither totally**

variable nor wholly fixed. For example, various amenities provided to workers may have no relation either to volume of production or time factor.

(ii) **Dependence on key factors:** Contribution of a product itself is not a guide for optimum profitability unless it is linked with the key factor.

(iii) **Scope for Low Profitability: Sales staff may mistake marginal cost for total cost** and sell at a price; which will result in loss or low profits. Hence, sales staff should be cautioned while giving marginal cost.

(iv) **Faulty valuation: Overheads of fixed nature cannot altogether be excluded** particularly in large contracts, while valuing the work-in- progress. In order to show the correct position fixed overheads have to be included in work-in-progress.

(v) **Unpredictable nature of Cost:** Some of the assumptions regarding the behaviour of various costs are not necessarily true in a realistic situation. For example, the assumption **that fixed cost will remain static throughout is not correct**. Fixed cost may change from one period to another. For example, salaries bill may go up because of annual increments or due to change in pay rate etc. The **variable costs do not remain constant per unit of output**. There may be changes in the prices of raw materials, wage rates etc. after a certain level of output has been reached due to shortage of material, shortage of skilled labour, concessions of bulk purchases etc.

(vi) **Marginal costing ignores time factor and investment:** The **marginal cost of two jobs may be the same** but the time taken for their completion and the cost of machines used may differ. The true cost of a job which takes longer time and uses costlier machine would be higher. This fact is not disclosed by marginal costing.

(vii) **Understating of W-I-P:** Under marginal costing stocks and **work in progress are understated**.

Q 32 — May'18

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

Reference	What's New
Material	

Answer

Just in Time (JIT) Inventory Management

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

JIT is based on two principles

(i) Produce goods **only when it is required** and

(ii) the products should be delivered to customers at the time only when they want.

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

Demand for final product ⇨ Production starts to process the demand for product ⇨ Material Requirement is sent to Purchase department ⇨ Order for raw materials sent to supplier ⇨ Supplier sent the material for production

Q 33 Nov'18

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

Reference	What's **New**
Material	

Answer

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

Materials may become obsolete under any of the following circumstances:

(i) where it is a **spare part**, or a component of a machinery used in manufacture and **that machinery becomes obsolete**;

(ii) where it is used in the manufacture of a **product which has become obsolete**;

(iii) where the material itself is replaced by **another material due to either improved quality or fall in price**.

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

Q34 Nov'19

Define Inventory Control and give its objectives

Reference	What's New
Material	

Answer

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

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

- Inventory Control
  - By Setting Quantitative Levels
  - On the basis of Relative Classification
  - Using Ratio Analysis
  - Physical Control

Q35 MTP Oct'19

Distinguish between Bill of Materials and Material Requisition Note.

Reference	What's New
Material	

Answer

Bills of Material	Material Requisition Note
1. It is document or list of materials prepared by the engineering/ drawing department.	1. It is prepared 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.	2. It is a document authorizing Store-Keeper to issue material to the 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.	3. It cannot replace a bill of material.
4. It can be used for the purpose of quotation.	4. It is useful in arriving historical cost only.
5. It helps in keeping a quantitative control on materials drawn through Stores Requisition.	5. It shows the material actually drawn from stores.

Q 36 — Nov'19

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

Reference	What's **New**
Operating Costing	

Answer

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

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

Composite unit may be computed in two ways:

(i) Absolute (Weighted Average) basis.

(ii) Commercial (Simple Average) basis.

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

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

Σ (Weight Carried $\times$ Distance)$_1$ + (Weight Carried $\times$ Distance)$_2$ +….+ (Weight Carried $\times$ 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.

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

In both the example, variable cost is dependent of distance and is a quantitative factor.

Since, the weight carried does not affect the variable cost hence and is a qualitative factor.

Q 37 — MTP Mar'18

Explain Single and Multiple Overhead Rates.

Reference	What's **New**
Overhead – Absorption Costing	

Answer

Single and Multiple Overhead Rates:

Single overhead rate: It is one single overhead absorption rate for the whole factory.

It may be computed as follows:

$$\text{Single overhead rate} = \left(\frac{\text{Overhead costs for the entire factory}}{\text{Total quantity of the base selected}}\right)$$

The base can be total output, total labour hours, total machine hours, etc.

The single overhead rate may be **applied in factories which produces only one major product on a continuous basis**. It may also be used in factories where the **work performed in each department is fairly uniform and standardized**.

