EXPOSURE DRAFT

GUIDANCE NOTE

ON

Maintenance of Cost Accounting Records

The Institute of Cost Accountants of India

March, 2012

For comments and suggestions in respect of any part of this Guidance Note, please write to the Secretary, Professional Development Committee, Institute of Cost Accountants of India, CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi – 110 003.

Chapter 1: Introduction

Sections 209(1) (d) of the Companies Act, 1956, incorporated in 1965, is the backbone of statutory cost accounting in the Indian corporate sector. This framework put to practice, through promulgation of Cost Accounting Records Rules by the Government, has inculcated a sense of cost consciousness in large number of industries/companies. The mechanism of maintenance of cost records, to a very large extent, has helped industry to face the fierce competitive forces arising out of post-1991 liberalization and globalization. It also served well the legal and non-legal requirements of various regulatory authorities, government agencies, tariff/price fixation bodies, research organisations, etc.

Presently, the prescription of cost accounting records rules has been extended to all companies engaged in production, processing manufacturing and mining activities. Further, the Central Government has also prescribed uniform cost accounting records rules in place of product-wise records rules prescribed earlier. As such, it is necessary to explain the extent, scope and methodology of preparation and maintenance of requisite cost accounting records by the companies. This Guidance Note is an attempt to guide the members employed in various organizations and also those engaged in public practice to ensure that they follow a well-structured cost accounting system suited to the type, size & scale of operations that results in creating the intended cost accounting records leading to collection, assignment, apportionment and absorption of correct cost data to the relevant cost objects in the organization. The structure followed should also enable the Cost Auditor to audit and certify the cost statements for each product/activity in accordance with the notified Cost Accounting Records Rules and Cost Audit Report Rules.

This Guidance Note is neither intended to supersede any Rules/Regulations/Orders issued by the Central Government or by any other Authority nor may be construed as a mandatory replacement of the system of cost accounting that exist and is well suited in any organization. It is mere guide to supplement the efforts made by the members employed in various organizations and also those engaged in public practice to enable these organisations to follow a cost accounting system that conforms to the Generally Accepted Cost Accounting Principles and Cost Accounting Standards issued by the Institute and also complies with the Cost Accounting Records Rules notified by the Ministry of Corporate Affairs. Therefore, all users of this Guidance Note should familiarise themselves with all the Rules/Regulations/Orders and clarifications issued by the Central Government as well as the Standards and other pronuncements made by the Institute and may take assistance of this Guidance Note in a manner that will meet the requirement of the organizations without sacrificing with the fundamental principles that are enshrined either in any Statute or in the Standards prescribed by the Institute of Cost Accountants of India.

This Guidance Note has primarily focussed on the uniform Cost Accounting Records Rules notified by the Ministry of Corporate Affairs vide GSR 429(E) dated 3rd June, 2011. In addition, the common principles as embedded in the other six industry specific Cost Accounting Records Rules notified on 7th December, 2011 also remain covered; but the formats as prescribed in these industry specific CARR have to be followed and complied with fully.

Chapter2: Cost Accounting Record Rules (CARR)

Provisions in the Companies Act, 1956:

Section 209 of the Companies Act 1956 deals with the books of accounts to be maintained by a body corporate. The section provides as follows:

(1) Every company shall keep at its registered office proper books of account with respect to -

(a) all sums of money received and expended by the company and the matters in respect of which the receipt and expenditure take place;

(b) all sales and purchases of goods by the company;

(c) the assets and liabilities of the company; and

(d) In the case of a company pertaining to any class of companies engaged in production, processing, manufacturing or mining activities, such particulars relating to utilization of material or labour or to other items of cost as may be prescribed, if such class of companies is required by the Central Government to include such particular in the books of account.

Provided that all or any of the books of account aforesaid may be kept at such other place in India as the Board of Directors may decide and when the Board of Directors so decides, the company shall, within seven days of decision, file with the Registrar a notice in writing giving the full address of that other place.

(2) Where a company has a branch office, whether in or outside India, the company shall be deemed to have complied with the provisions of sub-section (1), if proper books of account relating to the transactions effected at the branch office are kept at that office and proper summarised returns, made up to dates at intervals of not more than three months, are sent by the branch office to the company at its registered office or the other place referred to in sub-section (1).

(3) For the purposes of sub-sections (1) and (2), proper books of account shall not be deemed to be kept with respect to the matters specified therein, -

(a) if there are not kept such books as are necessary to give a true and fair view of the state of the affairs of the company or branch office, as the case may be, and to explain its transactions; and;

(b) if such books are not kept on accrual basis and according to the double entry system of accounting.

(4) The books of account and other books and papers shall be open to inspection by any director during business hours.

(4A) The books of accounts of every company relating to a period of not less than eight years immediately preceding the current year together with the vouchers relevant to any entry in such books of account shall be preserved in good order:

Provided that in the case of a company incorporated less than eight years before the current year, the books of account for the entire period preceding the current year together with vouchers relevant to entry in such books of account shall be so preserved.

(5) If any of the persons referred to in sub-section (6) fails to take all reasonable steps to secure compliance by the company with the requirements of this section, or has by his own wilful act been the cause of any default by the company there under, he shall, in respect of each offence, be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to ten thousand rupees, or with both:

Provided that in any proceedings against a person in respect of an offence under this section consisting of a failure to take reasonable steps to secure compliance by the company with the requirements of this section, it shall be a defence to prove that a competent and reliable person was charged with the duty of seeing that those requirements were complied with and was in a position to discharge that duty:

Provided further that no person shall be sentenced to imprisonment for any such offence unless it was committed wilfully.

(6) The persons referred to in sub-section (5) are the following, namely:-

(a) where the company has a managing director or manager, such managing director or manager and all officers and other employees of the company; and

(b) where the company has neither a managing director nor manager, every director of the company.

(7) If any person, not being a person referred to in sub-section (6), having been charged by the managing director, manager or Board of directors, as the case may be, with the duty of seeing that the requirements of this section are complied with, makes default in doing so, he shall, in respect of each offence, be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to ten thousand rupees, or with both.

In exercise of powers conferred by section 642(1) read with section 209(1)(d) of the Companies Act, 1956, the Central Government prescribes Cost Accounting Record Rules for the maintenance of cost records relating to the utilization of materials, labour and other items of cost, in the manner as prescribed, by specified class of companies engaged in production, processing manufacturing or mining operations of the prescribed products/activities.

Cost Accounting Records Rules 2011:

In exercise of the powers conferred by clause (b) of sub-section (1) of section 642 read with clause (d) of sub-section (1) of section 209 of the Companies Act, 1956, and in suppression of all the existing 44 CARRs, the Central Government has notified revised Cost Accounting Records Rules as per details given below.

G.S.R. No. 429(E) dated 3rd June, 2011 - Companies (Cost Accounting Records) Rules, 2011 issued in supersession of 36 cost accounting records rules	
	Rules Superseded
1	**Cost Accounting Records (Cycles) Rules, 1967** published vide G.S.R. 311 dated 2nd March, 1967
2	**Cost Accounting Records (Tyres & Tubes) Rules, 1967** published vide G.S.R. 1260 dated 10th August, 1967
3	**Cost Accounting Records (Air-Conditioners) Rules, 1967** published vide G.S.R. 1447 dated 16th September, 1967 and subsequently amended vide G.S.R. 668(E) dated 28th September, 1999
4	**Cost Accounting Records (Refrigerators) Rules, 1967** published vide G.S.R. 1448 dated 18th September, 1967
5	**Cost Accounting Records (Batteries other than Dry Cell Batteries) Rules, 1967** published

G.S.R. No. 429(E) dated 3rd June, 2011 - Companies (Cost Accounting Records) Rules, 2011 issued in supersession of 36 cost accounting records rules	
	Rules Superseded
	vide G.S.R. 1467 dated 20th September, 1967 and subsequently amended vide G.S.R. 667(E) dated 28th July, 1999.
6	**Cost Accounting Records (Electric Lamps) Rules, 1967** published vide G.S.R. 1503 dated 27th September, 1967 and subsequently amended vide G.S.R. 670(E) dated 28th September, 1999
7	**Cost Accounting Records (Electric Fans) Rules, 1969** published vide G.S.R. 2298 dated 15th September, 1969
8	**Cost Accounting Records (Electric Motors) Rules, 1969** published vide G.S.R. 2574 dated 24th October, 1969
9	**Cost Accounting Records (Aluminium) Rules, 1972** published vide G.S.R. 334 dated 25th February, 1972 and subsequently amended vide G.S.R. 703(E) dated 28th September, 2001
10	**Cost Accounting Records (Vanaspati) Rules, 1972** published vide G.S.R. 1529 dated 27th November, 1972 and subsequently amended vide G.S.R. 287 dated 29h May, 1992
11	**Cost Accounting Records (Jute Goods) Rules, 1975** published vide G.S.R. 590(E) dated 29th December, 1975
12	**Cost Accounting Records (Paper) Rules, 1975** published vide G.S.R. 601(E) dated 31st December, 1975
13	**Cost Accounting Records (Rayon) Rules, 1976** published vide G.S.R. 606 dated 20th April, 1976 and subsequently amended vide G.S.R. 694 dated 31st August, 2000
14	**Cost Accounting Records (Dyes) Rules, 1976** published vide G.S.R. 605 dated 22nd April, 1976.
15	**Cost Accounting Records (Polyester) Rules, 1977** published vide G.S.R. 126(E) dated 24th March, 1977 and subsequently amended vide G.S.R. 692(E) dated 31st August, 2000
16	**Cost Accounting Records (Nylon) Rules, 1977** published vide G.S.R. 157(E) dated 1st April, 1977 and subsequently amended vide G.S.R. 695(E) dated 31st August, 2000
17	**Cost Accounting Records (Textiles) Rules, 1977** published vide G.S.R. 417(E) dated 28th June, 1977 and subsequently amended vide G.S.R. 29(E) dated 19th January, 1994.
18	**Cost Accounting Records (Dry Cell Batteries) Rules, 1978** published vide G.S.R. 45(E) dated 31st January, 1979
19	**Cost Accounting Records (Steel Tubes and Pipes) Rules, 1984** published vide G.S.R. 506(E) dated 10th May, 1984
20	**Cost Accounting Records (Engineering Industries) Rules, 1984** published vide G.S.R. 688 dated 25th June, 1984 and subsequently amended vide G.S.R. 279(E) dated 24th April, 2001
21	**Cost Accounting Records (Electric Cables and Conductors) Rules, 1984** published vide

G.S.R. No. 429(E) dated 3rd June, 2011 - Companies (Cost Accounting Records) Rules, 2011 issued in supersession of 36 cost accounting records rules	
	Rules Superseded
	G.S.R. 767 dated 7th July, 1984.
22	**Cost Accounting Records (Bearings) Rules, 1985** published vide G.S.R. 664 dated 1st July, 1985
23	**Cost Accounting Records (Steel Plant) Rules, 1990** published vide G.S.R. 574 dated 31st July, 1990 and subsequently amended vide G.S.R. 281(E) dated 24th April, 2001.
24	**Cost Accounting Records (Insecticides) Rules, 1993** published vide G.S.R. 258(E) dated 3rd March, 1993
25	**Cost Accounting Records (Soaps & Detergents) Rules, 1993** published vide G.S.R. 677(E) dated 29th October, 1993.
26	**Cost Accounting Records (Cosmetics & Toiletries) Rules, 1993** published vide G.S.R. 678(E) dated 29th October, 1993
27	**Cost Accounting Records (Footwear) Rules, 1996** published vide G.S.R. 186(E) dated 12th April, 1996
28	**Cost Accounting Records (Shaving Systems) Rules, 1996** published vide G.S.R. 202(E) dated 6th May, 1996
29	**Cost Accounting Records (Industrial Gases) Rules, 1996** published vide G.S.R. 271(E) dated 9th July, 1996
30	**Cost Accounting Records (Motor Vehicles) Rules, 1997** published vide G.S.R. 537(E) dated 11th September, 1997 and subsequently amended vide G.S.R. 328(E) dated 3rd June, 1998, G.S.R. 329(E) dated 3rd June, 1998 and G.S.R. 280(E) dated 24th April, 2001
31	**Cost Accounting Records (Cement) Rules, 1997** published vide G.S.R. 536(E) dated 11th September, 1997.
32	**Cost Accounting Records (Milk Food) Rules, 2001** published vide G.S.R. 704(E) dated 28th September, 2001
33	**Cost Accounting Records (Mining and Metallurgy) Rules, 2001** published vide G.S.R. 276(E) dated 24th April, 2001
34	**Cost Accounting Records (Electronic Products) Rules, 2001** published vide G.S.R. 277(E) dated 24th April, 2001
35	**Cost Accounting Records (Plantation Products) Rules, 2002** published vide G.S.R. 685(E) dated 8th October, 2002
36	**Cost Accounting Records (Chemicals) Rules, 2004** published vide G.S.R. 562(E) dated 2nd September, 2004

Industry Specific Cost Accounting Records Rules		
	New Rules	**Rules Superseded**
37	G.S.R. No. 869(E) dated 7th December 2011 - **Cost Accounting Records (Telecommunication Industry) Rules 2011**	Cost Accounting Records (Telecommunications) Rules, 2002 vide G.S.R. 689(E), dated the 8th October, 2002
38	G.S.R. No. 870(E) dated 7th December 2011 - **Cost Accounting Records (Petroleum Industry) Rules 2011**	Cost Accounting Records (Petroleum Industry) Rules, 2002 vide G.S.R. 686(E), dated the 8th October, 2002
39	G.S.R. No. 871(E) dated 7th December 2011 - **Cost Accounting Records (Electricity Industry) Rules 2011**	Cost Accounting Records (Electricity Industry) Rules, 2001 vide G.S.R. 913(E), dated the 21st December, 2001
40	G.S.R. No. 872(E) dated 7th December 2011 - **Cost Accounting Records (Sugar Industry) Rules 2011**	Cost Accounting Records (Sugar) amended Rules, 1997 vide G.S.R. 388(E), dated the 15th July, 1997
41		Cost Accounting Records (Industrial Alcohol) Rules, 1997 vide G.S.R. 532(E), dated the 17th September, 1997.
42	G.S.R. No. 873(E) dated 7th December 2011 - **Cost Accounting Records (Fertilizer Industry) Rules 2011**	Cost Accounting Records (Fertilizers) Rules, 1993 vide G.S.R. 261(E), dated the 5th March, 1993
43	G.S.R. No. 874(E) dated 7th December 2011 - **Cost Accounting Records (Pharmaceutical Industry) Rules 2011**	Cost Accounting Records (Bulk Drugs) Rules, 1974 vide G.S.R. 130(E), dated the 14th March, 1974
44		Cost Accounting Records (Formulations) Rules, 1988 vide G.S.R. 452, dated the 22nd April, 1988.

SALIENT FEATURES OF NEW COST ACCOUNTING RECORDS RULES, 2011

The features outlined below pertain to all the 7 cost accounting records rules, viz., the Companies (Cost Accounting Records) Rules 2011 (Common CARR) and the 6 Industry Specific Cost Accounting Records Rules (IS-CARR)

1. Applicability [Rule 3]:

Class of Companies

The cost accounting records rules are applicable to all companies where:

a) the aggregate value of net worth as on the last date of the immediately preceding financial year exceeds five crore of rupees; or

b) the aggregate value of the turnover made by the company from sale or supply of all products or activities during the immediately preceding financial year exceeds twenty crore of rupees; or

c) the company's equity or debt securities are listed or are in the process of listing on any stock exchange, whether in India or outside India.

The Common CARR or IS-CARR shall not apply to a body corporate governed by any special Act.

Nature of Activities:

Companies (Cost Accounting Records) Rules 2011 apply to all companies subject to the limits indicated above and engaged in production, processing, manufacturing or mining activities as defined in these Rules. However, the 6 industry specific cost accounting records rules apply to the activities as defined in the respective Rules as reproduced below.

Telecommunication:

"Telecommunication Activities" means any act, process, procedure, function, operation, technique, treatment or method employed in relation to telecasting, broadcasting, telecommunicating voice, text, picture, information, data or knowledge through any mode or medium and includes intermediate and allied activities thereof and these activities would, inter alia, include the following services or activities, including such services that require license or registration with the Ministry of Communications and Information Technology, Government of India, namely: -

(i) Basic Telephone Services;

(ii) National Long Distance Services;

(iii) International Long Distance Services;

(iv) Cellular Mobile Telephone Services;

(v) Wireless Local Loop (WLL) (Fixed or Mobile) Telephone Services;

(vi) Very Small Aperture Terminal Services;

(vii) Public Mobile Radio Trunk Services;

(viii) Global Mobile Personal Communication Services;

(ix) Internet or Broadband or Wireless Access service;

(x) Infrastructure Provider (IP-1);

(xi) Passive Telecom Infrastructure including Telecom Tower Facilities;

(xii) Cable Landing Stations; and

(xiii) Any other related, allied, intermediate or support services in relation to telecommunication activities not indicated above.

Petroleum:

"Petroleum Activities" means production, processing, manufacturing or mining of crude oil, gases [including Natural Gas, Compressed Natural Gas, Liquefied Petroleum Gas and regasified gases, etc. as defined in the Petroleum and Natural Gas Regulatory Board Act, 2006 (19 of 2006)] or Biogas or any other petroleum products, or included under Chapter 27 of the Central Excise Tariff Act, 1985 (5 of 1986), including the intermediate products and articles or allied products or activities thereof and includes storage, transportation or distribution of crude oil or gases or biogas or any or all of the petroleum products.

Electricity:

"Electricity Activities" means any act, process, procedure, function, operation, technique, treatment or method employed in relation to generation of electricity from any source of energy, and includes transformation, transmission, distribution, or supply of electricity by any mode, or medium, and further includes intermediate and allied activities thereof.

Sugar:

"Sugar Activities" means the activities relating to the production, processing, or manufacturing of any form or grade of sugar, molasses, or alcohol (including ethyl alcohol, rectified spirit, absolute alcohol, denatured alcohol, power alcohol, or solvent blends etc. but excluding potable alcohol) by using any raw materials, and includes the meaning assigned to them under Chapter 17 or Chapter 22 of the Central Excise Tariff Act, 1985 (5 of 1986) or of the Customs Tariff Act, 1975 (51 of 1975), and further includes the intermediate products and articles or allied products thereof.

Fertilizers:

"Fertilizer Activities" means production, processing, manufacturing or mining of any type of fertilizers whether nitrogenous, phosphatic, potassic or complex (organic, inorganic or mixed) and includes all types of fertilizers as defined in clause (h) of section 2 of the Fertilizer (Control) Order, 1985 made under section 3 of the Essential Commodities Act, 1955 (10 of 1955) or included under Chapter 31 of the Central Excise Tariff Act, 1985 (5 of 1986), and further includes the intermediate products and articles or allied products or activities thereof.

Pharmaceuticals:

"Pharmaceutical Activities" means production, processing, or manufacturing of bulk drugs or formulations and includes the meaning assigned to them under the Drugs (Prices Control) Order 1995 as amended from time to time, or included under Chapters 29 and 30 of the Central Excise Tariff Act, 1985 (5 of 1986), and further includes the intermediate products and articles or allied products thereof.

As per MCA General Circular No. 67/2011 dated 30th November 2011, the Companies (Cost Accounting Records) Rules, 2011 are not applicable to:

(i) Wholesale or retail trading activities.

(ii) Banking, financial, leasing, investment, insurance, education, healthcare, tourism, travel, hospitality, recreation, transport services, business/professional consultancy, IT & IT enabled services, research & development, postal/courier services, etc. unless

any of these have been specifically covered under any other Cost Accounting Records Rules.

(iii) Companies engaged in rendering job work operations or contracting/ sub-contracting activities, and are paid only the job work or conversion charges, such as tailoring, baking, repairing, painting, printing, constructing, servicing, etc.

(iv) Companies engaged in the production, processing, manufacturing or mining activities till such time they commences their commercial operations.

(v) Ancillary products/activities of companies incidental to their main operations (i.e. products/activities that do not constitute their main line of business) and wherein the total turnover from the sale of each such ancillary products/activities do not exceed 2% of the total turnover of the company or Rs.20 crores, whichever is lower. However, required details of all such ancillary products/activities may be maintained under a miscellaneous group and disclosed appropriately.

Year of Application:

Common-CARR - for every financial year commencing on or after 1st April 2011

IS-CARR - for every financial year commencing on or after the date of publication of the Rules, i.e., 7th December 2011.

However, companies that were covered under any of the earlier 44 Cost Accounting Records Rules shall continue to comply with those Rules, as the case may be, till the new Rules become applicable.

2. Compliance Report

Compliance Report has been defined under Rule 2 and its form, content and manner of authentication has been provided under Rule 5, 6 & 7.

Compliance Report has been defined as - "Compliance Report means compliance report duly authenticated and signed by a cost accountant in the prescribed form of compliance report".

Every company to which the Common CARR applies is required to submit a compliance report, in respect of each of its financial year commencing on or after the 1st day of April, 2011, duly certified by a cost accountant, along with the Annexure to the Central Government, in the prescribed form.

Every company to which any of the IS-CARR applies is required to submit a compliance report, in respect of each of its financial year commencing on or after the 1st day of April, 2012, duly certified by a cost accountant, along with the Annexure to the Central Government, in the prescribed form.

The rules have prescribed the form and contents of the Compliance Report and its Annexure. The Compliance Report consists of (a) the eForm to be filed by the Company; and (b) Compliance Report and its Annexure :

(a) Form A for filing Compliance Report and other documents with the Central Government consists of Part I providing General Information of the Company and Part II consists of the attachments and digital signatures on behalf of the Company

(b) Form B is the Compliance Report and Annexure to the Compliance Report.

Time Limit for Submission:

Within one hundred and eighty days from the close of the company's financial year to which the compliance report relates.

3. Authentication and Certification of Compliance Report:

The Annexure to the compliance report is required to be approved by the Board of Directors and certified by a Cost Accountant before submitting the same to the Central Government by the company.

The term "cost accountant" as defined in the Rules means a cost accountant as defined in clause (b) of sub-section (1) of section 2 of the Cost and Works Accountants Act, 1959 (23 of 1959) and who is either a permanent employee of the company or holds a valid certificate of practice under subsection (1) of section 6 and who is deemed to be in practice under subsection (2) of section 2 of that Act and includes a firm of cost accountants.

The Council of the Institute has further clarified that a "cost accountant" within the definition of these Rules does not include:

a) A member holding a part-time certificate of practice; or

b) A member who is in full time employment whose membership fees are in arrears;

c) A member of ICWAI who has been admitted as a member through reciprocal arrangement of membership by virtue of being a member of Institute of Management Accountants USA.

The Rules have not prescribed any procedure for appointment of cost accountant to certify the Compliance Report. In case a company desires to have it certified by a Practicing Cost Accountant, it would be advisable to appoint the cost accountant by the Board since the Board has been made responsible to approve the Compliance Report. In case a company decides to get it certified by a permanent employee of the organisation, nominating/authorizing the employee cost accountant would be an internal matter of the company.

Further, there is no ceiling on the number of Compliance Reports that can be certified by a cost accountant in whole-time practice. A cost accountant working as permanent employee can certify the Compliance Report of the company where he is employed but he cannot certify Compliance Report of any other company even under the same group. A cost accountant who has been appointed as cost auditor of the company can also certify the Compliance Report of that company.

As per MCA General Circular No. 68/2011 dated 30th November 2011, if all the products/activities of a company, excluding the exempted categories, are covered under cost audit, then the company will not be required to separately file the compliance report. It has also been clarified that a company required to file Compliance Report shall be required to file only compliance report as per the notified Form-B and no other details of cost records are required to be filed with the Government.

It has further been clarified by the Institute that if one or more product(s)/activity(s) of a company is covered under Cost Audit and there are other products covered under Common-CARR or any of the IS-CARR but not covered under Cost Audit as per industry specific Cost

Audit Orders dated 2nd May, 2011, 30th June, 2011 or 24th January 2012, the Company will be required to file a Compliance Report for the Company as a whole covering products under cost audit and products not under cost audit.

Further, if one or more product(s)/activity(s) of a company is covered under Cost Audit and there are other products not covered under either Common-CARR or any of the IS-CARRs, then the company will not be required to file a Compliance Report since the product(s)/activity(s) other than product(s)/ activity(s) under Cost Audit are in the exempted category.

4. Compliance of Cost Accounting Standards and Generally Accepted Cost Accounting Principles

Rule 4(3) of the cost accounting records rules stipulates that the cost accounting records should be maintained in accordance with the Generally Accepted Cost Accounting Principles (GACAP) and Cost Accounting Standards (CAS) issued by the Institute of Cost Accountants of India to the extent these are found relevant and applicable.

5. Product and Product Group:

The Rules have defined "Product" and "Product Group" as below:

"Product" means any tangible or intangible good, material, substance, article, idea, know-how, method, information, object, service, etc. that is the result of human, mechanical, industrial, chemical, or natural act, process, procedure, function, operation, technique, or treatment and is intended for use, consumption, sale, transport, store, delivery or disposal.

"Product Group" in relation to tangible products means a group of homogenous and alike products, produced from same raw materials and by using similar or same production process, having similar physical or chemical characteristics and common unit of measurement, and having same or similar usage or application; and in relation to intangible products means a group of homogenous and alike products or services, produced by using similar or same process or inputs, having similar characteristics and common unit of measurement, and having same or similar usage or application.

For application of Product Group, reference may be made to the Guidance Note on Product Group Classification issued by the Institute.

Both the Compliance Report and the cost audit report rules have introduced submission of the reports according to the "product group". It is, however, to be kept in mind that the "product group" concept has been introduced for disclosure purposes only. ***It should be clearly understood that the cost accounting records are required to be maintained product-wise and unit-wise and not "product group wise"*** as per the relevant provision reproduced in the suceeding paragraph. For Compliance Report purposes and the abridged cost statement and other details required for submission of cost audit report are to be done according to "product group".

6. Maintenance of Cost Records

Every company to which these rules apply, including their units and branches, in respect of each of its financial year, are required to keep cost records on regular basis in such manner so as to make it possible to calculate per unit cost of production or cost of operations, cost of

sales and margin for ***each of its products and activities carried out at individual production units or locations*** for every financial year on monthly/quarterly/half-yearly/annual basis.

These cost records are required to be maintained in accordance with the generally accepted cost accounting principles and cost accounting standards issued by the Institute of Cost and Accountants of India [formerly Institute of Cost and Works Accountants of India], to the extent these are found to be relevant and applicable. The cost accountant is required to clearly indicate and explain any variation, if any, in his compliance report or cost audit report as the case may be.

The cost records including statistical, quantitative and other records which enable the company to exercise, as far as possible, control over the various operations and costs with a view to achieve optimum economies in utilization of resources are required to be maintained. Cost records are required to be maintained on continuous basis from the basic stage of inputs to the final output. These rules also require that the records should be maintained in such a manner so that they are able to provide necessary data which is required to be furnished under these rules.

The rules also require that all such cost records and cost statements, maintained under these rules shall be reconciled with the audited financial statements for the relevant financial year specifically indicating expenses or incomes not considered in the cost records or statements so as to ensure accuracy and to reconcile the costing profit of all its products/activities with the overall profit of the company. The cost accountant is required to clearly indicate and explain any variation, if any, in his compliance report or cost audit report as the case may be.

There cannot be any exhaustive list of cost accounting records. Any transaction, statistical, quantitative or other details that has a bearing on the cost of the product/activity would be important. It is advisable to maintain such records and details in a structured manner on a regular basis so that the accumulation is possible on a periodical basis. An illustrative list of Cost Records can be as follows:

1. Production

1.1. Raw Material consumption register/report;

1.2. Production report;

1.3. Rejections/wastages/scrap report;

1.4. Report on stoppage of machines with reasons;

1.5. Idle time report with reasons;

1.6. Machine utilization report;

1.7. By-Product & Joint Products.

2. Work-in-Progress and Finished Goods

2.1 Process stock register- cost centre-wise and product wise;

2.2 Finished goods stock register- product-wise.

2.3 Daily Stock Accounts (DSA) maintained under Central Excise Law

5. Raw Materials and Stores Accounting

5.1 Goods received register;

5.2 Bin cards;

5.3 Materials/stores ledgers.

5.4 Packing Materials

6. Employee Cost

6.1 Attendance registers/ sheets;

6.2 Wages/salary sheets;

6.3 Leave and gratuity payments.

3. Repairs and Maintenance

3.1 Works order register / card showing material and spares consumed and labour utilized;

3.2 Procedure followed for routine maintenance;

3.3 Details major breakdowns & Repairs;

3.4 Details of Abnormal Repairs & Reconditioning activities.

4. Utilities (Water, Steam, Power, DM Water, Air, Effluent Treatment etc.)

4.1 Records of input and output;

4.2 Record of cost centre-wise allocation of outputs.

7. Overheads

7.1 Details such as production hours, labour hours, machine hours to facilitate distribution of overheads;

7.2 Overheads Keys.

8. Cost Accounts

8.1 Overheads analysis register;

8.2 Cost centre-wise assets register;

8.3 Product ledger;

8.4 Annexures and proformae as per rules;

8.5 Reconciliation of profit/loss as per cost records and financial records.

9. Sales

9.1 Product-wise Sales analysis

9.2 Stock Transfer

9.3 Marketing/ Market Research Cost

The following steps can be taken to ensure proper maintenance of cost records:

1 Study and examine the chart of accounts with special reference to the system of cost methods adopted by the company.

2 Study the basic raw materials and packing materials, chemicals and stores required for the manufacture of the product and their sources.

3 Study the organizational structure and know the details of manufacturing process.

4 Examine whether cost centres are split-up into production & services functions

5 The licensed capacity and installed capacity should be ascertained. Any addition to production capacity during the preceding two years should also be ascertained.

6 Examine the adequacy of internal checks and control.

7 Before starting the assignment, meet the various important executives of the company and note down the functions, responsibilities and powers delegated to each.

8 Obtain an understanding of the business and the production processes involved, the flow of the process, till the finished goods are packed and transferred to the finished stores for despatch.

9 Obtain the Balance Sheets of the company for the past two years and make a note of the important points contained in the Directors' Report to the shareholders on the various financial, operation and technical matters.

10 Study the books/records containing production records etc., statistics maintained by the factory(s) in compliance with the Excise and other Government requirements and note down the Licensed and Installed capacities. Ascertain the reasons for shortfall in production, if any, as compared to the previous two years.

11 Compare actual production with the installed capacity.

12 Prepare a complete quantitative analysis beginning with input materials (both direct and indirect), corresponding production at each stage of production, any by-product or joint products produced, scrap and wastages generated, quantity transferred for captive consumption and the stage from which such transfer is taking place and final reconciliation with that of sales and stocks in respect of each type of product.

13 Study the Cost Accounting System followed by the company. Examine whether the same system is followed in case the Company is engaged in production of different and varied types of products manufactured at different locations and such locations are operating under different autonomous Divisions under the overall management of the Company.

14 Make proper identification of various production and service cost centres and check whether the expenditure is initially booked to these cost centres correctly.

15 Check whether the relevant cost accounting standards and generally accepted cost accounting principles (GACAP) are being followed for valuation of materials, utilities, overheads etc.

16 It is necessary to prepare individual service/utilities cost statements, viz., Water, Steam, Power, DM Water, Purified Air etc. Ensure consumption records of these utilities at various production and service centres properly maintained and allocate the costs on an equitable basis to the various consuming cost centres. In respect of supplies made to or received from other units of the company, ensure that the transfers are made at cost of production/generation of the utilities and that the method followed is consistent. In case of inter unit transfers at pre-determined transfer price in financial accounts, the same has to be reversed for cost accounts and considered at cost.

17 Ascertain any abnormal reasons for low productions and/or high usage of services/ utilities and high down time in the plant. Find out whether these have been properly recorded and reported separately.

18 Verify whether consistency is maintained with regard to cost accumulation, cost analysis, cost allocation and apportionment, cost treatment and costing procedures adopted for inventory valuation from period to period.

19 Examine the records maintained for inter-company transfers.

20 Ascertain if any Royalty/Technical Services Fee has been paid to Collaborator/Technology Supplier. If it is one-time lump sum payment, check whether the charge to cost of product is spread over the period for which benefit is to be derived out of the payment and the same is equitable and reasonable.

21 Examine whether there is any Royalty agreement and check its effect on cost of production and allocation of the cost to the product.

22 Examine the practice followed for maintaining quality of the product and related Quality Control Expenses. Check the amount incurred on quality control, quality audit etc. and their treatment in the cost of product.

23 Examine whether the company is complying with the various legal provisions with respect to pollution control and the expenses incurred therefor and whether absorption of such cost in the product is done equitably and consistently.

24 Cost of production should be derived for domestic sale and export sale separately.

25 Verify the reconciliation statement between the profit/loss as per the cost accounts and as per the financial accounts. Also examine the variations and reasons thereof.

26 Examine whether the data maintained in the cost record are reconciled with the relevant returns submitted by the company to government authorities.

27 Where a system of standard costing is used, it should be ensured that such costs are converted into actual for the purpose of determining the figures required to comply with the requirements of Cost Accounting Record Rules. The method of adjustment of variances to arrive at the actual cost from the standard cost should be examined.

28 Examine that cost statements have been prepared as per requirements of Cost Accounting Records Rules.

29 Examine whether Cost Accounting Standards and Generally Accepted Cost Accounting Principles issued by the Institute of Cost Accountants of India are being followed.

30 Examine whether there are any abnormal features affecting production during the year, e.g., strikes, lock-outs, major breakdowns in the plant, substantial power cuts, serious accidents, etc., and what is their impact on the cost of production.

31 Examine if there are any special expenses, which have been directly allocated to products under reference, and what is the total amount as also the incidence per unit of product.

7. Cost Records, Cost Statements and Reconciliation Statements are to be preserved

All such cost records, cost statements and reconciliation statements, maintained under these rules, relating to a period of not less than eight financial years immediately preceding a financial year or where the company had been in existence for a period less than eight years, in respect of all the preceding years are to be kept in good order.

8. Penal Provisions

The rules provide for penalty for cost accountant and companies as follows:

a) Default by a cost accountant

If default is made by the cost accountant in complying with the provisions of these rules, he shall be punishable with fine, which may extend to five thousand rupees.

b) Contravention by a Company

If a company contravenes any provisions of these rules, the company and every officer thereof who is in default, including the persons referred to in sub-section (6) of section 209 of the Act, shall be punishable as provided under sub-section (2) of section 642 read with sub-sections (5) and (7) of section 209 of Companies Act, 1956 (1 of 1956).

In order to prepare and maintain cost accounting records, the cost accountant should first familiarise himself with the industry where the records are to be maintained. Once the cost accountant has familiarised himself with the process of manufacture or production, he should

classify the production process under different cost centres under which different elements of costs are to be collected and analysed. He should also then identify the different component of costs for the total cost build-up.

The steps involved in preparing the cost records are explained in the following chapters.

Chapter 3: Material Cost Accounting

The Cost Accounting Record Rules require maintenance of proper records showing separately all receipts, issues and balances both in quantities and cost of each item of raw material (including all direct charges up to the works) required for the production, processing or manufacturing of the products, packing material, consumables etc. The basis on which quantities, costs of issue and consumption are calculated are required to be indicated in the cost accounting records and followed consistently.

1. <u>Classification of Materials:</u>

Materials are of two types:

1. **Direct Materials:** Materials the costs of which can be easily attributed to a cost object in an economically feasible way.
2. **Indirect Materials:** Materials, the costs of which cannot be attributed to a particular cost object.

1. Direct Materials should be classified in the cost statement under suitable heads:

- Raw materials,
- Components,
- Semi-finished goods and
- Sub-assemblies

Further, Direct materials should be classified as:

- Indigenous
- Imported and
- Self-Manufactured

2. Indirect Material should be classified under suitable heads:

Indirect materials may be grouped under major heads like tools, stores and spares, machinery spares, jigs and fixtures, consumable stores, etc., if they are significant.

Cost of Material will cover all types of direct raw materials such as purchase price of raw materials and bought out components (finished and semi-finished). For raw material and merchandise inventory, which are purchased outright and not intended for further conversion, the identification of cost is relatively straightforward. The cost of these purchased materials will include the purchase price, transportation costs, insurance and handling costs and other expenditure directly attributable to the acquisition. In case of imported raw materials, additional costs, such as, import duty, CVD etc. shall be included. Duties and taxes are to be added unless subsequently recoverable from the taxing authorities. However, duties and taxes, which are subsequently recoverable from the taxing authorities, such as, Cenvat, Countervailing Customs Duty (CVD), VAT/Sales Tax set-off etc. should not be included in the raw material cost. Trade discounts / Cash discount, rebates, duty drawbacks and other similar items should also be netted off against the raw material cost.

Cost of materials in the nature of process materials, dies & tools, packing materials etc., which are used as indirect materials for the production function should form part of the cost construction. The method of calculation of landed cost and valuation thereof would

be similar to raw material cost explained above. The quantity and value for each and every item of material stocked is required to be maintained separately with proper identification. It is to be ensured that:

(a) The basis of valuation of issues is consistent.

(b) The values should include all direct charges up to works, such as, freight and insurance, wherever identifiable, and

(c) The value should be after adjusting credit for Cenvat and other benefits in the nature of Cenvat, if availed by the Company.

(d) Any wastage, whether in storage, transit or for other reasons, should be shown separately and the method of dealing with such losses in cost indicated in the cost record by way of footnotes or explanatory notes or in some other suitable manner.

Group control accounts in cases of stores and spares may be maintained where difficulty is faced to maintain individual stock accounts for each item. Such a scheme may be operated by the use of Rate Cards.

In this method, the elaborate procedure of maintaining a priced stock ledger account for each material is dispensed with and in its place a rate card is kept up dated after such purchase so that the prices are always current and actual. Quantitative information is provided by the bin cards only.

Periodic reconciliation with the total stock control accounts will be necessary to prove the correctness of the valuation. Further, records of periodic physical verification of stocks and the manner in which discrepancies arising therefrom are dealt with should also be maintained.

2. <u>Consumable Stores & Spares / Indirect Materials:</u>

(a) Records of receipts, issues and balances, both in quantities and cost of each item of consumable stores, other process materials, small tools and machinery spares, indirect materials etc. are required to be maintained separately for each item. The cost shall include all direct charges up to works.

(b) The cost of consumable stores, small tools and machinery spares are to be collected under the relevant consuming cost center or department or product process on the basis of actual issues of these items. In the case of consumable stores and small tools, the cost of which are insignificant, instead of maintaining separate item-wise consumption records, the company may, if it so desires, maintain such records for the group of such consumable stores and tools.

(c) If any of the indirect materials used are produced in-house and such processing is done by any outside agency, the quantity sent for processing, quantity received back after processing and cost incurred thereon should be identified and recorded separately.

(d) Check Gate Pass/ Challan for the material sent outside for processing/ re-processing and see whether material sent through these have been received back by the Company.

3. <u>Wastages/Spoilages:</u>

(a) The quantity and value of wastage, spoilage, rejections and losses of raw materials, intermediates, process materials, consumable stores, small tools and machinery spares, whether in transit, storage, manufacture or at any other stage are required to be maintained for each item.

(b) The method followed for adjusting the above losses as well as the income derived from the disposal of rejected and waste materials including spoilage, if any, in determining the cost of product, is required to be indicated in the cost records.

(c) Any abnormal wastage or spoilage or rejection or losses are to be indicated distinctly and separately along with reasons thereof.

(d) Check Recycling of waste, if any.

(e) Check efficiency reports in which the waste is classified as normal or abnormal;

(f) Check Storage Capacity and its co-relation with waste;

(g) Check whether waste is as par Industry norms;

(h) Check waste as per machine design and cross –verify with the industry norms;

(i) Trend analysis of waste and its impact;

(j) Waste Accounting;

(k) Accounting for spoilage and its analysis.

4. Slow and Non-moving Items

The value of raw materials, intermediates and process materials, finished and semi-finished, consumable stores, small tools and machinery spares, which have not moved for more than twelve months are required to be maintained showing the item distinctly and clearly.

5. Principles of Measurement

A. Principles of valuation of receipt of materials

The material receipt should be valued at purchase price including duties and taxes, freight inwards, insurance and other expenditure directly attributable to procurement (net of trade discounts/cash discount, rebate, taxes and duties refundable or to be credited by the taxing authorities).

Examples of taxes and duties to be deducted from cost are CENVAT credits, credit for countervailing customs duty, sales tax set off/ vat credits and other similar items of credit recovered/ recoverable.

The valuation of receipt of materials is to be based on the terms and conditions stated in the purchase /supply order, source of supply i.e. indigenous or imported etc.

1. Valuation of Purchase of indigenous material

The purchase/supply order inter alia states:

(a) Specification of material being purchased

(b) Purchase price

(c) Quantity of supply

(d) Time of supply

(e) Place of supply

(f) Payment terms

(g) Other commercial conditions regarding inspection, rejection, trade discount etc.

If purchase price is ex-works of purchaser, inward freight is inbuilt in the price structure. If purchase price is ex-works of supplier, inward freight is to be paid by the purchaser and it is to be included in the valuation of receipt. Other terms used in this regard are FOR (Free on

Rail) destination / FOR of supplier's place. If it is FOR destination, loading at the place of supplier and railway freight is in built in the material purchase price. Unloading and transportation from railway station to works is to be incurred by the purchaser and is to be charged to the material purchase value. In case of FOR supplier's place, railway freight is to the account of purchaser.

In addition to basic purchase price, duties and taxes, freight inwards, insurance and other expenditure directly attributable to procurement are to be taken into account while valuing the receipt if these can be quantified with reasonable accuracy at the time of receipt. If any of these items of expenditure cannot be quantified with reasonable accuracy, these should be treated as material handling cost. Trade discount, rebates, taxes and duties refundable (or to be credited by the taxing authorities) are to be set off. Examples of taxes to be deducted from cost are:

- CENVAT Credit
- Countervailing/custom duty credit
- Vat credit
- Other taxes, if any.

1.1. Finance costs incurred in connection with the acquisition of materials shall not form part of material cost. Finance costs are interest etc. on borrowed funds and the same is not to be included in the cost of materials.

1.2. Bank charges are in the nature of handling charges and are not for any credit term. These charges do not form part of the finance cost. Similarly, the letters of credit charges are for credit risk or a transaction risk (demand bill) and are part of bank charges. Hence, these charges, if directly attributable to the procurement of material should form part of the material cost.

1.3. Sometimes goods are kept in bonded warehouse and clearance of goods is delayed. This may happen due to any financial stringency delaying the payment to the bank or any other reason. Such payments of storage are to be excluded from cost of materials calculation and are to be treated as a charge to the profit & loss account.

2. <u>Valuation of Purchase of Imported material</u>

Materials are imported from other countries depending upon the availability in the country/economics of import. Import license may be required in certain cases. Purchase condition inter alia may be FOB, CIF port/airport. FOB (Free on Board) means that goods are loaded on the ship and there is no additional charge relating to loading etc. Purchaser has to pay transit insurance and freight from place of import to its destination. In case of CIF (Cost, Insurance & Freight) price, price includes besides basic price, transit insurance and freight. On receipt of goods, bill of entry/lading is prepared and other custom formalities are to be complied with for clearance of the goods.

Following points are to be considered while valuing imported material:

a. Actual customs duty paid on the basis of classification by the customs authorities will be assigned, net of any credits.

b. Material imported free of duty or at concessional rate of duty under export incentive scheme will be accounted for at the actual rate of duty applicable so long as there is reasonable expectation that the enterprise will satisfy the conditions for the duty exemption or concession. In case the material is used other than the intended purpose, provision for import duty, if any is to be provided. This entry may be offset

when the material is available for export purposes at the imported parity rate of material.

c. Harbour dues, stevedoring charges, congestion charges, etc on the basis of actual, if imported singly. If the material is imported as part of a basket, then proportionate value will become the basis for assigning the above charges

d. Intermediate storage – actual charged by the storage provider

e. Clearing Agent's Charges: will be added to cost of materials. Where other services are also provided by the clearing agent besides procurement of orders, e.g. arranging for LC, the charges for such services will also be assigned to the materials covered on a suitable basis.

f. Adjustment of CENVAT /VAT as per applicable regulation

g. Duty drawback and other similar duties subsequently recovered should also be deducted from the cost of material

h. LC Charges / Bank Charges on purchases will not form part of material cost but will form part of administration expenses.

3. Self-manufactured materials are to be valued including direct material cost, direct employee cost, direct expenses, factory overheads, share of administrative overheads relating to production but excluding share of other administrative overheads. Self-manufactured materials include material, components assemblies and sub-assemblies, accessories etc manufactured internally for making the final product. For example, gear box assembly, steering system assemblies etc are made separately and used in the final product assembly.

Self-manufactured materials are classified into two categories viz., intermediate products (used in the assembly of main product) which are exempt from excise duty. Other self-manufactured components if captively consumed, are subject to levy of excise duty on cost of production to be determined. It further provides for the determination of cost production for captive consumption. While determining the cost of self-manufactured material for captive consumption and for other use, the following elements of costs are to be considered:

(a) Material consumed (indigenous, imported, bought out items, self-manufactured items, process material etc.)

(b) Direct employee cost

(c) Direct expenses (e.g. cost of utilities, royalty, technical know-how charges for design, quality control, etc.)

(d) Research and Development

(e) Share of factory overhead (including factory administration and management expenses)

Finance cost and marketing overhead are not to be considered while valuing the self-manufactured material.

4. Spares :

(a) Spares which are specific to an item of equipment shall not be taken to inventory, but shall be capitalized with the cost of the specific equipment. Cost of capital spares and/or insurance spares, whether procured with the equipment or subsequently, shall be amortized over a period, not exceeding the useful life of the equipment

(b) The spares which are specific to any equipment supplied at the time of purchase are amortized. Sometimes, capital spares are not separately invoiced but merged with the cost of equipment supplied. Such value may be amortized with the cost of machinery over its service life. It may be charged to cost based on machine hours utilized.

(c) Spares which are termed as Insurance spares are stored to meet a contingency such as failure of a critical part in order to have Insurance against stoppage of production. Such spares may be used for replacing a defective part. These are special purpose spares specific to a specific machinery or group. These are also to be amortized within the service life of the machinery.

5. **Normal loss or spoilage of material** prior to reaching the factory or at places where the services are provided shall be absorbed in the cost of balance materials net of amounts recoverable from suppliers, insurers, carriers or recoveries from disposal.

   Sometimes materials are lost in transit or spoiled. Treatment of loss will depend upon the terms and conditions of purchase order. If the purchase order does not specify any level of loss, and supplier is responsible to supply good quantity, in such cases the loss is to be recovered from suppliers or insurers as the case may be.

   In case transit loss is to the account of purchaser, it has to fix the level of loss to be treated as normal or abnormal if it is recurring feature. The normal loss is to be absorbed by the good production. Abnormal loss of material is to be charged to Costing profit loss account and does not form part of the cost of material. In case of spoiled material if there is any realizable value, loss is to be accounted net of such value if economically feasible.

6. **Losses due to shrinkage or evaporation** and gain due to elongation or absorption of moisture etc., before the material is received shall be absorbed in material cost to the extent they are normal, with corresponding adjustment in the quantity.