Multiple overhead rate: It involves computation of separate rates for each production department, service department, cost center and each product for both fixed and variable overheads. It may be computed as follows:

$$\text{Multiple overhead rate} = \left(\frac{\text{Overhead allocated/ appportioned to each department/ cost centre or product}}{\text{Corresponding base}}\right)$$

Under multiple overheads rate, jobs or products are charged with varying amount of factory overheads depending on the type and number of departments through which they pass. However, the number of overheads rate which a firm may compute would depend upon two opposing factors viz. the degree of accuracy desired and the clerical cost involved.

Q 38 MTP Oct'18

Discuss with example the level of activity method of segregating semi-variable costs into fixed and variable costs.

Reference

Overheads – Analysis of Semi Variable Cost

What's **New**

Answer

Level of activity method: Under this method, the variable overhead may be determined by comparing two levels of output with the amount of expenses at those levels. Since the fixed element does not change, the **variable element may be ascertained with the help of the following formula**.

$$\frac{\text{Change in the amount of expense}}{\text{Change in the quantity of output}}$$

Suppose the following information is available:

	Production Units	Semi-variable expenses (₹)
January	100	260
February	140	300
Difference	40	40

The variable cost :

$$\frac{\text{Change in Semi-variable expenses}}{\text{Change in production volume}} = \frac{₹\ 40}{40 \text{ units}} = ₹\ 1/\text{unit}$$

Thus, in January, the variable cost will be 100 × ₹ 1 = ₹ 100 and the fixed cost element will be (₹ 260 – ₹ 100) or ₹ 160. In February, the variable cost will be 140 × ₹ 1 = ₹ 140 whereas the fixed cost element will remain the same, i.e., ₹ 160.

Q 39 — MTP Oct'18

Explain the difference between Allocation and Apportionment of expenses.

Reference	What's New
Overheads – Primary and Secondary Distribution	

Answer

The **difference between the allocation and apportionment is** important to understand because the purpose of these two methods is the identification of the items of cost to cost units or centers. However, the main difference between the above methods is given below.

(1) Allocation deals with the **whole items of cost**, which are identifiable with any one department. For example, indirect wages of three departments are separately obtained and hence each department will be charged by the respective amount of wages individually.

On the other hand, apportionment deals with the **proportions of an item of cost** for example; the cost of the benefit of a service department will be divided between those departments which has availed those benefits.

(2) Allocation is a **direct process of charging** expenses to different cost centres whereas apportionment is an **indirect process** because there is a need for the identification of the appropriate portion of an expense to be borne by the different departments benefited.

(3) The allocation or apportionment of an expense **is not dependent** on its nature, but the relationship between the expense and the cost centre decides that whether it is to be allocated or apportioned.

(4) **Allocation is a much wider** term than apportionment.

Q 40 — 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)

Reference

Overheads – Primary and Secondary Distribution

What's **New**

Answer

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

Q 41 RTP Nov'19

Explain the term Equivalent units used in process industries.

Reference

Process Costing and WIP valuation

What's **New**

Answer

Equivalent Units: 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 number of units in the process of manufacture × Percentage of Work completed)

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-inprocess will be equal to the cost of 50 finished units.

Q 42 May’18; RTP Nov’18; MTP Oct’19; MTP May’20

State the differences between Job costing and Batch costing.

Reference	What’s New
Unit, Batch and Job Costing	

Answer

Differences between Job costing and Batch costing:

Sr. 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**.

Q 43 MTP Mar’18

State how Economic Batch Quantity is determined?

Reference	What’s New
Unit, Batch and Job Costing	

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:

$$\mathbf{EBQ} = \sqrt{\frac{\mathbf{2DC}}{\mathbf{C}}}$$

Where,

D = Annual demand for the product

S = Setting up cost per batch

C = Carrying cost per unit of production per annum

Q 44 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

Reference

Unit, Batch and Job Costing

What's **New**

Answer

S. No.	Industry	Cost Unit Basis
(i)	Electricity	Kilowatt-hour (kWh)
(ii)	Automobile	Number
(iii)	Cement	Ton/ per bag etc.
(iv)	Steel	Ton

(v)	Gas	Cubic feet
(vi)	Brick-making	1,000 bricks
(vii)	Coal mining	Tonne/ton
(viii)	Engineering	Contract, job
(ix)	Professional services	Chargeable hour, job, contract
(x)	Hospitals	Patient day