   In case of certain materials before its receipt, losses due to shrinkage /evaporation and gain due to elongation or absorption of moisture arises. An anticipated level for such losses or gains for each type of material is to be predetermined. Unit price of material is reduced or inflated to cover the cost of the normal percentage of loss or gain.

7. **FOREX:**

   (a) The FOREX component of imported material cost should be converted at the rate on the date of the transaction. Any subsequent change in the exchange rate till payment or otherwise shall not form part of the material cost.

   (b) FOREX conversion has to be on the date of transaction. The cost records and financial accounts will have the same basis for alignment. Normally the date of dispatch of the document or the date on which the property in goods passes as per the purchase contract is adopted as the date of transaction. The difference between the actual payment and the amount taken as material cost of goods received is taken to a separate financial account to show the exchange rate variations (not becoming part of cost calculations.)

8. **Demurrage or detention charges**, or penalty levied by transport or other authorities shall not form part of the cost of materials. Demurrage and penalties are levied by the transporter /custom authorities for delay in clearance of wagon/vessel etc.

   Illustrations are:

   - Demurrages levied by transporter for not removing goods,

- Penalties for keeping hazardous goods in unauthorized places in transit without proper safeguards.
- As regards imported goods, items such as penalties or interest levied by customs for delayed clearance.

Demurrage and penalties are an abnormal cost and are not includible in the material cost. It is charged to profit & Loss account.

9. Subsidy/Grant/Incentive :

(a) Subsidy/Grant/Incentive and any such payment received/receivable with respect to any material should be reduced from cost for ascertainment of the cost of the cost object to which such amounts are related.

(b) Subsidy and grant received should be recognized on a systematic basis. These should be matched with the related cost for which these are intended to compensate over the period. Subsidy received for any material is to be reduced from the cost of the object.

(c) There can be some subsidy for using materials produced by a specific priority industry or energy saving device etc. Such subsidy is to be adjusted against the cost of the cost object.

10. Incentives

Incentives received from the Government for exports should be reduced from the cost of production of the products in respect of which the incentives are received. There can be some difficulty to match incentive with the cost of production due to possible timing differences among the period of production, period of exports and the period of receipt of the incentives.

Export incentives are sometimes recorded on the basis of receipt. In such a situation matching becomes difficult. It will be desirable that accounting entries relating to export incentives are passed on accrual basis to reflect the true and fair position of the cost of the product in the cost statements. Export incentive should not be reduced from the cost of production. In India export product pricing is not competitive as compared to domestic product pricing. So Export incentive should be credited to income so as to compensate the pricing for exports.

DEPB: Duty Entitlement Pass Book Scheme should be checked, whether the benefit has been availed by the Assessee/company. Check the return for this purpose.

B. Principle of valuation of issue of material:

1. Issues shall be valued using appropriate assumptions on cost flow, e.g. First In First Out, Last In First Out, Weighted Average Rate.

The Method of valuation of issues once adopted should be followed consistently from one period to another and with uniformity between different product/units. If method of valuation is changed, its impact on costs of material should be disclosed.

The following are the valuation methods for issue of materials. Any of the methods may be adopted as per the suitability of the Industry.

- FIFO (First –in-First out)
- LIFO (Last in First out)
- Weighted Average Rate

The FIFO formula assumes a cost flow that the items of materials that were purchased or produced first are issued first while LIFO assumes the exactly opposite cost flow charging the current price to cost. Under the weighted average cost formula, the cost of each item is determined from the weighted average of the cost of similar items at the beginning of a period and the cost of similar items purchased or produced during the period. The average may be calculated on a periodic basis, or as each additional shipment is received, depending upon the circumstances of the enterprise.

Accounting Standard AS-2 in normal circumstances provides for two cost formula, viz., FIFO (First-in-First-out) and Weighted Average cost. Most of the organizations are adopting one of above two cost formulae for the purpose. If any other cost formula is adopted, the differences between with financial accounts and cost accounts shall be disclosed in the reconciliation of profit as per cost records and the financial accounts.

LIFO method can be gainfully applied while estimating /projection of cost as it reflects current price cost. It is to be noted that LIFO method of valuation is not permissible under Accounting Standards. In case LIFO is followed for cost accounting purposes, proper reconciliation has to be made between the financial valuation and cost valuation.

2. **Where materials are accounted at standard cost, the price variances related to materials should be treated as part of material cost.**

   Standard Price method can also be applied for valuation of issue of material. In this method price of issues is predetermined for a stated period taking into account all the factors affecting price such as anticipated market trends, transportation charges and normal quantity of purchase. Standard prices are determined for each material and material requisitions are valued at standard price irrespective of the actual purchase price. Any difference between the standard and actual prices of purchase results in material price variance. **The material price variance is to be treated as part of material cost.**

   When standard costing system is in vogue, there can be other variances relating to usage during the course of production which may be due to normal or abnormal reasons. Variances due to normal reasons should be treated as cost while the variances due to abnormal\ reasons are treated outside the cost of production.

3. **Any abnormal cost should be excluded from the material cost.**

   The rationale of exclusion is that inclusion of such items in the cost will make the cost not comparable with a normal situation. Such an aberration is avoided to understand the cost in a better perspective for any purpose. For instance, the cost of materials cannot be loaded with losses due to an earthquake which is an abnormal event. Similarly, loss of production due to major fire accident or a major shutdown due to sudden and long machine breakdown for days together for want of a special part may be treated as Abnormal Cost.

4. **Wherever material costs include transportation costs.**

   The cost of procurement of materials is to be identified for proper allocation/apportionment to the materials/cost. In case inward transport /freight charges are indicated in the invoice which is for more than one material, inward transport cost shall be allocated to the quantity of different materials indicated in the invoice on reasonable and appropriate basis such as weight, volume, numbers etc.

   If the material is carried singly, the cost of transportation should be allocated to the single material transported. If the material is carried by special carrier, it will be assigned to the specific material transported.

5. The material cost of normal scrap/ defectives which are rejects should be included in the material cost of goods manufactured. The material cost of actual scrap / defectives, not

exceeding the normal should be adjusted in the material cost of good production. Material Cost of abnormal scrap /defectives should not be included in material cost but treated as loss after giving credit to the realisable value of such scrap/ defectives.

6. Normal scrap generated during process of manufacture is to be treated as a part of material cost. Scrap have generally low recovery value as in the case of steel but it may have significant value as in the case of gold. Thus its recovery value depends upon the type of material. There are several methods of accounting of scrap as detailed below:

1. Scrap sales credited to revenue
2. Scrap sales credited to production overhead
3. Scrap identifiable with a job and its realizable value is credited to the job.

7. Treatment of scrap when reintroduced in production process:

(a) An alternative to sale of scrap is that it can be reprocessed into useful raw material for subsequent production of basic products. For example the scrap material from sheets of metal from which parts have been stamped, may be melted and again formed into sheets from which more units may be stamped. In such a situation, the realisable value of the scrap can be credited to cost of production and debited to raw material consumption. Other examples are (a) runners and risers generated in the course of dressing up of castings in foundry. Runners and risers are valued at weighted average cost at pouring stage (i.e. raw material cost plus conversion cost of molten metal); (b) Side trimmings from machine roll of paper or scrap generated at the finishing house of a paper mill is recycled and used as waste paper for pulp making.

(b) The material cost of abnormal scrap will not form part of the material cost.

(c) Defectives may arise at any stage of production. If defectives are within the normal level fixed for the purpose, it will form part of the material cost. If the defective units are clearly identified with a specific job order and the defects are peculiar to the job, the cost to complete the defective units can be charged to the job. If defective units occur irregularly, the added cost is to be charged to factory overheads. In case the defective work is inherent in the process of manufacture, it is to be included in the cost of production. The cost of abnormal defective work should be charged to Costing Profit & Loss Account or Financial Profit and Loss A/c as the case may be.

(d) Before rectification work is taken up, it should be examined whether the estimated cost of rectification work would be commensurate with the value to be obtained and it would be more profitable than any other choice available.

(e) Repairing of a defective end product may result in either being sold as a proper product, at a lesser price as seconds/ or as a rejected one. The quality and extent of damage to specifications in a product determines the necessary requirement of repairing.

(f) If defectives / spoiled work cannot be made into a first-class / saleable finished unit with significant additional expenditure, it is to be disposed off as rejects. Rejects or scrap or waste is discarded material having some value.

(g) It is not always possible to pinpoint the exact cause and location for rejects. Further recovery is not affected by the location. For example if cables are rejected at final stage, efforts shall be made to recover the conductor metals which can be reused. In compliance with the Central Excise rules, the cables are chopped off in very short lengths and grossed together irrespective of the actual occurrence of wastage i.e. in wire drawing stage or in finishing stage. The recovery is therefore not credited to various cost centers but an overall view is taken and suitable adjustments are made in the cost records.

(h) In paper industry bamboo, hardwood, wood waste (Veneer waste, Rulla etc. from Plywood industry) is used as raw material. Before these materials can be used, various preparatory operations such as cutting, debarking, chipping and screening to make proper size of wood chips are performed to make the material fit for use. This preparatory cost forms part of the material cost.

(i) Wood requires seasoning and the cost of cutting, seasoning should be treated as material cost. Seasoning of raw material for wine is another example of preparatory cost.

8. Waste:

In production of yarn in textile industry, waste is generated. Waste cotton is reintroduced in blow room with a mix of raw materials again, but waste yarn may not be used in a similar manner. Waste may be also sold for salvage value or put into an alternative use in-house or outside the enterprise. The cost of wastage should be shared by the good units introduced into the production process e.g., 100 kg of materials is purchased at a price of Rs.2 per kg. Normal wastage is 10%. The actual quantity available will be 90 kg. Now the issue price will be taken as Rs.2.22 per kg. If additional cost is incurred to process the waste, such additional cost is taken as additional cost of production to the job/process or treated as departmental or manufacturing overheads appropriately. The cost of abnormal waste should not be included in material cost and charged to profit and loss account.

In chemical industries, materials may be lost due to evaporation e.g. petroleum products. Materials mixed with alcohol etc may evaporate.

9. Spoilage:

It arises when the units produced do not meet the exact specification of the product. Spoilage is classified as normal spoilage and abnormal spoilage. Normal spoilage is to be absorbed by good production and abnormal spoilage is to be charged to profit and loss account.

Example: Metal poured, due to time lost in pouring, is incomplete on account of loss of temperature. This has to be disposed off as such by re-melting or sale as scrap.

***When the spoilage materials are sold**:* This recovery is shared by all the good production as the cost of material is already shared by netting the good production. The material cost for the batch or process will get the benefit of this credit, if significant.

When spoilage is reused as raw material in another process or job, then the credit should be given to the process or job on the basis of the utility value of spoilage and charged to the job / process using the material. Any additional cost incurred for further processing to make it fit for consumption will be reduced from the credit for benefit to the original job / process or charged to manufacturing overheads, if not so significant.

C. Assignment of costs

1. Assignment of material costs to cost objects: Material costs should be directly traced to a Cost object to the extent it is economically feasible and /or should be assigned to the cost object on the basis of material quantity consumed.

Assignment of material cost involves establishing a suitable procedure to identify and record the resources consumed by the cost object. For direct material the source document is material requisition. Details of material issued for manufacturing a product are recorded in it. It records the job number, type of material, and items listed are priced at their acquisition cost. Thus material requisition represents the source of information for assigning the cost of material to cost object.

The quantity of material consumed is to be worked out from material issue records of stores for a product and return of unused material, if any. Such consumption in quantity may be derived by two methods:

Method (i): Based on actual issues for batch, unit or job - This method is preferred as it establishes direct relationship of actual material usage for the product.

Method (ii): Based on any method other than actual e.g. Standard.

Under this method material is issued as Standard Bill of material. The standard cost for each direct material is defined at the beginning of the year. The variances from standard on account of price / consumption etc are adjusted to consumption at the year end. Some organizations follow "Backflush Costing" system. **Backflush costing** is a product costing approach, in which costing is delayed until goods are finished. Standard costs are then flushed backward through the system to assign costs to products. The result is that detailed tracking of costs is eliminated. Accounting in inventory accounts may be delayed until the time of product completion or even the time of sale, and standard costs are used to assign costs to units initially, that is, to flush costs backward to the points at which inventories remain. Therefore, it eliminates detailed accounting transaction. It focuses first on the output of the organization and then works backwards when allocating cost between goods sold and inventories. As soon as a finished good is ready for stock, material is back flushed (issued) as per the bill of material for that product. Any variation between the actual issues (both quantity and value) and the standard as accumulated over the period is charged to consumption.

Standard Bill of material method is to be used in case of goods, where the direct link of actual consumption for product is not available. The manufacturer using this method should certify the quantitative requirement considered for calculation of material consumption as per Bill of Material etc. It may be ensured that usage variance is within reasonable limit and it should be adjusted in calculation of cost of production.

For tracing of material cost direct to a cost object, concept of "to the extent economic feasible" is also to be taken into account. This requires an exercise to analyse the cost involved, benefit to accrue and over-riding requirement to identify material with the object. In other words material cost if not directly identified with the cost object on economic feasibility consideration, it should not result in misstatement of material cost of object.

Reconciliation of cost of material consumed – In order to have proper control on material consumption, it is advisable that cost of the material consumed for working out cost of production is reconciled with financial books. For major direct materials, reconciliation should be ensured both in quantity and value.

2. Where the material costs are not directly traceable to the cost object, these may be assigned on a suitable basis like technical estimates.

Materials which cannot be directly traceable to cost object, are to be assigned on some rational basis consistently. These bases could be based on some factor linking to the utilization. Technical estimates help in arriving at such rational basis.

Illustration: Grease or lubricants used for maintenance work may be consumed by all the departments. It may not be economical to issue individual requisition to charge each time. It may be decided to take the total consumption per month and divide the cost between all the user cost centres based on a technical estimate based on a sample survey of usage during a selected period. Such studies may be reviewed periodically to correct for changes taking place affecting the consumption.

Assignment of Costs – Direct Expenses

1. **Where a material is processed or part manufactured by a third party according to specifications provided by the buyer, the processing/ manufacturing charges payable to the third party should be treated as part of the material cost.**

   It is relating to a production operation out sourced. The material undergoes change and enters the work in process stage or semi-finished goods stage. A part of the production operation is outsourced. The outsourcing charges are treated as conversion charges to be loaded on to the value of material cost for inventory valuation.

   Example (1): Casting requires trimming, machining and polishing, heat treatment after pouring etc. One of these operations is subcontracted. The activity subcontracted and its cost is part of the material cost and inventorised.

   Example (2): A metal sheet is given to another unit for conversion into specific measurement for use in a press, the materials cost is increased to take care of the change in shape done before using in production. Such cost is part of the material cost, as the material is prepared fit for the operation.

2. **Wherever part of the manufacturing operations / activity is subcontracted, the subcontract charges related to materials should be treated as direct expenses and assigned directly to the cost object.**

   This provision covers a situation where the manufacturer gets part of the manufacturing operation subcontracted. For example steel strip is sent to slitter for smaller size, slitting charges paid to subcontract is to be treated as direct expenses and assigned directly to cost object.

Assignment of Costs – Indirect Materials

1. **The cost of indirect materials should be assigned to the various Cost objects based on a suitable basis such as actual usage or technical norms or a similar identifiable measure**

   The cost of indirect materials shall be assigned to the various Cost centres or standing orders based on actual consumption determined on the basis of relevant documents like material requisition slips, invoices etc duly authorized by concerned official. The value of indirect materials should therefore be collected in aggregate for each cost centre and be distributed as overheads assigned to the cost object on an equitable basis.

   It is possible that some of the indirect materials may be purchased based on a delegation as may be decided by the enterprise authorities at the departmental level directly from the market instead of routing through the purchase department , stores etc. In such cases the indirect material cost will be assigned to the cost centre using the invoice document itself duly receipted with the proper head of account and the cost centre.

   The cost of indirect materials should be directly assigned to the cost centre where possible under suitable heads as may be economical to aggregate and report under heads like lubricants, tools, consumable stores (building stores, mechanical stores, electrical stores), spares etc. All the costs under different heads for the cost centres aggregated and collected should be distributed to the production cost centres on an equitable basis.

2. **The cost of materials like catalysts, dies, tools, moulds, patterns etc, which are relatable to production over a period of time should be amortized over the production units benefited by such cost.**

   Indirect materials like cost of catalysts, dies, tools, patterns etc. have longer service life. Special patterns are charged to the cost of the special jobs. But these patterns may be reused again. Where reuse is anticipated and can be logically estimated, it should be amortised over

the production units to be benefitted by such cost. This also applies to dies, tools and catalysts.

If certain chemicals are used as catalyst having life of more than one year the cost of such items should be amortised over the production units benefitted by such costs.

In a process industry like steel plant, the materials like refractory, rolls and other process materials like catalysts, useful life is determined by many parameters like production, quality, metallurgical requirement and many other techno operational parameters. In certain cases, it may be difficult to ascertain the life of the process material. In such cases it may be charged off as and when it is issued for consumption.

3. **The cost of indirect material with life exceeding one year should be included in cost over the useful life of the material.**

   Where cost of indirect material is not relatable to product/process or there are no suitable technical norms exist, and the life of an indirect material is estimated beyond one year then it should be charged off to the cost.

CHECK LIST FOR MATERIAL ACCOUNTING AND CONTROLS

1. Ensure proper entries are made in stores ledger for raw materials and specific stores etc. in respect of receipts, issues and balances both in quantities and values.
2. Ensure that the procedure for purchase of raw materials and the standards fixed for its quality control are followed.
3. Ensure that the amount has been deducted from supplier's bills in case of supply of sub-standard materials.
4. The receipt entries should be made with reference to supplier's invoices and delivery challans, Goods received notes and as per the terms of contracts entered into with the suppliers. Any excess or short supplies made by the parties, and the basis on which such excess / short supplies were made are to be properly dealt with in the cost records as per the terms of settlement.
5. Ensure transit losses (if any) of raw materials has been properly dealt with in the cost records.
6. Ensure that the proper classification of material cost into direct and indirect categories has been made.
7. Proper system of stock verification at regular intervals should be in existence in the organization. There should be proper authorization for adjustment of physical inventory differences in the cost records. Ensure that all the goods received within the financial year are included in purchases.
8. There should be proper control systems to verify that the goods sent to outside for processing or re-processing, or job work are received back in the factory during the year. If the goods sent are not received, proper entries are to be passed in the books of account.
9. Ensure purchase returns are with original invoices or Debit Notes and also ensure credit for such purchase return has been obtained from the suppliers.
10. There should be proper reconciliation of the value of material issued by the Stores and received by the Plant. Similarly, there should be proper reconciliation of the movement of material to plant and processes.
11. The Company should have policy to treat the items of store as non-moving or slow moving. For control on such items, it is advisable that a list of non-moving and slow-moving store items should be prepared and the value of such items of stores in relation to total closing inventory should be determined.

12. For the control purpose, verify the chemical consumption with reference to raw material mix.
13. The Company should have proper e store accounting systems and procedures for indenting, purchasing, receiving and inspection. Similarly, the Company should have a set of documents/proformae used for recording arrival of materials at the factory, their acceptance into stock, issues for consumption, return and transfer of materials between the departments and stores, written off unserviceable materials etc.
14. To avoid duplicate or fraudulent payments, there should be proper system of processing, passing and payment of purchase bills.
15. There should not be any delays in accounting of materials after their receipt in the factory.
16. For control purpose, there should be system of the bin cards and individual material wise priced stock ledgers are maintained. The bin cards are posted chronologically and balances as per bin card are compared with priced stock ledger.
17. For control purpose, the Company may have a procedure for issues of materials to the user departments.
18. Ensure that the freight and all other incidental expenses have been considered as part of the individual items of material cost.
19. Ensure that the material transferred for non-production or capital jobs are deducted from purchases.
20. The waste, spoilage or other losses of materials in storage and in process are properly accounted for and dealt in cost records as per generally accepted cost accounting principles and cost accounting standards issued by the Institute of Cost Accountants of India. Where insurance claims are received for transit losses or otherwise, the same amount should be deducted from the material cost. In case any recovery pertains to a prior period, the same should not be considered for cost records of the current financial period and the same would be treated as a reconciliation item.
21. Where transport costs are significant, the same should be shown separately.

D. CHECKLISTS FOR MATERIAL MANAGEMENT

The following can be a checklist to verify materials management:

Sl. No.	Business Activity	Objectives	Yes/No	Specify areas where such controls can be designed to fulfil the objectives	Deficiencies Noted	Management Action on how to maintain such documentation for recouping such deficiencies
1.	Managing Inventory	1.1 Whether inventory is saleable or usable.				
		1.2 Whether Inventory is adequately safeguarded				
		1.3 Whether adjustments to inventory prices or quantities relate to valid price changes and physical inventory differences.				
		1.4 Whether all adjustments to inventory prices or quantities are recorded accurately.				
2.	Receiving and Storing Raw Materials	2.1. Whether Raw materials are received and accepted only if they have valid purchase orders.				
		2.2 Whether the Raw materials received are recorded accurately				
		2.3 Whether all raw materials received are recorded.				
		2.4 Whether the Receipts of raw materials are recorded timely and in the appropriate period.				
		2.5 Whether any defective raw materials are returned timely to suppliers				
3	Requisitioning Materials	3.1 Whether all transfers of raw materials to production are recorded accurately and in the appropriate period.				

Sl. No.	Business Activity	Objectives	Yes/No	Specify areas where such controls can be designed to fulfil the objectives	Deficiencies Noted	Management Action on how to maintain such documentation for recouping such deficiencies
4	Producing/Costing Inventory	4.1. Whether All recorded production costs are consistent with actual direct and indirect expenses associated with production.				
		4.2 Whether all direct and indirect expenses associated with production are recorded as production costs.				
		4.3 Whether all direct and indirect expenses associated with production are recorded accurately and in the appropriate period.				
		4.4 Whether all transfers of completed units of production to finished goods inventory are recorded completely and accurately in the appropriate period.				
		4.5 Whether all defective products and scrap resulting from the production process are valid and recorded completely and accurately in the appropriate period.				
5	Handling Finished Products	5.1 Whether finished goods returned by customers are recorded completely and accurately in the appropriate period.				
		5.2 Whether finished goods received from production are recorded completely and accurately in the appropriate period.				
		5.3 Whether the Goods received from production or returned by customers are only accepted in accordance with the				

Sl. No.	Business Activity	Objectives	Yes/No	Specify areas where such controls can be designed to fulfil the objectives	Deficiencies Noted	Management Action on how to maintain such documentation for recouping such deficiencies
		organization's policies.				
6	Shipping Finished Products	6.1 Whether all shipments are recorded accurately.				
		6.2 Whether the Shipments are recorded timely and in the appropriate period.				
		6.3 Whether the Inventory is relieved only when goods are shipped with approved customer orders.				
		6.4 Whether the Costs of shipped inventory are transferred from inventory to cost of sales.				
		6.5 Whether the Amounts posted to cost of sales represent those associated with shipped inventory.				
		6.6 Whether the Costs of shipped inventory are transferred from inventory to cost of sales timely and in the appropriate period.				
7	Maintaining Inventory Master File	7.1 Whether there are only valid changes are made to the inventory management master file.				
		7.2 Whether there are all valid changes to the inventory management master file are input and processed.				
		7.3 Whether there are changes to the inventory management master file are accurate.				
		7.4 Whether there are Changes to the inventory management				

Sl. No.	Business Activity	Objectives	Yes/No	Specify areas where such controls can be designed to fulfil the objectives	Deficiencies Noted	Management Action on how to maintain such documentation for recouping such deficiencies
		master file are processed timely.				
		7.5 Whether there are an inventory management master file remains pertinent				
	8. Inventory Accounting	8.1 Whether there are a periodic inventory counts are performed to confirm inventory records. Selection of items for count is segregated from performing the count, which is in turn segregated from recording the count. System count is reflected on cycle count worksheets (e.g. "Blind" counts are performed).				
		8.2 Whether there are physical counts verify quantities on hand.				
		8.3 Whether there are written instructions are used by physical count personnel that provide guidance on timing of the count, number and composition of the count teams, areas of responsibility, how to perform and record the physical counts and count sheet control.				
		8.4 Whether there are Discrepancies between physical counts and perpetual inventory records are researched prior to posting any adjustments to the perpetual and/or accounting records				
		8.5 Whether there are any inventory count crews are supervised.				
		8.6 Whether there are Receiving/shipping during physical counts is controlled.				

Sl. No.	Business Activity	Objectives	Yes/No	Specify areas where such controls can be designed to fulfil the objectives	Deficiencies Noted	Management Action on how to maintain such documentation for recouping such deficiencies
		8.7 Whether the Perpetual records are reconciled to physical counts.				
		8.8 Whether the perpetual/physical is reconciled to the general ledger.				
		8.9 Whether there are Procedures are in place to adjust slow moving, obsolete, or damaged items to their expected realizable value.				

Note: For more details readers may refer Cost Accounting Standard (CAS)-6 on Material Cost issued by the Institute of Cost Accountants of India.

Chapter 4: Packing Material Cost Accounting

Packing materials are of various types. Type of packing material required for a product depend upon the nature of the product to be packed. It varies with industry to industry as items to be packed will be different as in the table below:

Food Packaging	Bakery items, dairy products, confectionary, snacks, frozen items, ice creams- food packaging foils, food packaging laminates, flexible packaging foils, cookies packaging, cracker packaging, bread packaging material, chips packaging, chocolate packaging, wafer packaging, namkeen packaging, pastry packaging, toffee wrappers, lollipop wrappers, chewing gum wrappers, chocolate wrappers and many more.
Beverage Packaging	Beer, drinks, water bottle, juice, soft drinks bottles / can
Personal care cosmetic Packaging	Cosmetic, oral care, Toiletries, soap, shampoo, glass like clear polymer bottle / tubes / pouch etc.
Pharmaceutical	Blister, Aluminium / cellophane / glassine paper foil for strip or blister packing of tablets / capsules, bottle (glass / plastic), closures, (metal / plastic / Rubber closures for vials) jars , tubes, aerosol etc.
Heavy machinery packing	Wooden crates / boxes / pallets.
Fertilizers, cement, sugar,	HDPE Bags
Paper/stationery	Wrapper, liner, strings, gum tape, wooden , bottle (for ink / gum), tubes, box for holding pens/pencils
Textiles	Yarn in hanks packed in burlap and bales; Yarn in cones packed in boxes/bags; Cloth packed in bales; fancy cloth in wooden/cardboard cases/ boxes; Other packing material used are hessian, cloth, paper board, polythene paper, lining paper, iron/plastic hooks, nails, sewing thread etc.

On the basis of source of supply, packing materials are classified as indigenous materials / imported materials. Indigenous packing materials are manufactured within the country and imported packing materials are purchased from other countries.

However for the purpose of this standard Packing Materials are classified into primary and secondary packing materials. In simple words the packing material used for holding a product is classified as “Primary Packing Material’ and packing material used for storing, transport etc. is classified as ‘Secondary Packing material. These aspects are dealt in detail under definition.

A. Packing Material Cost

The cost of material of any nature used for the purpose of packing of a product is called packing material cost.

It can be divided into two parts namely:

a) Primary Packing

b) Secondary Packing

Example:

Industry	Primary Packing Material	Secondary Packing Material
Pharmaceutical	Insertions related to product. Foils for strips of tablet and capsules.	Cartons used for holding strips of tablets and card board boxes used for holding cartons.
Industrial Gases	Cylinders or bottles which are used for filling the gaseous products.	
Confectionary Industry	Butter Paper and wrappers	Jars for holding wrapped chocolates. Cartons containing packs of biscuits.
Textile		Card board boxes used for holding cones on which yarn is woven.

Primary Packing Material is for holding the product, keeping the contents clean, fresh, sterile and safe for the intended shelf life and sale. Primary packing material required for a product will depend upon the type of the product to be packed. Primary packing material may be intended for shop display also.

Above example indicates various types of primary packing material. For pharmaceutical industry primary packing material will be insertion related to product, Blister strips for tablets / capsules, bottle, tubes etc. For confectionary / food products, it may be butter paper, wrappers, box, tray etc.

As stated above, the function of primary packing material is essentially for holding a product. But depending upon use, the same material may be classified as secondary packing material. For example, a shrink wrap can be primary packaging when applied directly to the product, and secondary packaging when combining smaller packages.

Primary packing material cost is part of production cost of a cost object.

Some products such as sugar, fertilizers, cements, etc are sold in bags and do not need any further packing. Such packing is to be treated as secondary packing and will form part of cost of sales.

The packing material of the incoming packages is reused as packaging for the outgoing product if found fit for reuse and economically viable after inspection, cleaning, repair, etc. Certain products are packed in returnable containers. Returnable containers are constructed to support heavy loads and to provide resistance to impact, resulting in better protection of the product carried inside. These are re-used till found fit. The use of returnable container for packing will depend upon the product to be packed. The following factors are also to be taken into account while introducing returnable container/pallet:

- Large capital expense or high Initial Investment
- Increased transportation expense, mainly for the returns
- Cost for tracking and accounting and sometimes cleaning
- Storage space for empties

B. Principles of Measurement – Valuation of receipts of packing materials

The packing materials receipt should be valued at purchase price including duties and taxes, freight inwards, insurance, and other expenditure directly attributable to procurement (net of trade discounts, rebates, taxes and duties refundable or to be credited) that can be quantified at the time of acquisition.

The valuation of receipt of packing materials is to be based on the terms and conditions stated in the purchase /supply order and source of supply i.e. indigenous or imported etc.

Purchase of indigenous Packing material

The purchase / supply order inter-alia states

(1) Specification of packing material being purchased

(2) Purchase price

(3) Quantity of supply

(4) Time of supply

(5) Place of supply

(6) Payment terms

(7) Other commercial conditions regarding inspection, rejection, trade discount etc.

In addition to basic purchase price, duties and taxes, freight inwards, insurance and other expenditure directly attributable to procurement are to be taken into account while valuing the receipt of packing material if these can be quantified with reasonable accuracy at the time of receipt. If any of these items of expenditure cannot be quantified with reasonable accuracy, these shall be treated as material handling cost. Trade discount, rebates, taxes and duties refundable (or to be credited by the taxing authorities) are to be set off. Examples of taxes to be deducted from cost are CENVAT Credit, Countervailing / custom duty credit, VAT credit etc.

Imported Packing Material:

Packing Materials are imported from other countries may be FOB, CIF port/airport. FOB (Free on Board) means that goods are loaded on the ship and there is no additional charge relating to loading etc. Purchaser has to pay transit insurance and freight from place of import to its destination. In case of CIF (Cost, Insurance & Freight) price, price includes besides basic price, transit insurance and freight.

Following points are to be considered while valuing imported packing material:

a. Actual customs duty paid on the basis of classification by the customs authorities will be assigned, net of any credits.

b. Packing Material imported free of duty or at concessional rate of duty under export incentive scheme will be accounted for at the actual rate of duty applicable so long as there is reasonable expectation that the enterprise will satisfy the conditions for the duty exemption or concession. This entry may be offset when the material is available for export purposes at the imported parity rate of material.

c. Harbour dues, stevedoring charges, congestion charges, etc on the basis of actual, if imported singly. If the packing material is imported as part of a basket, then proportionate value will become the basis for assigning the above charges.

d. Intermediate storage – actual charged by the storage provide.

e. Clearing Agent's Charges: will be added to cost of materials. Where other services are also provided by the clearing agent besides procurement of orders, e.g. arranging for LC, the charges for such services will also be assigned to the materials covered on a suitable basis.

f. Adjustment of CENVAT /VAT as per applicable regulation

g. Duty drawback and other similar duties subsequently recovered shall also be deducted from the cost of material

h. LC Charges / Bank Charges on purchases: to be treated as finance charges and will not form part of material cost but will be treated as a part of administration expenses.

Other Issues:

(a) Finance costs directly incurred in connection with the acquisition of packing materials should not form part of packing material cost.

(b) **Self-manufactured packing materials** should be valued including direct material cost, direct employee cost, direct expenses, job charges, factory overheads including share of administrative overheads comprising factory management and administration and share of research and development cost incurred for development and improvement of existing process or product. In the other words, the self-manufactured packing material should be valued by taking into account all the relevant cost incurred in manufacturing the packing material e.g. material cost, duties & taxes, freight inwards, insurance and other expenditure (net of trade discounts, rebate, taxes and duties refundable or to be credited), direct employees cost, direct expenses, utilities, job charges, factory overheads, share of administration overheads, development & improvement expenses etc.

(c) **Normal loss or spoilage of packing material** prior to receipt in the factory should be absorbed in the cost of balance materials net of amounts recoverable from suppliers, insurers, carriers or recoveries from disposal.

(d) Abnormal cost arises due to some abnormal causes viz. heavy break-down in plant, theft, fire, material not according to required specification, etc. They are not considered in the cost of production and charged to profit & loss account. In case of packing material which is rejected after issue due to abnormal causes such as misprinting, material of wrong specification / size etc. is to be treated as abnormal cost. It is to be excluded from cost of packing material cost of the product. Any realization from disposal of such rejected packing material is to be credited to the abnormal cost.

(e) If defectives / spoiled work cannot be made into a first-class / useable packing material without uneconomical expenditure, it is to be disposed off as rejects. Rejects or scrap or waste is discarded material having some value.

The rejection may occur in the following stages:

(1) In course of inspection

(2) Rejection in testing/packing at the finished stage

(3) Rejection by customers after finished products has been dispatched from the factory.

(f) Discarded packing material is disposed of as scrap. Any value realized from disposal of discarded material if insignificant, is to be treated as other income. If discarded material can be reintroduced in the production of packing material, it shall be valued at its realizable scrap value.

(g) The forex component of imported packing material cost should be converted at the rate on the date of the transaction. Any subsequent change in the exchange rate till payment or otherwise will not form part of the packing material cost.

(h) Any demurrage, detention charges or penalty levied by the transport agency or any authority will not form part of the cost of packing materials.

(i) Any subsidy or grant or incentive or any such payment received or receivable with respect to packing material should be reduced for ascertainment of the cost to which such amounts are related.

C. Principles of valuation of issue of packing material

a) Issues shall be valued using appropriate assumptions on cost flow e.g. FIFO, LIFO, Weighted Average. The method of valuation once adopted should be followed consistently from one period to another and with uniformity between different product/units.

b) If packing material costs includes transportation costs, determination of costs of transportation should be governed by the principle of average (equalized) cost of transportation.

c) The packing material cost will not include imputed cost.

d) If the packing material are accounted at standard cost the price variances related to such materials is to be treated as part of packing material cost and the portion of usage variances due to normal reasons should be treated as part of packing material cost. Usage variances due to abnormal reasons should be treated as part of abnormal cost.

e) The normal loss arising from the issue or consumption of packing materials should be included in the packing materials cost. Certain losses are inherent in the use of packing material and cannot be eliminated. For example losses occur in cutting wood / cardboard to make box / crate. These losses occur even under efficient operating condition and are referred to as normal loss. Thus Normal loss arising from the issue or consumption of packing materials is to be treated as a part of packing material cost.

f) Any abnormal cost where it is material and quantifiable should be excluded from the packing material cost. For example, loss of packing material due to major fire accident is abnormal loss and should be treated as abnormal Cost and should not form part of cost of the packing material consumed and it should be dealt with in the costing profit and loss account.

g) The credits/recoveries in the nature of normal scrap arising from packing materials if any should be deducted from the total cost of packing materials to arrive at the net cost of packing materials.

D. Assignment of Cost

Assignment of packing material cost involves establishing a suitable procedure to identify and record the packing material consumed by the cost object. Material requisition is the source document indicating details of packing material issued for a product. It records the job number, type of packing material, and items listed are priced at their acquisition cost. Thus material requisition represents the source of information for assigning the cost of packing material to cost object. Based on actual issues, the cost of packing material is traced to cost object to the extent economically feasible.

Packing material cost may also be assigned on the basis of standard bill of packing material in place of actual issues. Under this method packing material is issued as Standard Bill of material. The standard cost for each item of packing material is defined at the beginning of the year. The variances from standard on account of price/consumption etc are adjusted to consumption at suitable interval. Any variation between the actual issues (both quantity and value) and the standard as accumulated over the period is charged off to consumption.

For assigning the packing material cost, the following principles should be kept in view:

a) Packing material cost should be directly traced to a cost object to the extent it is economically feasible.

b) If the packing material costs are not directly traceable to the cost object, these may be assigned on the basis of quantity consumed or similar measures like technical estimates. For example, Nails, adhesive, tapes, gums etc are consumed while packing the cost object. Such packing materials are used in small quantities and/or of not significant value. In such cases it may not be economical to issue individual requisition to charge to cost object each time. It is desirable to take the total consumption of such packing material per month and divide the cost between costs objects packed based on a technical estimate or on a sample survey of usage during a selected period. Such studies may be reviewed periodically to correct for changes taking place affecting the consumption.

c) The packaging cost of reusable packing should be assigned to the cost object taking into account the number of times or the period over which it is expected to be reused. For example, gas cylinders are returnable packing material. Filled cylinders are supplied against a security deposit and user is charged rent. Cylinders are depreciated over its useful life and any repair and depreciation will form cost of packing

d) Cost of primary packing materials should form part of the cost of production.

e) Cost of secondary packing materials should form part of selling and distribution overheads. Since, these packing materials are used to make the product marketable. Certain products such as sugar, fertilizers, cement etc are packed in HDPE / gunny bags and are transported / sold without any further packing. For such products there is only one type of packing material cost and forms part of cost of sales.

Note: For more details readers may refer Cost Accounting Standard (CAS)-9 on Packing Material Cost issued by the Institute of Cost Accountants of India.

Chapter 5: Employee Cost Accounting

1. Classification of Employee Cost

Employee cost, on the basis of relation with a cost centre / cost object is classified direct employee cost, and indirect employee cost, of product / service cost. Direct employee cost, is the cost of those workers who are readily identified or linked with a cost centre or cost object. Indirect employee cost is the wages of employees which are not directly allocable to a particular cost centre.

Employee Cost:

Employee Cost means the aggregate of all kinds of consideration paid, payable and provisions made for future payments for the services rendered by employees of an enterprise (including temporary, part time and contract employees). Consideration includes wages, salary, contractual payments and benefits, as applicable or any payment made on behalf of employee. This is also known as labour cost. However, the following points need consideration in identification of employee cost:

1. Contract employees includes employees directly engaged by the employer on contract basis but does not include employees of any contractor engaged in the organisation.
2. Compensation paid to employees for the past period on account of any dispute/ court orders shall not form part of Employee Cost.
3. Short provisions of prior period made in current period will not form part of the cost in the current period.

However, the employee cost includes payment made in cash or kind for example:

Employee Cost

- Salaries, wages, allowances and bonus / incentives.
- Contribution to provident and other funds.
- Employee welfare.
- Other benefits.

Employee Cost – Future benefits

- Gratuity.
- Leave encashment.
- Other retirement/separation benefits.
- VRS/ other deferred cost.
- Other future benefits

Benefits generally include:

- Paid holidays.
- Leave with pay
- Statutory provisions for insurance against accident or health scheme.

- Statutory provisions for workman's compensation.
- Medical benefits to the employees and dependents.
- Free or subsidised food.
- Free or subsidised housing.
- Free or subsidised education to children.
- Free or subsidised canteen, crèches and recreational facilities.
- Free or subsidised conveyance.
- Leave travel concession.
- Any other free or subsidised facility.
- Cost of Employees' stock option.

Therefore, the term "employee costs" refers to the expenditure borne by employer for engagement of employees and include direct remunerations, allowances and bonuses, paid by an employer in cash or in kind to employee in return for work done. It includes payments to social saving schemes, payments for days not worked and remunerations in kind such as food, drink, fuel, company cars, etc. However, there are a number of costs which do not appear in the payroll but are employee related cost such as: recruitment costs, training costs, relocation costs, learning costs support / social costs, and Personnel Administration costs. **The employee cost is also termed as Labour cost.**

2. Categorization of Employees:

The employees in an organization may be categorized as:

a. Daily rated worker / badli worker, piece rate worker
b. Monthly paid worker
c. Contract basis
d. Temporary or regular
e. Skilled or unskilled
f. Executive / non-executive.

Remuneration paid to above categories of employees for the purpose of control is also classified accordingly i.e. casual labour cost, supervisory cost, etc.

Payment is made to employees as per their term of employment. For many employees remuneration is based on attendance. (Attendance is controlled by biometric / clocking system / manually). They work for a number of hours per day, and get paid at the end of the work or month. For others, their remuneration is based on the quantity and quality of their work, that is, the more good units they make or provide the higher their payment.

The employee cost will not include the compensation paid to employees for the past period on account of any dispute/ court orders for the reason that there is no contribution by the concerned employee to the production activity of the organization during the current period. Such payments for past period are items of reconciliation between Cost and Financial Accounts.

Similarly, short provisions of prior period made up in current period shall not form part of employee cost in the current period and will be an item of reconciliation between cost and financial accounts.

Idle time:

Idle time is the difference between the time for which the employees are paid and the employees' time booked against the cost object. The time for which the employees are paid includes holidays, paid leave and other allowable time offs such as lunch, tea breaks.

Idle time happens due to various causes for which an employee is not responsible but full wages are paid to him. Even for employees who are paid on the basis of output, idle time payment may be required to be made. Idle time may be classified as under:

Normal Idle Time:

Time lost between gate and place of work, break for tea, personal needs, time interval between one job and another, time for tool setting, adjustment of machine, etc. It is treated as normal idle time. It is built in labour hour rate.

Abnormal Idle Time:

Idle time arises due to breakdown of machinery, power failures, non-availability of material, lock -out, atmosphere conditions, flood etc. is abnormal idle time and excluded from the cost.

Direct Employee Cost

Direct employee cost is that portion of wages and salaries which can be identified without any difficulty and charged to a cost object. It may be classified as direct when:

(a) There is a direct relationship to the product through a process or a costing unit;
(b) The cost may be measured in light of this relationship; and
(c) The cost is sufficiently material in amount.

Direct labour means labour spent in the actual production of the finished product or is labour immediately identifiable with product costs. It must be economically feasible to associate a labour cost with units produced before treating that cost as direct. "Economically feasible way" means cost effectiveness so that the cost accounting is not too expensive in relation to expected benefits. This concept is applicable not only to cost object, but also to job, process, such as melting, dying or galvanizing.

Employees performing the following operations are normally classified as direct employee:

- Machining operations
- Assembly operations
- Machine setting
- Heat treatment,
- Melting
- Process operation

The ultimate and practical criterion for classifying employee cost as direct is whether the work performed by an employee can economically be identified with the product or not.

Indirect Employee Cost:

Indirect Employee Cost is the cost which cannot be directly attributed to a particular cost object.

1. All factory employees cost other than for direct employees are classified as indirect employee costs. The distinction between direct and indirect employee is sometime difficult to establish. Where fully automatic machinery is used, the worker becomes in effect a machine tender. The machine alters the size or shape of the product, while the worker merely feeds the machine at intervals and makes minor adjustments. A question may arise a machine adjuster is a direct employee or an indirect employee. A distinction is to be made that if a man is tending a productive machine, his labour is as direct as the labour of an employee producing goods manually. But if he is repair man or set-up man, he may be classified as indirect employee.
2. An employee may be direct in nature, but for practical reasons, may not be charged directly to a given product, being prorated as direct employee cost over several products or even treated as indirect employee cost. Instances of such border line cases are spray painting, inspection and short operations e.g. buffing, polishing, etc. Spray painting can, in some instances, be easily identified with and charged to specific jobs but in many cases the spraying is done on a conveyor belt with items from various jobs being sprayed as needed. In the latter case, to charge the paint spraying employee cost directly to the separate job may entail too much clerical detail and the employee cost may be allocated to various jobs on some equitable basis.
3. Inspection employee may be considered direct employee or indirect employee depending upon the circumstances. It is often considered direct employee in cases where each unit must be tested or measured to ascertain that the product meets predetermined specification as in the case of manufacture of drugs where each item must be tested to guard against error. Inspection should, in other cases be considered as indirect employee if inspection is done on an intermittent or selective basis. If inspector divides his time between two or more departments or jobs, proration of his wages may be accomplished more easily by treating them as indirect employee cost than by attempting to make a direct allocation through time tickets or time cards.
4. Short Operations which require a relatively small amount of time to complete such as buffing, scouring and polishing may be treated as indirect employee if the operation takes less time than the unit time employed in labour accounting. If in a given plant the minimum unit time is 15 minutes, an operation consuming less than that amount should be classified as a short operation. Proration of the employee cost of these operations may be in some cases being best accomplished through allocation as indirect employee cost.
5. The distinction between direct and indirect employee is necessary because direct employee efficiency is measured by the number of acceptable units completed, while the efficiency of other type of employee frequently has little relationship to the number of units produced. Therefore in the measurement of the efficiency of a particular worker, group of workers or a department, their employees must be divided, so far as practicable, into direct and indirect employee.

Cost Records for Employee Cost:

The following records need to be maintained by the Company to ascertain correct employee cost on each activity/ cost centre:

Particular	Recording	Remark
Clock Card/Attendance Record	The time of coming in and leaving the factory premises, the employee will use this card at the factory gate for recording the starting and finishing time.	It is a document on which starting and finishing time of an employee is recorded Example: An employee by insertion into the time recording device ascertains the actual attendance time.
Daily or Weekly Time Sheet	It is a document on which the employee records how his time has been spent. The total time on the time sheet should correspond with the time shown on the clock card.	It will analyze his movement and when signed by the supervisor an analysis of the labour cost is made for various jobs and operations.
Job Cards	It is a single job or batch and is likely to contain entries relating to numerous employees. On job completion it will contain a full Records of the times and quantities involved in the job or batch.	It enables reconciliation of work time and attendance time as jobs usually goes for long duration.
Piece Work Cards	It shows the number of units processed or produced each day on the basis of which wages are payable.	Enables calculation of wages and evaluation of efficiency of the workers.
Payroll Accounting	It is involved in maintenance of records for the amounts due to the employees like wages and salaries including other allowances together with deductions made from the employee's earnings.	It aides to the management in calculation of wages and salaries of individual employees taking consideration his attendance and leaves together with other entitlements.
Employee or Labour Cost Accounting	It involves identifying the amount of labour cost to be charged to individual jobs and overhead accounts. The idle time analysis is also necessary for labour cost accounting.	It aids in identifying the information relating to the time spent on each job or process or number of units produced is obtained from the job cards, piece of work tickets etc.

Note:

(1) Proper records should be maintained to show the attendance and earnings of all employees assigned to the cost centers or departments and the work on which they are employed. The records should also indicate the following separately for each cost centre or department:

(a) piece rate wages (wherever applicable);

(b) incentive wages, either individually or collectively as production bonus or under any other scheme based on output;

(c) overtime wages;

(d) earnings of casual or contractual labour;

(e) bonus or gratuity, statutory as well as other;

(f) contribution to superannuating scheme;

(g) any other earnings of the nature specified in (a) to (f) above.

(2) The records should be maintained in such a manner as to enable the company to book these expenses cost centre-wise or department-wise for each products Where the employees work in such a manner that it is not possible to identify them with any specific cost centre or department, the employees cost should be apportioned to the cost centers or departments on equitable and reasonable basis and applied consistently.

(3) The idle labour cost should be separately recorded under classified headings indicating the reasons therefore. The method followed for accounting of idle time payments should be disclosed in the cost records.

(4) Any wages and salaries allocable to capital works, such as, additions to plant and machinery, buildings or other fixed assets should be accounted for under the relevant capital heads. Similarly, payments in the nature of deferred revenue expenditure should be separately recorded under separate classified headings indicating the reasons therefor. The method followed for accounting of such payments in determining the cost of the product(s) under reference should be on equitable and reasonable basis and applied consistently.

(5) The cost of normal retirement benefits payable to employees should be recorded separately and charged to cost. The method followed for accounting of such costs in determining the cost of the products under reference should be on equitable and reasonable basis and applied consistently and disclosed separately. Termination benefits which are payable in addition to the normal retirement benefits, such as benefits under voluntary retirement scheme, should be treated as abnormal and should not form part of salaries and wages and cost of production.

In the case of accounting for direct labour costs methods vary because:

(a) The wage payment system themselves vary.

(b) Standard Labour Cost are used and

(c) The extent of the existing system of labour booking varies.

In organizations where time booking on a job wise basis or on an operation wise basis does not exist, it would be necessary to design and introduce a time booking system. Quite a few organizations employ a system of piece-rate wages payment where the basic labour cost will be much easier to be ascertained as it is on a per piece basis. However the dearness allowance which forms the bulk of the employee's pay packet remains a time-reckoned payment in all cases.

It will be necessary to convert the standards into actuals at the end of each accounting period in the case of each component or sub-assembly where cost booking is made at standard rate and time booking. A reconciliation of the direct labour cost as calculated from the pay rolls with the amount charged to the individual job costs, operation or process costs will be necessary to establish correctness.

Similarly, allocation of indirect labour and salaries will have to be done to the concerned overhead account on an actual basis from the pay roll analysis. The major point that will have to be kept in mind is the amount of labour costs chargeable to capital jobs/work.

Principles of Measurement

Measurement of Employee Cost involves determining the basis of cost measurement method and establishing criteria for use of alternative cost measurement techniques.

Examples of cost measurement are:

- Use of historical cost,
- Use of actual or standard cost,
- Designation of items of cost which must be included or excluded from the Employee Cost,
- Employee Cost is measured in terms of time (man hours / man days) and rate of payment.
- Measurement of Employee Cost (to be checked later)

The Company should follow the principles and methods of computation of employee cost in cost records consistently from one period to another and for reasonable uniformity between different products / units. For example Employees working on machining operation are to be classified as Direct Employee from one period to another and those engaged in repair to be classified as indirect.

1. **Employee Cost should be ascertained taking into account the gross pay including all allowances payable along with the cost to the employer of all the benefits.**

   a) **Financial Benefits:**

   Based on Pay slips (which indicate department code), summary of gross earnings, deductions, working days etc, are prepared department wise / cost centre wise. Gross earning of an employee is the employee cost to the organization.

   Employer's contribution to PF, FPS and ESI are identifiable with each employee. Contribution to Provident fund is to be made as per the PF Rules. Thus contribution to Provident Fund, Employee State Insurance Scheme and FPS are charged as incurred.

   Share of employers' contribution to PF, FPS and ESI should be identified to cost centre / department where the employee is working. In cases where it is not feasible, it should be allocated based on employees gross earning.

   To cover the cost of worker's compensation under Workmen Compensation Act for injury to employees on the job, Accident Insurance policy is taken resulting in additional employee cost. It is to be treated as Production overhead as it is not specific to any cost centre.

   b) **Non-financial benefits:**

   Non-financial benefits are offered to employees in several ways. These benefits are in the form of amenities or facilities which do not offer cash reward to the employee for any specific or measured work done. Such non-monetary benefits make the working conditions and terms of employment lucrative so as to induce the employee to increase his efforts. The benefits go to all the employees in the organization and is not limited to any individual, class, or group.

   A few examples of non-financial benefits are mentioned below:-

- Free or subsidised food.
- Free or subsidised housing.
- Free or subsidised education to children.
- Free or subsidised canteen, crèches and recreational facilities.
- Free or subsidised conveyance.
- Leave travel concession.
- Any other free or subsidised facility.
- Recreational facilities
- Pension Scheme
- Protective clothing, liveries, uniforms etc.
- Tea milk etc

They are non-financial only so far as the employee is concerned, but the employer has to incur expenditure to provide for the incentives. The above payments to employees are ascertainable at the end of each month. In case of subsidized benefits, token money recovered from the employee is credited to the relevant benefit scheme. Net cost of benefits is allocated to the departments/cost centre on the basis of gross earning/ number of employee.

Provision for gratuity and for leave encashment is made on the basis of actuarial valuation at the end of financial year and the organization contribute the same to Fund/Trust set up for purpose. The amount contributed to the Fund/Trust is invested in the specific designated securities as mandated by law. Some organizations contribute to a Group Gratuity scheme with Life Insurance Corporation of India/insurance companies to cover the gratuity liability for its employee and such contribution is charged to profit & Loss account.

Similarly, Provision for pension liability for staff other than covered under ESIC& FPS, is made on the basis of actuarial valuation at the end of financial year and the organization contribute the same to Fund/Trust set up for purpose. The amount contributed to the Fund/Trust is invested in designated securities or through a group Scheme of LIC in this regard.

Pension benefit is to be charged entirely to administrative expenses since the cost cannot reasonably be allocated and also the benefit goes to the entire company. If pension cost is allocated to each department where the employee is working, it may penalize the department having the oldest employees.

Termination benefits are generally paid in lump sum. It may comprise of enhanced retirement benefits and salary for noticed period. It should be treated as administrative overhead.

Direct Labour hour rate is established for each department / cost centre comprising of all grades of direct employee in that department / cost centres. The direct labour hour rate will be calculated taking into account the employee's salary including all allowances and other benefits, such as Employer's contribution to EPF, FPS, ESI, Gratuity payable, bonus etc. Total estimated direct employee cost of the cost centre/department is divided by net total number of available production hours during the period multiplied by the number of employees of the cost centre/department.

If the labour hour rate is calculated on a monthly /quarterly basis based on actual, the numerator and denominator may be adjusted.

2. **Bonus whether payable as a Statutory Minimum or on a sharing of surplus is to be treated as part of employee cost. Ex gratia payable in lieu of or in addition to Bonus should also be treated as part of the employee cost.**

   The treatment of Profit sharing Bonus paid to employees under Payment of Bonus and Ex-gratia payment as an item of cost. Any payment of bonus as a Statutory Minimum or on a sharing of surplus should form part of the employee cost. The bonus paid to employees should be identified with each cost centre/department. For determining labour hour rate, bonus should be estimated on the basis of past results and future forecast.

3. **Remuneration payable to Managerial Personnel including Executive Directors on the Board and other officers of a corporate body under a statute will be considered as part of the Employee Cost of the year under reference whether the whole or part of the remuneration is computed as a percentage of profits.**

   a) Remuneration paid to non-executive directors should not form part of Employee Cost but should form part of Administrative Overheads.

   b) Remuneration paid to officers, managers and executive directors of a corporate body whether paid as a fixed amount or paid whole or part of the remuneration as percentage of profits should be treated as employee cost. Remuneration covers fixed salary, PF contribution, leave, superannuation and severance payment, and other benefits, besides commission, etc. Other benefits include free furnished residential accommodation or house rent allowance, leave travel concession, reimbursement of medical expenses for self and family, personal accident insurance, fully maintained company's car with driver, gardener, watchmen, electricity.

   c) Remuneration will be identified as production, administrative or selling overhead based on the services provided. As mentioned above, the remuneration paid to non-executive directors should be treated as Administrative Overheads.

4. **Separation costs related to voluntary retirement, retrenchment, termination etc. should be amortized over the period benefitting from such costs.**

   These benefits are amortized over the period benefitting from such additional cost resulting in reduction of current employee cost. Lumps sum payments under the above schemes are generally amortized over a period of 5 years.

5. **Employee cost should not include imputed costs.**

   Imputed cost of an employee should not form part of the employee cost as there is no cash payment and it is being used for the purpose of decision making. Cost of employee share options can be treated as part of employee cost provided the same is not a notional cost and involves an actual cash outlay

6. **Cost of Idle time is ascertained by the idle hours multiplied by the hourly rate applicable to the idle employee or a group of employees.**

   Normal idle time is built in the labour hour rate and forms the part of the cost object. Abnormal idle time is the time lost and will not part of the cost object. It is to be measured on the basis of the hourly rates of individual employee or at an average rate for closely associated group of employees or some statistical basis such as factor hours use of individual pay rates is the most accurate but requires more clerical efforts.

7. **Where Employee cost is accounted at standard cost, variances due to normal reasons related to Employee cost should be treated as part of Employee cost. Variances due to abnormal reasons should be treated as part of abnormal cost.**

When standard costing system is in vogue in an organization, there can be employee cost variance, besides material cost and other variances relating to usage of resources during the course of production. Variance is the difference between an actual amount and a target or planned amount. Variances may be due to normal or abnormal reasons. Variances due to normal reasons should be treated as cost while the variances due to abnormal reasons are treated outside the cost of production. Direct employee cost standard consists of two phases:

(a) Fixation of employee time (i.e. quantity); and

(b) Setting of the employee wage rate standards for each product manufactured.

(c) The standard time for each operation multiplied by the standard employee wage rate gives the standard employee cost for the operation. Employee time standards may be set up in any of three ways: Using past records of performance

(d) Time and motion study and

(e) Taking trial runs.

i) Employee rate standard

The rates of pay expected to be paid to the employee is taken into account for fixation of employee rate standards. In case of piece work system of payment, the setting of rate standard is simple because the piece rate fixed itself from the standard rate. In case of day work system, an hourly rate of pay is fixed for each grade of employee with reference to the standard employee rate.

Direct employee cost variance is the difference between standard direct employee cost specified for the activity achieved and the actual direct employee wages paid.

ii) Employee (wage) rate variance:

This is the portion of the wage variance which is due to the difference between the actual wage rate paid and the standard rate of pay specified.

Reasons for wage rate variances are:

a) Change in basic wage structure or change in piece rate

b) Engagement of workers of grades and rates of pay different from those specified due to shortage of labour of the proper category

c) Payment of guaranteed wages to works that are unable to earn their normal wages, if such guaranteed wages form part of direct labour cost.

d) Overtime and night shift work in excess of or less than the standard

e) Composition of a gang as regards the skill and rates of wages being different from that laid down in the standard.

Wage rate variance are uncontrollable except for the portion which arises due to deployment of wrong grade of employee or overtime work and such other controllable factors for which the departmental executive may be held responsible.

Employee Efficiency variance: It is the portion of the direct wages variances which is due to the difference between the standard employee hours specified and the actual employee hours expended. The employee efficiency variance is the result of taking more or less time than the standard for the performance of an operation or process
Reasons for variance are:

a) Lack of proper supervision

b) Poor working conditions

c) Delays due to waiting for materials, tools, instructions etc if not treated as idle time.

d) Defective machines, tools and other equipment

e) Work on new machines requiring less time than provided.

f) Basic inefficiency of works due to low morale, insufficient training, faulty instructions etc.

g) Use of non-standard material requiring more or less operation time.

Variances are to be analyzed. Normal variances will form part of the employee cost and abnormal variance will not form part of the employee cost.

For example: Abnormal employee cost variance may be due to slow down tactics or waiting for material or breakdown of machinery.

8. Any Subsidy, Grant, Incentive or any such payment received or receivable with respect to any Employee cost should be reduced for ascertainment of cost of the cost object to which such amounts are related.

Subsidy, grant or incentives are provided for specific purpose. For example, generation of employment in specified areas, subsidy, grant or incentives are given by government to attract setting up units in those areas. Any subsidy, grant received / receivable shall be reduced from the employee cost.

9. Any abnormal cost where it is material and quantifiable should not form part of the Employee cost.

It is to be excluded if it is it is material and quantifiable.. The rationale of exclusion is that inclusion of such items in the cost will make the cost not comparable with a normal situation. It will not form part of cost of the production as not to distort the cost due to abnormal reasons. It is dealt with in the costing profit and loss account.

10. Penalties, damages paid to statutory authorities or other third parties should not form part of the Employee cost.

Penalties/damages are levied by statutory authorities for non-compliance with statutory requirements, such as non-payment of PF contribution in time, non-compliance with any labour legislation, etc. Since penalties are abnormal item of expense, it will not form part of the employee cost and will be an item of reconciliation with financial accounts.

11. The cost of free housing, free conveyance and any other similar benefits provided to an employee should be determined at the total cost of all resources consumed in providing such benefits.

Free housing accommodation is provided to certain staff. Accommodation may be on lease or owned by the organization. Total expenses incurred for maintenance, repairs , depreciation, lease rent paid and any other related cost of housing is be assessed and form part of

employee cost. The above treatment is also applicable to free conveyance provided which may be leased or owned. For leased vehicle hire charges and for owned vehicles, related expenses such petrol / diesel, maintenance and repair, depreciation will form part of free conveyance provided to the employees.

12. **Any recovery from the employee towards any benefit provided e.g. housing should be reduced from the employee cost.**

    Amount recovered from employee towards housing, supply of electricity, water, or for any other subsidized benefits such as canteen facility etc. should be adjusted against the relevant cost of the benefit. Net cost of benefits provided will form part of the employee cost.

13. Any change in the cost accounting principles applied for the determination of the cost should be made only if it is required by law or for compliance with the requirements of a cost accounting standard or a change would result in a more appropriate preparation or presentation of cost statements of an enterprise.

C. Assignment of Cost

1. **Where the Employee services are traceable to a cost object, such employees' cost should be assigned to the cost object on the basis such as time consumed or number of employees engaged etc. or similar identifiable measure.**

Documents commonly used for assignment of employee cost are the "**time card**" and the "**Employee job ticket**".

A time card (clock card) is inserted in a time clock by the employee several times each day: upon arrival, going to lunch, taking a break, and when leaving for the day. By mechanically keeping a Records of total hours worked each day by employees, this procedure provides a reliable source for computing and recording total payroll costs by employee wise and cost centre wise. With computerisation, manual punching has now been replaced in most organisation by electronic swipe cards which are more efficient and provides online data to the payroll system.

Employee job tickets are prepared daily by employees for each job worked on. Employee job tickets indicate the number of hours worked, a description of the work performed, and the employee's wage rate (inserted by the payroll department). The sum of the employee cost and hours for different jobs (as shown on employee job tickets) should be equal to the total employee cost and employee hours for the period (as shown on time cards).

Time booked as Job tickets when multiplied by employee hour rate indicate the cost against jobs or production order or standing order Number as the case may be. (Standing order number is the sub-division of overhead cost for purpose of accounting and control). Valuation of the time tickets is done on the basis of the current hourly rates when a group or a number of employees work interchangeably on similar operations. In this method, an average hourly wage rate of all such workers or of the group is computed and hours in the time tickets are valued with this rate without reference to the hourly rate of the particular workers who actually perform the work.

Another method which is applicable where a worker runs several automatic machines is known as the **Factor Hours Method**. Each machine is known as a factor and the hours for which is referred to as factor hours. Under this method, a standard factor hour cost worked as under:

Worker's wage rate	Rs.300 per day
Working hours per day	8
Machine or factors handled	3
Factor hours per day (3 x8)	24
Standard cost rate per factor hour	300/24 = 12.5

In brief, for job costing, time records are arranged according to production, job order or standing order no. Thus Information from time tickets, time sheets and daily production records are used as a basis for distributing the payroll cost to products, processes or to indirect labour accounts.

In process industry, there is no job card system, as employees are identified with each process and their employee cost is assigned accordingly.

2. **While determining whether a particular Employee cost is chargeable to a separate cost object, the principle of materiality should be adhered to.**

Materiality and significance:

The principle of materiality should be kept in view while assigning a particular cost to a separate cost object. Materiality and significance of a piece of information depends on nature, size, etc of operation. For example Employee Cost for generation of solar power is not significant in terms of product cost and forms part of overhead, but for subsidy requirement, it may be indicated separately.

3. **Where the Employee costs are not directly traceable to the cost object, these may be assigned on suitable basis like estimates of time based on time study.**

Some employees work in such a manner that it is not possible to identify them with any cost centre or department, their employee cost is to be assigned on technical estimates, such as factor hours for machine operator attending to more than one machine/ work study etc.

For example:

In bulk drug industry workers attend to different equipments in a sequence. Degree of attention devoted to different process equipment varies and is therefore not in constant ratio to equipment hours. For this purpose some weights are pre-determined for different equipment. Allocations of employee cost are made on the basis of equipment hours after adjustments are made with such predetermined weights.

4. **The amortised separation costs related to voluntary retirement, retrenchment, and termination etc. for the period should be treated as indirect cost and assigned to the cost objects in an appropriate manner. However unamortised amount related to discontinued operations, should not be treated as cost.**

Voluntary retirement, retrenchment and termination cost are incurred, resulting in reduction in labour force and consequential reduced current employee cost. However, cost benefit due to this separation accrues in future. It is therefore desirable to amortize the separation cost over a period, say five years, to cost objects on suitable basis, such as, direct employee hours

or direct employee cost. However, unamortized separation cost should not be amortized over the remaining period, if the relevant production operation has been discontinued. For example in a textile mill Dyeing activity has been discontinued after one year of the voluntary retirement scheme. Thus portion of unamortized separation cost relating to Dye activity is to be charged to Profit and Loss account and will not be amortized for the balance period.

5. **Recruitment costs, training cost and other such costs shall be treated as overheads and dealt with accordingly.**

For recruiting employee, various activities are to be carried out such as:

(i) Pre-recruitment –

(a) job specification; and

(b) briefing personnel department setting up recruitment process search;

(ii) Advertising

(iii) Candidates evaluation

(iv) Interviewing, including travel and substance

(v) Placement agency cost

(vi) Induction training /orientation programme etc.

Cost incurred in regard to above activities is to be treated as overhead and assigned to the cost object on appropriate basis.

6. **Overtime premium shall be assigned directly to the cost object or treated as overheads depending on the economic feasibility and the specific circumstance requiring such overtime.**

Overtime premium represents the overtime hours multiplied by the premium rate. The overtime payment is usually the double of regular wage rate. Thus payment of overtime is of two parts viz. the normal and extra payment (premium). Accounting treatments of overtime shall be as under:

Treatment 1: Most overtime results from the random scheduling of jobs and should be treated like a shift premium and charged to factory overhead control.

Treatment 2: When overtime results from the requirements of a specific job and not from random scheduling, the overtime premium should be charged to the specific job that caused the overtime. If it is not economically feasible, it should be treated as overhead. Economic feasibility means cost effectiveness in the sense that cost accounting is not too expensive in relation to expected benefits.

7. **Idle time cost should be assigned direct to the cost object or treated as overheads depending on the economic feasibility and the specific circumstances causing such idle time.**

Cost of idle time for reasons anticipated like normal lunchtime, holidays etc is normally loaded in the cost while arriving at the cost per hour of an employee /a group of employees whose time is attributed direct to cost objects.

Idle time cost (other than stated above) should be recorded as separate time on time ticket and standing code numbers established for this purpose. In continuous process industries, time lost due to machine breakdown or stand by purpose must be separately recorded, since time tickets are not utilized in most cases.

Idle time is to be analysed between normal and abnormal idle time. Normal idle time shall be assigned to cost object if it is economically feasible. In other cases it should be treated as overhead. Abnormal idle time due to strike, flood, etc is to be excluded from the cost of production.

Note: For more details readers may refer Cost Accounting Standard (CAS)-7 on Employee Cost issued by the Institute of Cost Accountants of India.

Chapter 6: Utilities Accounting

1. What is a Utility:

Production processes need several inputs other than raw material in the form of water, steam, electricity, etc. Such other inputs are known as utilities.

Classification of Utilities

Utilities are classified according to the nature of utility. Various types of utilities used in manufacturing process are:

Power	Purchased Power Generated Power (stand-alone) Co-generation
Water	Raw Water Treated water De-mineralized water Distilled water/softening water Chilled water Cold water Hot water
Steam	Low Pressure steam High pressure steam
Climatic control	Air conditioning Humidification Air Handling units
Air	Compressed Air Instrument Air (Vacuum) Oxygen Gas Nitrogen gas Hydrogenation

Measurement of cost of utility:

Cost of utility consists of direct employee cost, fuel, direct expenses, chemicals, stores and spares, repairs & maintenance, depreciation and inter utility transfer cost.

Each utility has a different measurement unit considering its nature and cost is expressed in per unit of the related utility. Details of measurement of unit of different utility are given below:

Utility	Measure	Unit
Power	Units per hour	KWH or MWH
Steam	Weight/ Pressure	KG/ Cm^2 at --- ^oC
Water	Volume	Litres/Kilo Litres
Heating	Thermal unit	K cal or BTU
Air	Pressure Volume	Kg/CM^2 or M^3

Principles of Measurement

1. Each type of utility shall be treated as a distinct cost object.
2. As each utility is a distinct cost object, cost of each utility is to be collected and measured separately. For example power, steam, water, compressed air, oxygen, nitrogen, coke oven gas etc are distinct utilities, and the cost is collected and measured for each utility separately. The costs are booked to each utility through the initial documents such as supplier's bill, if directly identifiable with utility, payroll analysis sheet, stores requisition, expense voucher etc.
3. **Cost of Utilities Purchased**

   Cost of utilities purchased will be measured at cost of purchase including duties and taxes, transportation cost, insurance and other expenditure directly attributable to procurement (net of trade discounts, rebates, taxes and duties refundable or to be credited) that can be quantified with reasonable accuracy at the time of acquisition.

   There can be a mix of source for a given utility. For example, it may purchase electricity from electricity supplier and may also be receiving from its own stand-by facilities for generation of electricity. For purchased power it will include all cost of purchase, maximum demand charges (which is payable irrespective of the actual power consumption), Load factor, local duties and other expenditure attributable to procurement. Credit is to be given for any discount, rebate, taxes and duties refundable etc.).

   The above treatment is also applicable to any other utility purchased, such as purchase of steam, coke oven gas, raw water from municipal sources, canal etc.

4. **Cost of self-generated utilities for own consumption will comprise direct material cost, direct employee cost, direct expenses and factory overheads**

   The cost of generating a utility may comprise water, fuel, electricity, direct expenses (such as boiler inspection fee), consumable stores, direct employee cost, repair and maintenance, depreciation, inter–utility transfer and factory overhead.

For example:

Cost of power generation will include cost of fuel such as furnace oil, diesel oil, coal, salaries and wages, consumable stores, repair and maintenance, deprecation and factory overhead.

Unit cost is arrived at on the basis of the net aggregate consumption in different departments after adjusting transmission losses. In case of cogeneration (power and steam) where waste heat from TG (Turbine Generation) is recovered in waste heat recovery unit and used for production of steam, due credit should be given to the Power plant and corresponding debit to SGP (Steam Generation Plant).

Charging of power to the consuming cost object is generally done at the weighted average of the cost of power purchased, generated and distribution cost at the consuming point.

(i) Steam:

A separate statement of cost of steam is to be prepared indicating the quantity of steam generated, cost of fuel, soft water, power, employee cost for operating staff, sundry supplies, chemical additives, deprecation and other works overhead.

Unit cost of steam is arrived at on the basis of units consumed in different departments after adjusting distribution loss. Steam may be of high pressure, low pressure and medium pressure with multiple paths by which the steam pressure is reduced according to the purpose of use. Steam costs are highly dependent on the path that steam follows in the generation and distribution system. The reported cost of steam is the average cost of generation at a particular production rate. Equated pressure shall be indicated in the statement of cost for steam. The net cost of operating the steam is equal to the cost of steam generation less the credit for power generation in the turbine.

(ii) Raw Water:

Raw water is either purchased or obtained from ground wells/canal. The cost of water mainly consists of share of cost of power allocated through inter-utility transfer. The total cost of water will include employee cost, fuel, power, repair and maintenance of tube wells, depreciation and overhead.

The total monthly cost of operating this department is divided by the number thousands of Kiloliters of water pumped during the month to determine the unit cost of water pumped.

iii) Cost of Soft Water:

Water if hard requires treatment. The cost of soft water will include the Cost of raw water, chemicals, cost of maintenance of settling tanks, employees cost, depreciation etc.

The cost of demineralised water is also arrived at on the above basis.

5. Inter Utility transfer

There is inter–utility transfer cost for a utility. For example water utility may be used in generation of steam and power. Power may be required for pumping water from tube well. Inter-utility cost is to be determined by the following method:

a) repeated distribution method;

b) simultaneous equation method;

c) other computer applications.

a) Repeated Distribution Method:

When this method is adopted, the utility costs are repeatedly allocated in the specified percentage until the figures become too small to be significant. Steps to be followed under this method are:

i) The proportion at which the cost of a utility is to be distributed to production cost centers and other utilities centre is determined based on usage.

ii) Cost of first utility is to be apportioned to production cost centers and other utilities in the proportion as determined in step (i) above.

iii) Similarly cost of other utilities is to be apportioned.

iv) This process as stated above is to be continued till the figures remaining undistributed in the utility are too small to be significant. The small amount left with utilities may be distributed to the production cost centers.

b) Simultaneous Equation Method

Simultaneous equation method is adopted to take care of inter-utility distribution of cost of utilities to production cost centres with the help of mathematical formulation and solutions. Steps to be followed are:

i) Proportion of utility received by different utilities/production cost centre from a utility is assessed on the basis of records.

ii) The same ratios are used as coefficients in the equation framed for finding values of a utility.

iii) Solution of the equations gives the cost of service cost centers.

iv) Cost of utility to be distributed to production cost centers.

c) Other Computer Application Tools:

Various Computer applications are now available that takes care of inter-se allocation of Utilities based on the quantitative data of consumption.

5.1 In case of Utilities generated for the purpose of inter unit transfers, the distribution cost incurred for such transfers shall be added to the cost of utilities.

If utilities generated are transferred to inter units, the cost of distribution of such utilities will be included in the cost of utility. It will comprise cost of generating utility and distribution facility. Distribution may be through a pipe line/transmission line. The cost of maintenance of pipe line/ transmission for transfer of utility will be added to the cost of utility.

In case of intercompany transfer, cost of utility so transferred should comprise of direct material (fuel etc.), direct labour, direct expenses, chemicals, share of factory overheads, distribution cost and share of administrative overhead.

5.2 Cost of Utilities generated for the sale to outside parties should comprise direct material cost, direct employee cost, direct expenses, factory overheads, distribution cost, share of administrative overheads and marketing overheads.

The sale value of such utilities to outside parties will also include the margin.

6. Finance costs incurred in connection with the utilities should not form part of cost of utilities

While determining the cost of utility the finance cost i.e. interest related cost will not be considered as an item of cost.

7. The cost of utilities should include the cost of distribution of such utilities

The utility is supplied to the user from the place of generating the utility. The cost incurred from the place of generating to the end users (i.e. setting of pipe line etc) will form part of the cost of utility supplied. It will include the cost of transportation through pipeline, stepping up / stepping down of power voltage, maintenance of distribution channels, etc.

8. Cost of utilities should not include imputed costs

Imputed cost does not involve any cash payment and should not be included in the cost of utility. However, in certain cases where a particular utility is produced and the same gets generated as a part of another process within the organisation as a by-product, the cost of such by-product utility may be valued at the cost of actual generation. Example: In an integrated paper mill, Steam is produced in Boilers for consumption in various processes. Steam is also generated as a by-product in the Soda Recovery process (conversion of black liquor to white liquor) and is used along with the other steam generated. In such a case, the steam generated at the Soda Recover Plant may be valued at the cost of generation of steam and the same is to be credited to cost of Soda Recovery and debited to Steam cost to arrive at the total steam consumption cost of the Paper Plant.

9. Where cost of utilities is accounted at standard cost, the price variances related to utilities should be treated as part of cost of utilities and the portion of usage variances due to normal reasons should be treated as part of cost of utilities. Usage variances due to abnormal reasons should be treated as part of abnormal cost.

The cost of utility may be accounted on standard cost method. The standards are fixed for various inputs, such as material, fuel, direct employee cost, budgeted overhead expenses. Under this method, price of inputs of material fuel etc is predetermined for a stated period taking into account all the factors affecting price such as anticipated market trends, transportation charges and normal quantity of purchase.

Standard prices are determined for each input and material requisitions are valued at standard price irrespective of the actual purchase price. Any difference between the standard and actual prices of purchase results in input/ material price variance. The material price variance is to be treated as part of input/material cost. There may be also input/material usage variance (the difference between the quantity required as per standard and actual consumption).

Normal variance will form part of the cost of input. Abnormal usage variance will not form part of the utility cost. There can be other variances relating to employee cost, overhead etc. Variances due to normal reasons should be treated as cost while the variances due to abnormal reasons are treated outside the cost of production.

10. Any Subsidy / Grant / Incentive or any such payment received / receivable with respect to any cost of utilities should be reduced for ascertainment of the cost to which such amounts are related.

Subsidy, grant or incentives are provided for specific purpose. For example: generation of non-conventional energy. Any subsidy, grant received/receivable should be reduced from the utility cost.

11. The cost of production and distribution of utilities shall be determined based on the normal capacity or actual capacity utilization whichever is higher and unabsorbed cost, if any, should be treated as abnormal cost. Cost of a Stand-by Utility should include the committed costs of maintaining such a utility.

Where utilities are created for captive consumption, utility plants are operated based on the production plan of end product. There may be a situation when end product itself may be operated at below normal capacity in adverse market conditions and recession. In such situation the normal capacity adopted for end product should be treated as normal capacity for the utility. The cost of production and distribution of utilities should be determined based on the normal capacity or actual utilization whichever is higher. The unabsorbed cost is to be treated as abnormal cost.

The committed cost of maintaining a stand-by utility should be included in the cost of stand by utility. All related cost of the standby utility is to be absorbed irrespective of its level of utilization.

There may be a different situation where a utility is purchased and generated also. For example in case of electricity, there is one subset called purchased electricity and another is an electricity generation through DG set. In case of purchased electricity, there cannot be a measure for capacity whereas for DG set there will be measure for capacity which again is to be related to the end product.

Where utilities have capacity to cater to plant requirement and for sale to other parties, the cost of production and utilities is to be determined based on the normal capacity of the utility plant. If it is operating below normal capacity utilisation, unabsorbed cost is to be treated as abnormal cost**.**

12. Any abnormal cost where it is material and quantifiable shall not form part of the cost of utilities.

Abnormal cost may arise for example due to plant break down, flood fire etc. Such cost will not form, part of the utility cost. Another example of abnormal cost is due to low capacity utilization.

13. Penalties, damages paid to statutory authorities or other third parties should not form part of the cost of utilities

Statutory authorities levy penalties for non-compliance of regulatory requirements. For example: not complying with boiler inspection, not safeguarding hazardous utility. Penalty so levied will not form part of the cost of utilities.

14. Credits/recoveries relating to the utilities including cost of utilities provided to outside parties, material and quantifiable, should be deducted from the total cost of utility to arrive at the net cost of utility.

Credit will be given for portion of utility utilized inside the production units (e.g. steam utilized in the generation of power or sold to the outside parties).The net cost arrived at should be then loaded to the different units benefitted by the use of a utility.

For example:

(1) Where a unit has a township / colony, electricity and water charges recovered for its use may be credited to the cost of these utilities and net cost distributed to production centers.

(2) If utility is sold by Unit A to outside parties, credit is to be given to the cost of utility at price of utility sold to outside parties (i.e. cost of utility including distribution overhead + administrative Overhead+ Marketing Overhead and Margin)

15. **Any change in the cost accounting principles applied for the measurement of the cost of utilities should be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organisation.**

    Cost accounting principles applied for measurement of the cost of utilities should be followed consistently and uniformly among different utilities and period. Change in cost accounting principle should be made only if required by law or for compliance with requirement of law. If various inputs are valued on FIFO basis, it should be followed consistently.

Assignment of Cost

1. **Assignment of cost of utilities, traceability to a cost object should be on an economically feasible manner.**

   The cost of utilities is to be assigned to the end user/ cost objects on the basis of meter readings. If no meters are installed, the cost of utilities is to be assigned on the basis of rated capacity, wattage, horse power of machines, area volume or on technical assessment. The basis adopted for assigning cost of utility should be economically feasible.

2. **Where the cost of utilities is not directly traceable to cost object, it should be assigned on the most appropriate basis.**

   The cost of utilities is to be assigned on the basis of meter reading which is more reliable. In case meters have not been installed, it should be assessed on technical estimate based on equipment rating, area, volume, etc.

3. **The most appropriate basis of distribution of cost of a utility to the departments consuming services is to be derived from usage parameters.**

   In the absence of meter, utility is to be distributed to the consuming departments based on usage parameters such as stated in the project report, technical estimates taking into account the equipment rating capacity, space, volume etc. The project report of the plant lays down various usage requirement of utility, and the same should also be taken into account while assigning the utility consumption.

Note: For more details readers may refer Cost Accounting Standard (CAS)-8 Cost of Utilities issued by the Institute of Cost Accountants of India.

Chapter 7: Direct Expenses Accounting

Direct Expenses:

Expenses relating to manufacture of a product or rendering a service, which can be identified or linked with the cost object other than direct material cost and direct employee cost.

Examples of Direct Expenses are royalties charged on production, job charges, hire charges for use of specific equipment for a specific job, cost of special designs or drawings for a job, software services specifically required for a job, travelling expenses for a specific job.

Treatment of some of Direct Expenses is given below:

Examples of various direct expenses related to manufacture has been indicated above. These are dealt with as under:

1. **Royalty based on production**:

   Royalty is to be paid to Collaborators or technology suppliers in terms of agreement entered with them. It is payable either in relation to production or sales during the accounting period. If royalty payment is in respect of production of the goods captively consumed, then the same should be added as the cost element. If royalty is linked with sales volume or sales price, then royalty shall form part of selling overheads.

2. **Royalty for Upgrading Technology for the captively consumed product**

   Royalty for Upgrading Technology for the captively consumed product will be included in cost of production, irrespective of whether it is paid on production basis or sales basis.

   Royalty for Marketing and Distribution, if paid, will be excluded from cost of production. Sometimes, royalty payments are one-time payment at the time of unit installation and are identified with the plant cost. It is capitalized and depreciated along with plant and machinery cost.

3. **Technical Assistance / Know-how fees:**

   Technical Assistance/ know-how fees should be apportioned to products for which it is payable based on the payment/ provision for the relevant period as per agreement with the supplier and its impact should be determined with reference to planned production.

4. **Amortized cost of moulds, dies, patterns, patents etc:**

   The cost of moulds, dies, patterns, patents etc should be apportioned to products for which such moulds, patterns, patents are used which are directly identifiable with the products, based on the useful life of the item.

5. **Job / Processing Charges:**

   Job Work Charges / Processing Charges which are directly identified or linked with the products will form part of direct expenses.

6. **Hire charges for tools and equipment:**

   Hire charges in respect of tools and equipment which can be directly identified with a particular product will form part of direct expenses. Hire charges for tools and equipment for general use is in the nature of indirect expenses and is to be included in works overheads.

7. **Charges for a particular product designing:**

Product design charges to the extent amortized in respect of tools and equipments which can be directly identified with a particular product will form part of direct expenses.

8. Other Expenses

Other expenses which can be economically identified with a cost object shall be treated as direct expenses, such foreign travelling for export, travelling for execution of a specific job etc.

Direct Expenses based on Standard Cost

In some cases direct expenses are charged based on standard cost. Standard costs are used to compare the actual costs with the standard cost with a view to determine the variances, if any, and analyze the causes of variances and take proper measure to control them.

Standards may be fixed for certain direct expenses such as job charges for loading, and unloading, packing charges of goods, Annual maintenance contract for certain equipment.

Principles for Measurement

1. **Identification of Direct Expenses should be based on traceability in an economically feasible manner.**

   Measurement of direct expenses depends upon identification and traceability to cost object in an economically feasible manner. If an expense can be identified with a cost object /product and is sufficient materiality in amount, it is treated as Direct Expenses. For tracing of direct expenses to a cost object, it requires an exercise to analyse the cost involved, benefit to accrue and over-riding requirement to identify direct expenses with the cost object.

   For example:

   Foreign travel for export: An analysis is to be made of the travelling expenses to identify the travelling expenses into domestic and foreign travel. Foreign travel is to be further analysed to identify and trace the travelling expenses for export of a product. If the benefit to accrue is not economically feasible, it is to be treated as Selling & Distribution Overhead.

2. **Direct Expenses incurred for the use of bought out resources should be determined at invoice or agreed price including duties and taxes and other expenditure directly attributable thereto net of trade discounts, rebates, taxes and duties refundable or to be credited.**

   Direct expenses are incurred for the use of bought out resources. These are Royalties charged on production, job charges, hire charges for use of specific equipment for a specific job, cost of special designs or drawings for a job, software services specifically required for a job, etc.

   In such case determination of Direct Expenses incurred for a cost object will depend upon the type of direct expenses. For Example, royalty payment is to be determined in terms of collaboration agreement. Job /hire charges will be as per work order and invoice. It shall include duties and taxes and other expenditure (freight/transport). For example if VAT / service tax is applicable for hiring of equipment, it will form part of hire charges. Direct expenses are to be net of any discount, rebate, taxes and duties (VAT/CENVAT) refundable, if any.

   If any design and drawing or equipment is imported, custom duty payable / paid will form part of the cost.

3. **Direct expenses other than those referred to in preceding paragraph are to be determined on the basis of amount incurred in connection therewith.**

Dies, tools, scaffolding, etc. are sometime produced internally. Production Cost of these items is to be determined taking into the direct material cost, direct employee cost, direct expenses and Production overhead (including share of administrative overheads relating to production comprising factory management.) As and when a decision is taken to produce dies / tools in house, a work order is issued and all the above expenses are recorded therein.

Whenever Development work is taken for improvement of the process of existing product based on research, development cost which can be traced to cost object. It will be treated as Direct Expenses.

4. **Direct Expenses paid or incurred in lump-sum or which are in the nature of 'one-time' payment, should be amortised on the basis of the estimated output or benefit to be derived from such direct expenses.**

   In case of lump sum or one-time payment, for which benefit is ensued in future period, it should be capitalized and written off over its useful life/or estimated production. For example Technical know-how fee paid should be capitalized and amortized over its useful /productive capacity expressed in terms of number of units it can produce.

5. **If an item of Direct Expenses does not meet the test of materiality, it can be treated as part of overheads.**

   If an item of expense is to be treated as Direct Expense or Indirect Expense, it should be determined in terms materiality of an item. Materiality depends on the size and nature of item judged in particular circumstances. An item of expense / information is considered material if its misstatement (i.e. omission or erroneous statement) could influence the economic decisions of users based on the cost statement. For example Royalty is a material item from the point of view of information. It should be shown as a separate item in the cost records and not aggregated with overhead even though it may not be significant in term of the total cost of the product. In another case, AMC charges/job charges can be identified with the cost object but if not being material and significant in value, it may be treated as overhead.

6. **Finance Costs incurred in connection with the self-generated or procured resources should not form part of Direct Expenses.**

   Finance costs are interest etc. on borrowed funds. Finance costs are excluded from Direct Expenses. The letters of credit charges are for credit risk or a transaction risk (demand bill). Bank charges are in the nature of handling charges and are not for any credit term. These charges do not form part of the finance cost.

7. **Direct Expenses should not include imputed costs.**

   Imputed cost does not involve any expense or cash outlay. As such it is to be excluded from Direct Expenses. However in case of goods produced for captive consumption, imputed cost is to be considered while determining the cost of goods produced.

   In case any input material, whether of direct or indirect nature, including packing material is supplied free of cost by the user of the captive product, the landed cost of such material should be included in the cost of production. Further, imputed cost is to be charged for Moulds, Tools, Dies & Patterns etc received free of cost. The amortization cost of such items should be included in the cost of production. Amortization should be done on the basis of estimated production that can be achieved during the life of the Mould, Tool, Die or Pattern.

8. **Where direct expenses are accounted at standard cost, variances due to normal reasons should be treated as part of the Direct Expenses. Variances due to abnormal reasons should not form part of the Direct Expenses.**

   If standards have been fixed for any direct expenses, such as job charges, AMC etc/ variance analysis of direct expenses should be done. Variance due to normal reason will form part of Direct Expenses and any abnormal variance will be excluded from Direct Expenses. The variance account enables management to observe the extent to which actual Direct Expenses are differing from planned objectives or predetermined estimates.

   For example, due to strike of the contracted labour, higher charges were paid to another contractor to get the job executed. The variance in the above situation should not form part of the Direct Expenses due to abnormal reasons.

9. **Any subsidy/grant/incentive or any such payment received/receivable with respect to any Direct Expenses should be reduced for ascertainment of the cost of the cost object to which such amounts are related**.

   Subsidy and grant received/receivable should be recognized on a systematic basis. These should be matched with the related cost for which these are intended to compensate over the period.

   Example:

   Subsidy may be for non-conventional energy and certain direct expenses on design and drawing have been incurred in this regard. Such Direct expenses shall be reduced to the extent of subsidy received while ascertainment of the cost of the non-conventional energy.

10. **Any abnormal portion of the direct expenses where it is material and quantifiable should not form part of the Direct Expenses.**

    Since inclusion of such items in cost will make the cost not comparable in a normal situation.

    Example:

    Certain Direct Expenses were incurred on design and drawing, but due to change in the specification of the product, these drawings were abandoned and were treated as abnormal cost on the ground of having materiality and quantifiable. In case such Direct Expenses cannot be quantified and are not material, it will form part of the Direct Expenses.

11. **Penalties, damages paid to statutory authorities or other third parties should not form part of the Direct Expenses.**

    Penalties/damages are levied by the statutory authorities for non-compliance with statutory requirements/delay and should not form part of the Direct Expenses.

    Example:

    - Penalty for delay in depositing Provident Fund contribution with the Provident Commissioner.
    - Demurrages levied by transporter for not removing goods
    - Penalties for keeping hazardous goods in unauthorized places in transit without proper safeguards.
    - Penalties / Damages are an abnormal cost and do not form part of the Direct Expenses it is charged to profit & Loss account.

12. **Credits/recoveries relating to the direct expenses, material and quantifiable, should be deducted to arrive at the net direct expenses.**

    If any credit is available relating to direct expenses, it is to be reduced from the direct expenses.

    For example for a job on contract, special design and drawing charges were to be recovered from the client. While determining the cost of the job, design and drawing charges received should be credited to its cost.

13. **Any Change in the cost accounting principles applied for the measurement of the Direct Expenses should be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an organization.**

    Thus change in cost accounting principle / law for determining the cost can be made when required by any law or for compliance with cost accounting standards or it results in appropriate presentation of cost statement/cost records.

Assignment of costs

Direct Expenses that are directly traceable to the cost object should be assigned to that cost object.

Assignment of Direct Expenses involves establishing a suitable procedure to identify and record the same by the cost object. Invoice / Agreement / Job on contract is the source documents indicating details of direct expenses. For internally produced equipment, Work Order is the source for assignment of cost. These documents record the cost object / cost centre / job number, etc. and items listed are charged at their acquisition cost.

Note: For more details readers may refer Cost Accounting Standard (CAS)-10 on Direct Expenses issued by the Institute of Cost Accountants of India.

Chapter 8: Depreciation Accounting

Depreciation is a measure of the wearing out, consumption or other loss of value of a depreciable asset arising from use, passage of time or obsolescence through technology and market changes.

Depreciation is allocated so as to charge a fair proportion of the depreciable amount in each accounting period during the expected useful life of the asset. Depreciation includes amortization of assets whose useful life is predetermined.

Depreciable assets are assets which

(i) are expected to be used during more than one accounting period; and

(ii) have a limited useful life; and

(iii) are held by an enterprise for use in the production or supply of goods and services, for rental to others, or for administrative purposes and not for the purpose of sale in the ordinary course of business.

Useful life is either (i) the period over which a depreciable asset is expected to be used by the enterprise; or (ii) the number of production or similar units expected to be obtained from the use of the asset by the enterprise.

Depreciable amount of a depreciable asset is its historical cost, or other amount substituted for historical cost1 in the financial statements, less the estimated residual value.

1. Depreciation, though part of overheads, generally appears as a separate line item in the cost statements instead of being grouped under overheads. This is because of its size in the technology driven business of today and its unique characteristic of being non-cash cost.
2. Amortization of intangible assets is to grouped with depreciation because intangible assets themselves are grouped with Fixed Assets in the presentation under Schedule VII of the Companies Act 1956.
3. The measurement of depreciation in Cost accounts is a mirror to the practices in financial accounts.
4. Even where an entity charges 100% depreciation in financial books of accounts, depreciation based on estimated life is used for costing purposes with the difference taken to costing Profit & Loss or Reconciliation with Financial Accounts. It may, however, be kept in mind that in the absence of a costing balance sheet, the accounting and tracking of such depreciation has to be maintained properly in the cost books.
5. Where small value items are written off fully at the time of purchase in financial accounts, the same is generally adopted for cost accounts.
6. In the case of old plants, there is the special case for fully depreciated assets which however continue in regular service. Some entities continue to provide a notional depreciation on such assets for costing purposes, with the amount being shown in reconciliation with financial accounts. It may, however, be kept in mind that in the absence of a costing balance sheet, the accounting and tracking of such depreciation has to be maintained properly in the cost books.
7. Depreciation on the amount by which the asset is written up on Revaluation is charged to Revaluation Reserve in financial books. Some entities compute the depreciation on the revalued figure for costing purposes as reflecting the true cost of depreciation.

8. The cumulative depreciation charged in the Cost Accounts against any individual item of fixed asset should not exceed the original cost of the asset.

9. The assignment of depreciation should be done based on usage of fixed assets by various cost centres. The detailed Fixed Asset records should be maintained by the Company product/ cost centre wise. However there are some common items of fixed assets between cost centres e.g. yard piping carrying products from one process to another, common storage tanks and the like. Depreciation on common assets are apportioned to individual cost centre on some suitable basis e.g. yard piping is assigned to the cost centre receiving the material.

Chapter 9: Repairs and Maintenance Cost Accounting

Repairs and Maintenance Cost: Cost of all activities which have the objective of maintaining or restoring an asset in or to a state in which it can perform its required function at intended capacity and efficiency.

Repairs and Maintenance activities include routine or preventive maintenance, planned (predictive or corrective) maintenance and breakdown maintenance. The repair or overhaul of an asset which results in restoration of the asset to intended condition would also be a part of Repairs and Maintenance activity. Major overhaul is a periodic (generally more than one year) repair work carried out to substantially restore the asset to intended working condition.

Principles of Measurement

1. **The cost of Repairs and Maintenance is the aggregate of direct and indirect cost relating to repairs and maintenance activity**.

   Direct cost includes the cost of materials, consumable stores, spares, manpower, equipment usage, utilities and other identifiable resources consumed in such activity. Indirect cost includes the cost of resources common to various repairs and maintenance activities such as manpower, equipment usage and other costs allocable to such activities.

   Thus, it will be the aggregate of direct and indirect cost relating to repairs and maintenance activity.

   Here,

   Direct Cost = Cost of Materials+ Consumable Stores + spares + manpower + equipment usage + utilities and other identifiable resources consumed.

   Indirect Cost = Cost of Resources common to various repairs and maintenance activities (e.g. Manpower, Equipment Usage and other cost allocable to such activities)

2. Cost of in-house repairs and maintenance activity should include cost of materials, consumable stores, spares, manpower, equipment usage, utilities and other resources used in such activity.

3. Cost of Repairs and maintenance activity carried out by outside contractors inside the entity should include charges payable to the contractor and cost of materials, consumable stores, spares, manpower, equipment usage, utilities and other costs incurred by the entity for such jobs.

4. Cost of repairs and maintenance jobs carried out by contractor at its premises should be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discount), taxes and duties refundable or to be credited. This cost should also include the cost of other resources provided to the contractors.

5. Cost of repairs and maintenance jobs carried out by outside contractors will include charges made by the contractor and cost of raw materials, consumable stores, spares, manpower, equipment usage, utilities and other costs in such jobs.

6. Each type of repairs and maintenance is treated as a distinct activity, if material and identifiable.

   For example, routine or preventive maintenance, planned (predictive or corrective) maintenance and breakdown maintenance should be identified separately.

7. Cost of spares replaced which do not enhance the future economic benefits from the existing asset beyond its previously assessed standard of performance will be included under repairs and maintenance cost.
8. High value spare when replaced by a new spare and if it is reconditioned, which is expected to result in future economic benefits, the same should be taken into stock. Such a spare will be valued at an amount that measures its service potential in relation to a new spare which amount will not exceed the cost of reconditioning of the spare.
9. The cost of major overhaul should be amortized on a rational basis. Major overhaul is the periodic (generally more than one year) repair work carried out to substantially restore the asset to the intended working condition.
10. Finance Costs incurred in connection with the repairs and maintenance activities should not form part of Repairs and Maintenance Cost.
11. Repairs and maintenance costs should not include imputed costs.
12. Price variances related to repairs and maintenance, where standard costs are in use, should be treated as part of repairs and maintenance cost. The portion of usage variances attributable to normal reasons should be treated as part of repairs and maintenance cost. Usage variances attributable to abnormal reasons should be excluded from repairs and maintenance cost.
13. Subsidy/Grant/Incentive or amount of similar nature received/receivable with respect to repairs and maintenance activity, if any, should be reduced for ascertainment of the cost of the cost object to which such amounts are related.
14. Any repairs and maintenance cost resulting from some abnormal circumstances, if material and quantifiable, should not form part of the repairs and maintenance cost.
15. Fines, penalties, damages and similar levies paid to statutory authorities or other third parties should not form part of the repairs and maintenance cost.
16. Credits/recoveries relating to the repairs and maintenance activity, material and quantifiable, should be deducted to arrive at the net repairs and maintenance cost.
17. Any change in the cost accounting principles applied for the measurement of the repairs and maintenance cost should be made only if, it is required by law or for compliance with the requirements of a law or a change would result in a more appropriate preparation or presentation of cost statements/cost records of an organization.

Assignment of Cost

1. Repairs and maintenance cost shall be traced to a cost object to the extent economically feasible.
2. If the repair and maintenance cost is not directly traceable to cost object, it should be assigned based on either of the following two principles:
   - Cause and Effect
   - Benefits received
3. If the repairs and maintenance cost is shared by several cost objects, the related cost should be measured as an aggregate and distributed among the cost objects.

Note: For more details readers may refer Cost Accounting Standard (CAS)-6 on Repairs and Maintenance Material Cost issued by the Institute of Cost Accountants of India.

Chapter 10: Cost of Service Cost Centre Accounting

Service Cost Centre: The cost centre which primarily provides auxiliary services across the enterprise.

The cost centre which provides services to Production, Operation or other Service Cost Centre but not directly engaged in manufacturing process or operation is a service cost centre. A service cost centre renders services to other cost centers / other units and in some cases to outside parties.

Examples of service cost centers are Engineering, Workshop, Research & Development, Quality Control, Quality Assurance, Designing, Laboratory, Welfare Services, Safety, Transport, Component, Tool Stores, Pollution Control, Computer Cell, Dispensary, School, Crèche, Township, Security etc.

Principles of Measurement

1. Each identifiable service cost centre should be treated as a distinct cost object for measurement of the cost of services subject to the principle of materiality.
2. Cost of service cost centre should be the aggregate of direct and indirect cost attributable to services being rendered by such cost centre.
3. Cost of in-house services should include cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other resources used in such service. Cost of other resources should include related overheads.
4. Cost of services rendered by contractors within the facilities of the entity should include charges payable to the contractor and cost of materials, consumable stores, spares, manpower, equipment usage, utilities, and other resources provided to the contractors for such services.
5. Cost of services rendered by contractors at their premises should be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discount), taxes and duties refundable or to be credited. This cost should also include the cost of resources provided to the contractors.
6. Cost of services for the purpose of **inter unit transfers** should also include distribution costs incurred for such transfers.
7. Cost of services for the purpose of **inter-company transfers** shall also include distribution cost incurred for such transfers and administrative overheads.
8. Cost of services rendered to outside parties shall also include distribution cost incurred for such transfers, administrative overheads and marketing overheads.
9. Finance costs incurred in connection with the Service Cost Centre shall not form part of the cost of Service Cost Centre.
10. The cost of service cost centre shall not include imputed costs.
11. Where the cost of service cost centre is accounted at standard cost, the price and usage variances related to the services cost Centre shall be treated as part of cost of services. Usage variances due to abnormal reasons shall be treated as part of abnormal cost.
12. Any Subsidy / Grant / Incentive or any such payment received / receivable with respect to any service cost centre shall be reduced for ascertainment of the cost to which such amounts are related.

13. The cost of production and distribution of the service shall be determined based on the normal capacity or actual capacity utilization whichever is higher and unabsorbed cost, if any, shall be treated as abnormal cost. Cost of a Stand-by service shall include the committed costs of maintaining such a facility for the service.

14. Any abnormal cost where it is material and quantifiable shall not form part of the cost of the service cost centre.

15. Penalties, damages paid to statutory authorities or other third parties shall not form part of the cost of the service cost centre.

16. Credits/recoveries relating to the service cost centre including charges for services rendered to outside parties, material and quantifiable, shall be reduced from the total cost of that service cost centre.

17. Any change in the cost accounting principles applied for the measurement of the cost of Service Cost Centre shall be made, only if it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an enterprise.

Assignment of Service Cost

1. Assigning cost of services based on traceability to a cost object in an economically feasible manner will be the guiding principle.

2. Where the cost of services rendered by a service cost centre is not directly traceable to a cost object, it will be assigned on the most appropriate basis.

3. The most appropriate basis of distribution of cost of a service cost centre to the cost centers consuming services is to be derived from logical parameters which could be related to the usage of the service rendered. The parameter should be equitable, reasonable and consistent.

Note: For more details readers may refer Cost Accounting Standard (CAS)-13 on Cost of Service Cost Centre issued by the Institute of Cost Accountants of India.

Chapter 11: Production Overheads Accounting

Production Overheads comprise of indirect material cost, indirect employee cost and indirect expenses. They are termed indirect because they are not directly identifiable or allocable to the ultimate cost object, usually a product or service, in an economically feasible way.

Production Overheads are costs involved in the production process or in rendering services. Production overheads include administration cost relating to production, factory, works or manufacturing. The terms Production Overheads, Factory Overheads, Works Overheads and Manufacturing Overheads denote the same meaning and are used interchangeably.

Since production overheads cannot be economically traced to products and services, they are assigned to them on some equitable basis. Production overheads include all expenses incurred by the factory from receipt of raw materials until completion of production.

For example,

- Salaries for staff for production planning, technical supervision, factory administration etc
- normal idle time cost
- expenses for stores management
- consumable stores
- factory rent,
- factory light, fuel, power, repair, oil, gas and water
- security expenses in the factory
- labour welfare expenses
- dispensary and canteen expenses
- depreciation of plant and machineries
- repair and maintenance of factory building and plant & machineries
- insurance
- quality control etc.

Principles of Measurement

1. **Production overheads should be the aggregate of cost of resources consumed in production activities relating to indirect expenses incurred by the factory of an organization.**

   Production overheads generally represent the cost of shared services by various activities and processes in manufacture of final product. Production overheads comprise items of expenses Salaries of production staff, planning, technical supervision, factory administration, store management expenses, factory rental, factory repair and maintenance expenses etc. The principles of measurement as indicated above under Material Cost, Employee Costs and Utilities and under Repairs and Maintenance given hereinafter will apply to these elements included in production overheads.

2. The cost of product manufacturing services procured from outside should be determined at the value of invoice or agreed price including duties and taxes and other expenditure directly attributable thereto net of discounts (other than cash discounts), taxes and duties refundable or to be credited.

3. If the subsidy or grant including any incentive or any amount of similar nature which is received or is receivable with respect to production overheads should be reduced for ascertainment of cost of the cost object to which such amounts are related.
4. The production overheads will not include any abnormal cost. Abnormal cost is an unusual or atypical cost whose occurrence is usually irregular and unexpected and/ or due to some abnormal situation of the production or operation
5. Fines, penalties, damages and similar levies which are paid to statutory authorities or other third parties should not form part of the production overheads.
6. Credits and recoveries relating to the production overheads including those rendered without any consideration which is of material value and are quantifiable should be deducted to arrive at the net production overheads.
7. Any change in the cost accounting principles applied for the measurement of the production overheads should be made only if it is required by law or for any compliance with the requirements of any standard or a change would result in a more appropriate preparation or presentation of cost statements/ cost records of an organization.

Assignment of cost

1. While assigning overheads, traceability to a cost object in an economically feasible manner should be the guiding principle. The cost which can be traced directly to a cost object shall be directly assigned.
2. Assignment of production overheads to the cost objects should be based on either of the following two principles:

   i) Cause and Effect - Cause is the process or operation or activity and effect is the incurrence of cost.

   ii) Benefits received – overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

   In case of facilities created on a standby or ready to serve basis, the cost shall be assigned on the basis of expected benefits instead of actual.
3. There is a distinct preference for assigning production overheads on the basis of "cause and effect" analysis. What or who causes the costs to be incurred is a more rational criterion to charge costs rather than size or benefits received.
4. Production overheads are usually accumulated under production cost centres to facilitate absorption by products or services**.** These costs are assigned to the products on the basis of resources used by the product at the production centre.

   Examples of basis of primary distribution of some items of production overheads:

Item of Cost	**Basis of Apportionment**
Power	H.P. rating of Machines x hours x LF *
Fuel	Consumption rate x hour
Jigs, tools & fixtures	Machine hours or Man hours
Crane hire charges	Crane hours or weight of materials handled
Supervisors' salary & fringe benefits	Number of employees
Labour welfare cost	Number of employees

Rent & rates	Floor or Space area
Insurance	Value of Fixed Asset
Depreciation	Value of Fixed Asset

5. The overheads assigned to the production cost centres are charged to products/ services through an overhead absorption rate for each cost centre.

Common bases for assignment of Production overheads to Cost Objects are:

Bases of denominator	**Applicability**
Unit of Production	When single product is produced or various products are similar in specifications.
Material Cost	Where the overheads are mostly related to material.
Direct employee cost	When conversion process is labour intensive and wage rates are substantially uniform
Direct employee hour	When conversion process is labour intensive
Machine Hour or Vessel Occupancy or Reaction Hour or Crushing Hour etc	When production mainly depends on performance of the base

A preferred approach for assignment of overheads to cost objects is to use multiple drivers instead of a single driver such as machine hour, where feasible.

6. A preferred approach to assignment of overheads is the assigning of cost of resources to activities and assigning the cost of activities to Cost Objects through use of cost drivers, wherever feasible.
7. Also there are service cost centres through which the product does not pass through but which provide a support function to the production cost centres. The cost of services rendered by a service cost centre is not directly traceable to a cost object, it should be assigned on the most appropriate basis.
8. The most appropriate basis of distribution of cost of a service cost centre to the cost centres consuming services is to be derived from logical parameters which could be related to the usage of the service rendered. The parameter shall be equitable, reasonable and consistent.
9. Charging overheads on the basis of "benefits received" by the various users is preferred. This requires some measure of benefit to be developed.
10. Sometimes capacity in a service department is created in anticipation of demand for services. It is appropriate to allocate such capacity costs on the basis of "capacity to serve" rather than actual usage of services.
11. Ultimately all overheads must be charged to products of services. Hence the total production overheads of Production Cost Centres are applied to products passing through them using a suitable absorption base.

12. Before the final step of absorption, production overheads of production cost centres have to be segregated between fixed overheads and variable overheads. The fixed overheads are absorbed by products based on normal capacity or actual capacity utilization whichever is higher. Variable overheads are absorbed by products based on actual capacity utilization.

Note: For more details readers may refer Cost Accounting Standard (CAS)-3 on Overheads issued by the Institute of Cost Accountants of India.

Chapter 12: Administrative Overheads Accounting

Administrative Overheads: ***Cost of all activities relating to general management and administration of an organisation.***

Administrative overheads should not include production overheads, marketing overheads and finance cost. Though production overheads includes administration cost relating to production, factory, works or manufacturing. These expenses are sum of all expenses incurred in connection with the formulation and implementation of policy, direction, controlling the operations, which are not related to the production, marketing, or R&D activity.

These are indirect Costs that are incurred in support of programs, outputs or other operating activities. These include cost of functions such as senior management, information systems, finance and accounting, which usually cannot be assigned on a cause and effect basis. Other support costs that may be assigned on that basis such as purchasing (procurement), personnel (human resources), insurance and property logistics, are sometimes also included in this term.

For example,

- Salaries of administrative and accounts staff
- Directors' Fees
- General office expenses like rent, lighting, rates and taxes, telephone, printing and stationery, postage etc
- Bank Charges
- Audit Fees
- Legal Expenses
- Depreciation
- Repair and Maintenance of office building etc.

Principles of Measurement

1. **Administrative overheads should be the aggregate of cost of resources consumed in activities relating to general management and administration of an organization.**

   Administration overheads generally represent the cost of shared services, cost of infrastructure and general management costs. Administrative overheads comprise items such as employee costs, utilities, office supplies, legal expenses and outside services. The principles of measurement as indicated above under Material Cost, Employee Costs and Utilities and under Repairs and Maintenance given hereinafter will apply to these elements included in administrative overheads.

2. In case of leased assets, if the lease is an operating lease, the entire rentals should be included in the administrative overheads. If the lease is a financial lease, the finance cost portion should be segregated and treated as part of finance cost.

3. The cost of software which is developed in-house, purchased, licensed or which is customized and it includes up-gradation cost shall have to be amortized over its estimated useful life.

   When hardware requires up-gradation along with software up-gradation, then compatible estimated lives be used for the two sets of cost.

4. The cost of administrative services procured from outside should be determined at the value of invoice or agreed price including duties and taxes and other expenditure directly attributable thereto net of discounts (other than cash discounts), taxes and duties refundable or to be credited.
5. If the subsidy or grant including any incentive or any amount of similar nature which is received or is receivable with respect to any administrative overheads should be reduced for ascertainment of cost of the cost object to which such amounts are related.
6. The administrative overhead will not include any abnormal administrative cost.

   Example: Expense incurred in a situation of natural calamity is an abnormal expense and should not be included in administrative overheads.
7. Fines, penalties, damages and similar levies which are paid to statutory authorities or other third parties should not form part of the administrative overheads.
8. Credits and recoveries relating to the administrative overheads including those rendered without any consideration which is of material value and are quantifiable should be deducted to arrive at the net administrative overheads.
9. Any change in the cost accounting principles applied for the measurement of the administrative overheads should be made only if it is required by law or for any compliance with the requirements of any standard or a change would result in a more appropriate preparation or presentation of cost statements/ cost records of an organization.

Assignment of Cost

1. The assignment of cost is guided by the traceability to a cost object in an economically feasible manner which forms as the guiding principle.
2. The assignment of administrative overhead is based upon the cost objects and based on either of the two principles:
   - **Principle of Cause and Effect** - Cause is the process or operation or activity and effect is the incurrence of cost.
   - **Benefits received –** overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.
3. The costs of shared services should be assigned to user activities on the basis of actual usage.
4. Where the resources by way of infrastructure are shared the cost should be assigned on a readiness to serve basis.
5. General management costs should be assigned on rational basis.

Note: For more details readers may refer Cost Accounting Standard (CAS)-11 on Administrative overheads issued by the Institute of Cost Accountants of India.

Chapter 13: Selling and Distribution Overheads Accounting

Selling Overheads: Selling Overheads, also known as Selling Costs, are the expenses related to sale of products and include all Indirect Expenses in sales management for the organization.

Selling Costs include all costs relating to regular sales and sales promotion activities.
Examples of expenses which are included in selling cost are:

a. Salaries of sales personnel
b. Travelling expenses of sales personnel
c. Commission to sales agents
d. Advertisement costs
e. Sales promotion expenses including cost of promotional material such as product brochures, catalogues etc.,
f. Collection costs including legal expenses for recovery of dues
g. Market research cost
h. Royalty on sale
i. After sales service costs
j. Warranty costs etc.,

Distribution Costs are the costs incurred in handling a product from the time it is completed in the works until it reaches the ultimate consumer.

Distribution costs are the costs incurred for distribution of product to customers.

Examples of Distribution Costs:

a) Transportation cost
b) Secondary packing cost
c) Packing repacking / labeling at an intermediate storage location
d) Cost of warehousing salable products (cost of warehousing covers depots, godowns, storage yards, stock yards etc).
e) Cost of delivering the products to customers.

Note:

1. Primary packaging cost is included in production cost whereas secondary packaging cost is distribution cost.

2. In exceptional cases, for example in case of heavy industries equipment supply, installation cost at delivery site for heavy equipment which involves assembling of parts, testing etc is included in production cost but not distribution cost.

   For example: Installation cost of a gas turbine at plant site is included in the cost of production of gas turbine.

Principles of Measurement

1. The selling overheads and distribution overheads are collected under different cost pools such as :

   Selling Overheads

   (i) Sales Employees cost

   (ii) Rent

   (iii) Traveling expenses

   (iv) Warranty Claim

   (v) Brokerage & Commission

   (vi) Advertisement relating to sales and sales promotion

   (vii) Sales incentive

   (viii) Bad Debts

   Distribution Overheads

   (i) Secondary Packaging

   (ii) Freight & forwarding

   (iii) Warehousing & storage

   (iv) Insurance etc.

2. Selling Overheads or selling costs are a combination of direct costs relating to selling of products or service and indirect costs of sales management.

3. Distribution overheads or distribution costs are the costs incurred in handling a product from the time it is ready for dispatch until it reaches the ultimate consumer. Distribution costs include, cost of secondary packing, transportation costs, cost of warehousing etc.

4. It is necessary to distinguish "selling" costs from "distribution costs". The latter relate mainly to costs incurred before sales are generated and are therefore indirect to product while distribution costs are more direct to products.

5. Transportation cost is an important element of cost for procurement of materials for production and for distribution of product for sale. Therefore, Cost Accounting Records should present transportation cost separately from the other cost of inward materials or cost of sales of finished goods.

6. Standardize cost records should be kept for the expenses relating to transportation and computation of transportation cost.

7. Cost of Transportation comprises of the cost of freight, cartage, transit insurance and cost of operating fleet and other incidental charges whether incurred internally or paid to an outside agency for transportation of goods but does not include detention and demurrage charges.

Assignment of Cost

1. Some items of selling overheads and distribution overheads are directly identified and absorbed to products or services and remaining part of selling and distribution overhead along with the with share of administration overheads relating to selling and distribution activities are to be apportioned to various products or jobs or services on the basis of net actual sales value (i.e. Gross sales value less excise duty, sales tax and other government levies).

2. Selling costs are to be recorded or assigned to marketing segments first before being assigned to product. Thus selling costs must first be identified to markets, distribution channels, territories, salesman etc., before being assigned to orders and to products.

3. Selling costs of a marketing segment are assigned to customer orders relating to the segment and then to products based on sales quantity or value. It facilitates customer profitability analysis when the order becomes the focal point of reference in cost accounting.

4. Distribution overheads or Costs are to be recorded or assigned as distribution cost incurred in handling a product from the time it is completed in the works until it reaches the ultimate consumer. These are the costs incurred for distribution of product to customers. These may be identified as Transportation cost, secondary packing cost, repacking / labeling at an intermediate storage location, cost of warehousing, cost of delivering the products to customers etc.

5. Cost of Transportation is aggregate of the cost of freight, cartage, transit insurance and cost of operating fleet and other incidental charges whether incurred internally or paid to an outside agency for transportation of goods but does not include detention and demurrage charges.

6. Cost of transportation should be classified as inward transportation cost and outward transportation Cost. Inward transportation costs will form the part of the cost of procurement of materials which are to be identified for proper allocation/ apportionment to the materials / products. Outward transportation cost will form the part of the cost of sale and is to be allocated / apportioned to the materials and goods on a suitable basis.

7. The acceptable bases for assigning common transport costs to products are:

    a. Weight
    b. Volume of goods
    c. Tonne km
    d. Units / equivalent units
    e. Value of goods

8. The transportation costs assigned to products are charged to units based on some measure which factors in the distance e.g. tonne km.

9. Transportation costs should be broadly divided into two categories

    (a) Cost of operating own fleet

    (b) Cost of hired transport

10. Costs under either category may include costs

    (a) Directly allocable to products or

    (b) To be apportioned to products

11. Penalty, detention charges, demurrage charges and other abnormal costs are excluded from transportation cost.

Chapter 14: Accounting for Cost of Finance

Finance Costs: ***Costs incurred by an enterprise in connection with the borrowing of funds.***

This will include interest and commitment charges on bank borrowings, other short term and long term borrowings, amortisation of discounts or premium related to borrowings, amortisation of ancillary cost incurred in connection with the arrangements of borrowings, finance charges in respect of finance leases, other similar arrangements and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest costs. The terms Finance costs and Borrowing costs are used interchangeably.

Principles of Measurement

1. Finance costs incurred in connection with acquisition of resources such as materials, utilities and the like will not form part of the cost of such resources.
2. Bank charges for negotiation of documents in connection with a purchase material or resources are generally treated as finance costs and should not be included in material cost or other resources.

   This is based on the premise that sale documents are negotiated through bank to avoid credit risks or to avail bank finance. Hence Bank charges on bills negotiated through bank on collection or acceptance basis are often added to material cost or other resources but are best excluded from material cost or other resources.
3. Interest when charged by the supplier for the whole of part of the credit period extended is treated as a finance charge. This is so even if the interest appears on the face of the invoice.
4. Exchange losses or gains incurred after the purchase transaction is completed is not treated as material cost or other resources but is to be treated as finance cost.
5. In case of leased assets, if it is an operating lease – the entire rentals will be treated as a part of administrative overheads, while in case of a financial lease – the finance cost portion will be segregated and treated as a part of finance costs.
6. Material is often held for long periods for seasoning, maturing etc. The storage and interest cost for such storage should be treated as part of material cost.

Assignment of Cost

1. Interest and Finance charges are accumulated under suitable heads as below in the financial books before they are taken to cost accounts:
   a) Interest on debentures and bonds
   b) Interest on long term loans
   c) Interest on working capital finance in the form of cash, credit or overdraft including short term loans
   d) Interest on overdue payments to suppliers and others
   e) Discounting charges on bills of exchange
   f) Bank charges on bills negotiated through Bank for sales or purchases
   g) Letter of credit charges
   h) Guarantee commission/ commitment charges
   i) Cash discount and many more

2. Working capital investment by product line should be arrived at directly or apportioned on the following:

   - **Raw Material Stocks** – Direct or on the basis of raw materials consumed
   - **Stores** – On the basis of stores consumed excluding special high value items which can be identified directly.
   - **Work-in-Process and Finished Goods** - Direct
   - **Book Debts** – Direct or on the basis of sales (gross)
   - **Other Current Assets** – except high value items which can be directly identified with products, on the basis of sales or cost of sales.

3. Other finance charges are identified by product lines or products for big items of expenditure or otherwise grouped and charged to product lines or products based on cost of materials consumed, cost of production, and cost of sales or sales.

4. Where the assignment is done initially to product lines as for interest on long term loans, such charges are assigned to individual products on the basis of cost of sales or sales.

5. For the purpose of assignment, Interest charges are grouped under

   i. interest on long term funds

   ii. interest on working capital funds

6. The former is assigned to product lines based on fixed capital investment (including fixed assets and mould and dies) in such product lines. A portion of the interest is also charged to outside investments, if they exist, and excluded from cost of sales. For this purpose, it is usual to develop an average cost of long term funds and apply it to fixed capital investment in each product line.

7. Consideration of imputed/notional Interest on owners' funds is not an accepted practice in cost accounting.

Chapter 15: Cost Build-up for a Production/Manufacturing Industry

A cost accountant should study the client's organizational set-up and the processes involved in manufacturing the final product. The entire process should be classified under different production cost centres, Utilities (Water, Steam Power etc.), Factory (Production) Overheads, Administration Overheads, and Selling & Distribution Overheads. The expenses booked under different expenses heads under an audited Profit & Loss Account can be taken as the base for allocation of expenses. It is assumed that the activity/cost centre for which an expense is incurred is captured at the time of incurrence.

Expenses directly identifiable to a cost centre should be allocated to that centre/utility. Expenses of common nature, not directly identifiable to any of the production cost centre or utility centre should be accumulated under the different Overheads depending on its nature of incidence. An illustrative list of expense items is given below.

Employee Benefits

- Salaries, Wages, Bonus Etc.
- Contribution to Provident & Other Funds
- Staff Welfare Expenses

Power & Fuel

- Fuel
- Water Charges

Consumable Stores and Spares

Repairs and Maintenance

- Plant & Machinery
- Buildings
- Others

Rent

Insurance

Rates & Taxes

Payment to Auditors

Travelling & Conveyance

Communication Expenses

Printing & Stationery

Bank Charges

Security Force Expenses

Sales Promotion Expenses

Handling Expenses

Miscellaneous Expenses

Transportation Charges

Quality Control

Royalty or Technical Know-how

Technical Assistant Fees

Lease Rent

Research and Development

Packing Expenses

Borrowing Charges

Loss on Assets Sold, Lost or Written Off

Exchange Rate Fluctuations

Provision for Doubtful Debts, Advances, Claims & Obsolescence

Depreciation

Total Expenses

Classification of Overheads:

As explained above, expenses which cannot be directly allocated to a cost centre, like, insurance, rent, rates & taxes, telephone, fax, printing & stationery, postage etc., should be classified under the three overheads according to its nature and source.

Secondary Allocation:

1. The costs accumulated as above for service utilities, like water, steam power etc., and should be allocated to different cost centers on the basis of units consumed by the user centre by crediting the respective utility centre.
2. The Factory Overheads including apportioned share of service utilities should then be apportioned to the production cost centers on a suitable basis.
3. The total expenses of individual cost centers including the allocated service utility expenses and apportioned share of Factory Overheads should be classified under Direct Charges (Variable) and Conversion Charges (Fixed) of that production cost centre.
4. The Direct Charges would include such expenses, which are allocated to a centre but are variable in nature. Examples are Piece Rate Wages, Production Incentives, Allocated share of Water, Steam, Power etc.
5. The total of expenses less the Direct Charges would constitute Conversion Charges.
6. The Direct and Conversion Charges arrived at as above will then be absorbed in the products based on the basis of absorption costing method. In this connection it should be kept in mind that conversion cost for manufactured goods should include only those costs that are associated with the units produced and is corollary to the principle that expenditure should be included to the extent to which it has been incurred in bringing the product to its present location and condition.
7. The allocation of fixed production overheads (conversion charges) for their inclusion in the costs of conversion is to be based on the normal capacity of the production facilities. In other words, the idle capacity cost should not be a part of the cost of production. The idle capacity is the difference between the practical capacity and the actual capacity utilized.
8. Normal capacity has been defined as the production expected to be achieved on an average over a number of period or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance.

9. To arrive at normal capacity the following factors may be considered:

   a) the level of activity over the period of the normal business cycle and seasonal variations;

   b) the budgeted level of activity for the year under review and for the ensuing years; and,

   c) the level of activity achieved both in the year under review and in the previous, say three years.

   In practice, a normal level of activity is established by reference to the budgeted or expected level of activity over several years in relation to the installed capacity. It is suggested that, wherever applicable, the normal capacity of individual cost centre be determined in relation to the installed capacity of the primary machine of the cost centre.

   The proportion of overheads allocated to a unit of production is not increased as a consequence of low production or idle plant, and overheads which are not allocated are recognized as an expense in the period in which they are incurred.

   The normal capacity thus determined should be expressed in terms of, say, hours or unit of measure normally adopted by the industry. As explained earlier, the normal capacity of individual cost centers should be determined in line with above principles and the rate of absorption of conversion charges to product should be determined. The conversion charges of a cost centre is then to be apportioned to the product(s) passing through that cost centre for the number of hours or unit of measure, as applicable, multiplied by the rate. The unabsorbed portion of conversion charges, if any, is to be treated as a charge against profits and not as a part of the cost of production.

   The Direct Charges being variable with the level of activity/production, should be absorbed in full based on the actual hours or actual unit of measure, as the case may be. Consequently, there would be no question of unabsorbed direct charges.

Realizable Value of Scrap and/or Bye-products:

The production process may generate scrap/wastes. This may fetch some value after being sold as scrap or waste. The actual value realized on such sale should be credited to the cost of production. Depending on the industry and the stage at which such scrap is generated, the credit may also be given to the cost of raw materials at the time of determining the landed cost of materials.

In case a by-product is obtained in the course of manufacture, the realizable value of the same should be credited to the cost of production.

Job Processing Charges:

The actual job work charges, if any, including freight, insurance and handling should form a part of the cost of production. The job work charges should be classified as a part of Direct Charges and is to be allocated to the product for which the job work has been incurred.

Administration Overheads:

Administration Overheads are to be apportioned to the products on a suitable basis. In smaller organizations or single unit companies, where there may not be a clear distinction of management functions, the cost of management may be allocated on suitable bases to the functions of production and selling. However, in large organizations, where the activities are categorized under different strategic business units or divisions, there necessarily is a corporate entity vested with the function of corporate management decisions. Such overheads should be classified under corporate expenses forming part of the total Administration Overheads.

Selling & Distribution Overheads:

The selling & distribution function is clearly overheads incurred, which are related to the selling activity of the organization.

A flow of cost build-up starting with the financial accounts is given below

Expense Control Statement

	Particulars	Total Rs.'000	PCC1 Rs.'000	PCC2 Rs.'000	PCC3 Rs.'000	PCC4 Rs.'000	Power Rs.'000	Steam Rs.'000	FOH Rs.'000	AOH Rs.'000	S&D Rs.'000
1	Salaries & Wages	9,550	1,000	1,200	1,100	1,300	250	200	1,500	2,000	1,000
2	Incentive Wages	660	100	120	110	130	20	30	150		
3	Stores & Spares	1,180	200	250	300	150	50	30	200		
4	Repairs & Maintenance	840	100	150	200	110	15	15	250		
5	Insurance	245	10	15	20	25	5	5	50	55	60
6	Depreciation	806	110	115	120	125	3	3	100	110	120
7	Total (1 to 6)	13,281	1,520	1,850	1,850	1,840	343	283	2,250	2,165	1,180
	Allocation of Utilities:										
8	Steam(on units)	-	-	94	-	-	189	(283)	-		
9	Total (7 + 8)	13,281	1,520	1,944	1,850	1,840	532	-	2,250	2,165	1,180
10	Power(on units)	-	50	60	100	110	(532)	-	152	40	20
11	Total (9 + 10)	13,281	1,570	2,004	1,950	1,950	-	-	2,402	2,205	1,200
	Apportionment of Overheads										
12	Factory Overheads (on Salaries & Wages)	-	522	627	574	679			(2,402)		
13	Total (11 + 12)	13,281	2,092	2,631	2,524	2,629	-	-	-	2,205	1,200
14	Administration Overheads (on conversion cost upto FOH)	-	420	509	500	516				(2,205)	260
15	**Total (13 + 14)**	**13,281**	**2,512**	**3,140**	**3,024**	**3,145**	**-**	**-**	**-**	**-**	**1,460**
16	Variable Overheads	874	150	274	210	240					
17	Fixed Overheads	12,407	2,362	2,866	2,814	2,905					1,460
18	**Total (16 + 17)**	**13,281**	**2,512**	**3,140**	**3,024**	**3,145**	**-**	**-**	**-**	**-**	**1,460**

Calculation of Overhead Absorption Rates

	Particulars	Total	PCC1	PCC2	PCC3	PCC4	Power	Steam	FOH	AOH	S&D
19	No. of Machines		4	3	2	1					
20	No. of Working Days		330	330	330	330					
21	No. of Shifts		3	3	3	3					
22	Gross Available Hours		3,960	2,970	1,980	990					
23	Less, Normal Down Time (%)		15%	20%	20%	15%					
24	Less, Normal Down Time (Hours) (22*23)		594	594	396	149					
25	Net Available Hours (22 - 24)		3,366	2,376	1,584	842					
26	Hours Worked/Utilised		2,500	2,350	1,584	800					
27	Capacity Utilisation (%) (26/25)		74.27%	98.91%	100.00%	95.07%					
	Machine Hour Rate (Rs./Hour)										
28	Variable Overheads (16/26)		60.00	116.60	132.58	300.00					
29	Fixed Overheads (17/25)		701.72	1,206.23	1,776.52	3,452.17					

a) *The Variable and Fixed Overheads are to be absorbed to the product cost on the basis of the above rates multiplied by the number of hours utilised by a particular product at a particular cost centre*

b) *The Selling & Ditribution will be absorbed in the product on the basis of sales realisation net of Excise Duty*

c) *PCC means "Production Cost Centre".*

	ALLOCATION BASIS	Total	PCC1	PCC2	PCC3	PCC4	Power	Steam	FOH	AOH	S&D
	Steam Units	750		250			500				
	Power Units	265	25	30	50	55			75	20	10
	Basis of AOH Apportionment										
	Total as per 12 above	11,076	2,092	2,631	2,524	2,629					1,200
	Less, Direct Charges										
	(Variable Overhead Allocations)										
	Steam	(94)	-	(94)	-	-					
	Power	(320)	(50)	(60)	(100)	(110)					
	Incentive Wages	(460)	(100)	(120)	(110)	(130)					
	Conversion Cost for AOH	10,202	1,942	2,357	2,314	2,389					1,200

Statement showing cost of Utilities like Water / Power / Steam etc.

I Quantitative Information

Sno.	Particulars	Unit	Current year	Previous year
1	Installed Capacity			
2	Quantity Produced			
3	Capacity Utilization (%)			
4	Quantity Purchased, if any			
5	Self consumption including losses (to be specified)			
6	Net Units Available			

II Cost Information:

Sno.	Particulars	Quantity	Rate per unit	Amount	Cost per Unit	
					Current Year	Previous Year
		Unit	Rs.	Rs.	Rs.	Rs.
1	Materials Consumed (specify) Indigenous Imported Self Manufactured/Produced					
2.	Process Materials/ Chemicals (specify)					
3.	Utilities (specify):					
4.	Direct Employees Cost					
5.	Direct Expenses (specify)					
6.	Consumable Stores and Spares					
7.	Repairs and Maintenance					
8.	Depreciation					
9.	Lease rent, if any					
10.	Other overheads					
11.	Sub-total (1 to11)					
12.	Less: Credit, if any					
13.	**Total cost (12-13)**					
	Apportionment: (cost centre-wise) 1. PCC 1 2. PCC 2 3. PCC 3					
	Total					

Statement showing Cost of PCC1

Sno.	Particulars	Quantity	Rate	Amount	Cost per Unit (Rs.)	
			Rs.	Rs.	Current Year	Previous Year
1.	**Raw Material** (a) Indigenous (b) Imported					
2.	Process Material/Chemicals (specify)					
3.	Utilities (specify details)					
4.	Direct Employee Cost					
5.	Direct Expenses (Specify)					
6.	Consumable Stores & Spares					
7.	Repairs and Maintenance					
8.	Quality Control Expenses					
9.	Research and Development					
10.	Technical Know-how/Royalty					
11.	Depreciation/Amortization					
12.	Other Production Overheads					
13.	Add/(Less) Stock Adjustments					
14.	Total					
15.	Less Credit for Wastage or By-products (Specify)					
16.	**Total Cost**					

Sno.	Products	Basis of apportionment of Cost	Actual Quantity	Amount (Rs.)
	Total Cost Apportioned to:			
	i) Sales			
	iii) Transferred to PCC-2			
	Total			

Statement showing Cost of Production and Sales

Sno.	Particulars	Quantity	Rate Rs.	Amount Rs.	Cost per Unit (Rs.)	
					Current Year	Previous Year
1	Materials Consumed (specify details) a) Indigenous Purchased b) Imported c) Transferred from PCC1					
2	Process Materials/Chemicals (specify)					
3	Utilities (specify details)					
4	Direct Employees Cost					
5	Direct Expenses					
6	Consumable Stores & Spares					
7	Repairs & Maintenance					
8	Quality Control Expenses					
9	Research & Development Expenses					
10	Technical know-how Fee / Royalty, if any					
11	Depreciation/Amortization					
12	Other Production Overheads					
13	Total (1 to 12)					
14	Add/Less: Work-in-Progress Adjustments					
15	Less: Credits for Recoveries, if any					
16	Primary Packing Cost					
17	Cost of Production/Operations (12 + 13 to 17)					
18	Increase/Decrease in Stock of Finished Goods					
19	Less: Self/Captive Consumption (incl. Samples, etc.)					
20	Other Adjustments (if any)					
21	Cost of Production/Operation of Goods/Services Sold (17 + 18 to 20)					
22	Administrative Overheads					
23	Secondary Packing Cost					
24	Selling & Distribution Overheads					
25	Interest & Financing Charges					
26	Cost of Sales (21 + 22 to 25)					
27	Net Sales Realization (Net of Taxes and Duties)					
28	Margin [Profit/(Loss) as per Cost Accounts] (27 - 26)					

Chapter 16: List of Terminologies and Principles

Definitions:

Cost: Cost is a measurement, in monetary terms, of the amount of resources used for the purpose of production of goods or rendering services.

Cost Centre: Any unit of Cost Accounting selected with a view to accumulating all cost under that unit. The unit may be a product, a service, division, department, section, a group of plant and machinery, a group of employees or a combination of several units. This may also be a budget centre.

Cost unit is a form of measurement of volume of production or service. This unit is generally adopted on the basis of convenience and practice in the industry concerned.

Examples of Cost Units :

- *Power - MW*
- *Cement/ Steel – MT*
- *Autromobile - Number etc.*

Classification of cost is the arrangement of items of costs in logical groups having regard to their nature (subjective classification) or purpose (objective classification).

Items should be classified by one characteristic for a specific purpose without ambiguity.

Scheme of classification should be such that every item of cost can be classified.

Basis of classification :

i) *Nature of expense*
ii) *Relation to object – traceability*
iii) *Functions / activities*
iv) *Behaviour fixed, semi-variable or variable*
v) *Management decision making*
vi) *Production Process*
vii) *Time period*

Material Cost is the cost of material of any nature used for the purpose of production of a product or a service.

Labour Cost means the payment made to the employees, permanent or temporary, for their services.

Expenses are other than material cost or labour cost which are involved in an activity. Expenditure on account of utilities, payment for bought out services, job processing charges etc. can be termed as expenses.

Normal Cost is a cost that is normally incurred at a given level of output in the conditions in which that level of output is achieved.

Abnormal Cost is an unusual or a typical cost whose occurrence is usually irregular and unexpected and due to some abnormal situation of the production.

Activity Based Costing (ABC) - A cost accounting method that measures the cost and performance of process related activities and cost objects. It assigns cost to cost objects based on their use of activities, and recognizes the causal relationship of cost drivers to activities.

Cost Driver - Any factor that causes a change in the cost of an activity or output resulting in the activity consuming fewer or greater amounts of resources.

Cost Object - An activity, output or item whose cost is to be measured. In a broad sense, a cost object can be an asset account, organization, a function, a task, a product, a service or a customer.

Administrative Costs - Indirect Costs that are incurred in support of programs, outputs or other operating activities. They include costs of functions such as senior management information systems, finance and accounting, which usually cannot be assigned on a cause and effect basis. Other support costs that may be assigned on that basis such as purchasing (procurement),personnel (human resources), insurance and property logistics are sometimes also included in this term.

Assigning Costs - A process that identifies specific costs with programs, outputs, activities or other cost objects. There are three appropriate methods of cost assignment, listed here in order of preference:

(a) directly tracing costs wherever economically feasible:

(b) cause and effect when determinable; and

(c) allocating costs on a reasonable and consistent basis.

Avoidable Costarecost associated with an activity that would not be incurred if the activity were not performed.

Unavoidable Costs - These are inescapable costs which are essentially to the incurred, within the limits or norms provided for. It is the cost that must be incurred under a programme of business restriction. It is fixed in nature and inescapable.

Business Process Reengineering - The radical redesign of processes (and the human and technical environment) to achieve improved results of operation.

Direct Material Cost - It is the cost of material which can be directly allocated to a cost centre or a cost object in an economically feasible way.

Indirect Material - It is the cost of material which cannot be directly allocable to a particular cost centre or cost object.

Direct Labour Cost - It is the cost of wages of those workers who are readily identified or linked with a cost centre or cost object. **Indirect Labour Cost -** It is the wages of the employees which are not directly allocable to a particular cost centre.

Direct Expenses - These are the expenses other than direct material or direct labour which can be identified or linked with the cost centre or cost object.

Indirect Expenses - These are the expenses other than of the nature of material or labour and cannot be directly allocable to a particular cost centres.

Production Cost– Production Cost is the cost of all items involved in the production of a product or service. It includes all direct costs and all indirect costs related to the production.
Production Overhead - It is involved in the production process or in rendering service.

Administration Costs - These are expenses incurred for general management of an organization. These are of the nature of indirect costs and are also termed as Administration Overhead.

Administrative Overheads - Expenses in the nature of indirect costs, incurred for general management of an organization.

Selling Costs - These are indirect costs related to selling of products or services and include all indirect cost in sales management for the organization.

Selling Overheads-Selling Overheads, also known as Selling Costs, are the expenses related to sale of products and include all Indirect Expenses in sales management for the organization.

Distribution Costs - These are the cost incurred in handling a product from the time it is completed in the works until it reaches the ultimate consumer.

Distribution Overheads- Distribution overheads, also known as Distribution Cost, are the costs incurred in handling a product from the time it is ready for despatch until it reaches the ultimate consumer.

Research & Development Costs - It is the cost for undertaking research to improve quality of a present product or improve process of manufacture, develop a new product, market research etc and commercialization thereof.

Fixed Cost - It is the cost which does not vary with the change of volume of activity in the short run. These costs are not affected by temporary fluctuation in activity of an enterprise. These are also known as period costs.

Variable Costs - It is the cost of elements which tends to directly vary with the volume of activity. Variable cost has two parts:

a) Variable Direct Cost: and

b) Variable Indirect Costs are termed as variable overhead,

Semi-variable Costs - These contain both fixed and variable elements. They are partly affected by fluctuation in the level of activity.

Marginal Cost - It is the aggregate of variable costs, i.e. prime cost plus variable overhead. Marginal cost per unit is the change in the amount at any given volume of output by which the aggregate cost changes of the volume of output is increased or decreased by the unit.

Differential Cost - It is the change in cost due to change in activity from one level to another.

Opportunity Cost - It is the value of the alternatives foregone by adopting a particular strategy or employing resources in specific manner.

Replacement Cost - It is the cost of an asset in the current market for the purpose of replacement.

Relevant Cost - These are the costs relevant for a specific purpose or situation.

Imputed Costs - These are hypothetical or notional costs, not involving cash outlay, computed only for the purpose of decision making.

Sunk Costs - These are historical costs which are incurred i.e. 'sunk' in the past and are not relevant to the particular decision making problems being considered.

Out-of-Pocket Cost - It refers to a cost which need not be paid for acquiring any goods, assets or services. It does not involve any outflow of cash. It does not involve any outflow of cash. In competitive markets, out-of-pocket-costs help to arrive at fruitful decisions for conservancy of cash resources.

Batch Cost - It is the aggregate cost related to a cost unit which consist identity throughout one or more stages of production.

Process Cost - When the production process is such that goods are produced from a sequence of continuous or repetitive operations processes, the cost incurred during a period is considered as process cost. The process cost per unit is derived by dividing the process cost by number of units produced in the process during the period.

Operation Cost - It is the cost where a specific operation is involved in a production process or business activity.

Operating Cost - It is the cost incurred in conducting a business activity.Operating costs refer to the cost of undertakings which do not manufacture any product but which provide services.

Contract Cost - It is the cost of a contract with some terms and conditions of adjustment agreed upon between the contractee and the contractor.

Joint Cost - These are the common cost of facilities or services employed in the output of two or more simultaneously produced or otherwise closely related operations, commodities or services.

Historical Costs - These are the actual costs of acquiring assets or producing goods or services.

Pre-determined Costs - It is computed in advance of production, on the basis of a specification of all the factors affecting cost and cost data.

Pre-determined costs may be either standard or estimated.

Standard Cost - A pre-determined norm applied as a scale of reference for assessing actual cost, whether these are more or less. The standard cost serves as a basis of cost control and as a measure of productive efficiency when ultimately posed with an actual cost. It provides management with a medium by which the effectiveness of current results is measured and responsibility of deviation placed.

Estimated Cost - It is the cost which is prepared in advance prior to the performance of operations or even acceptance of sale orders.

Defectives - End product and/or intermediate product unit that do not meet quality standards. This may include reworks or rejects.

Reworks - Defectives which can be brought up to the standards by putting in additional resources.

Rejects - Defectives which cannot meet the quality standards even after putting in additional resources.

Scrap - Discarded material having some value in few cases and which is usually either disposed of without further treatment (other than reclamation and handling) or reintroduced into the production process in place of raw material.

Waste - Material loss during production or storage, due to various factors such as evaporation, chemical reaction, contamination, unrecoverable residue, shrinkage, etc. and discarded material which may or may not have value.

Spoilage - Production that does not meet with dimensional or quality standards in such a way that it cannot be rectified economically and is sold for a disposal value. Net spoilage is the difference between costs accumulated up to the point of rejection and the salvage value.

Abnormal Idle Time - An unusual or atypical employee idle time occurrence of which is usually irregular and unexpected or due to some abnormal situations.

Direct Employee Cost - The cost of employees which can be attributed to a Cost Object in an economically feasible way.

Employee Cost - The aggregate of all kinds of consideration paid, payable and provisions made for future payments for the services rendered by employees of an enterprise (including temporary, part time and contract employees). Consideration includes wages, salary, contractual payments and benefits, as applicable or any payment made on behalf of employee. This is also known as Labour Cost.

Finance Costs - Costs incurred by an enterprise in connection with the borrowing of funds.

Classifying Costs - A process of identifying costs by type, behaviour, account, source, accounting period, etc. so that those costs may be properly assigned to cost objects.

Common Cost - The cost of resources employed jointly in the production of two or more outputs that cannot be directly traced to ay one of those outputs.

Production Cost - This cost is a sequence of operations which begins with supplying materials, engaging labour, using services and ends with primary packing of the product. Therefore, production cost will include direct material cost, direct labour cost, direct expenses and factory overhead.

****