



**M.COM.  
SEMESTER - IV (CBCS)**

**CORPORATE FINANCIAL  
ACCOUNTING**

**SUBJECT CODE : 67501**

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**Revised Syllabus of Courses of  
Master of Commerce (M.Com) Programme at Semester IV  
(To be implemented from Academic Year- 2022-23)**

**Group A: Advanced Accounting, Corporate Accounting and  
Financial Management**

**1. Corporate Financial Accounting**

**Modules at a Glance**

SN	Modules	No. of Lectures
1	Corporate Financial Reporting	15
2	International Financial Reporting Standards (IFRS) & Ind - AS	15
3	Valuation of Business for Amalgamation & Merger	15
4	Consolidated Financial Statement	15
<b>Total</b>		<b>60</b>

SN	Modules/ Units
1	<b>Corporate Financial Reporting</b>
	<ul style="list-style-type: none"> <li>• Introduction of Financial Reporting</li> <li>• Need for reporting</li> <li>• Contents of Financial Report</li> <li>• Recent trends in Financial reporting</li> </ul>
2	<b>International Financial Reporting Standards (IFRS) &amp; Ind - AS</b>
	<ul style="list-style-type: none"> <li>• Accounting Standards (AS) – applicability, interpretation, scope and compliance in India</li> <li>• Introduction to I.F.R.S</li> <li>• Ind – AS</li> <li>• Specific Ind AS: <ul style="list-style-type: none"> <li>Borrowing Costs</li> <li>Operating Segments</li> <li>Earning per share</li> <li>Income Taxes</li> <li>Accounting for fixed assets</li> </ul> </li> </ul>
3	<b>Valuation of Business for Amalgamation &amp; Merger</b>
	Meaning, Need & Approach Methods of valuation
4	<b>Consolidated Financial Statement</b>
	Meaning, Stand Alone Financial Statements Consolidated Financial statements – Applicability, Advantages & Disadvantages Procedure of Consolidation of Balance-sheet & Profit & Loss Account (Excluding cross holding, Chain Holding & Foreign Subsidiary)

## **CORPORATE FINANCIAL REPORTING**

### **Unit Structure**

- 1.1 Introduction
- 1.2 Developments of Financial Reporting Objectives
- 1.3 Basic Objectives of Financial Reporting
- 1.4 Indian Perspective in Financial Reporting
- 1.5 Qualitative Characteristics of Financial Reporting Information
- 1.6 ASI, Disclosure of Accounting Policies
- 1.7 Notes on Accounts in Corporate Annual Reports
- 1.8 Director's Report
- 1.9 Auditors Report
- 1.10 Exercise

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### **1.1 INTRODUCTION**

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Today reporting by companies has to assume a high level of importance. Formerly annual reports used to be less revealing and reporting was not timely and we not catering to requirement of various shareholder. More was concealed than what was revealed. But today thanks to investor awareness global standards used the effective functioning of regulatory bodies corporate reporting has become more revealing.

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### **1.2 DEVELOPMENTS OF FINANCIAL REPORTING OBJECTIVES**

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The subject of financial reporting objectives has been generally recognized as very important in accounting area since a long time. Many accounting and professional institutes all over the world have made attempts to define the objective of financial statements and financial reporting which are vital to the development of financial accounting theory and practice. This section describes developments in this area at the international level, particularly USA and UK. It can be rightly said that most of the attempts in the area of financial reporting objectives has been made in USA and UK and accounting developments in these countries have great impact on accounting developments and practices in other countries of the world.

## **Accounting Principles Board (APB) Statement No. 4**

In USA, the APB Statement No. 4 “Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises”, (1970) was the first publication which published the objectives of financial statements. These objectives may be summarized as follows:

1. The particular objectives of financial statements are to present fairly, and in conformity with generally accepted accounting principles, financial position, results of operations, and other changes in financial position.

2. The general objectives of financial statements are

a) To provide reliable information about economic resources and obligations a business enterprise in order (i) Evaluate its strengths and weakness, (ii) Show its financing and investment, (iii) Evaluate its ability to meet its commitments, and (iv) Show its resources base for growth;

b) To provide reliable information about changes in net resources resulting from a business enterprise’s profit- directed activities in order (i) Show to investors expected dividend return, (ii) Show the operation’s ability to pay creditors and suppliers, provide jobs for employees pay taxes, and generate funds for expansion, (iii) Provide management with information for planning and control, and

(iv) Show its long-term profitability;

c) To provide financial information useful for estimating the earning potential of the firm;

d) To provide other needed information about changes in economic resources and obligations; and

e) To disclose other information relevant to statement user’s needs.

3. The qualitative objectives of financial accounting are the following:

a) Relevance, which means selecting the information most likely to aid users in their economic decisions.

b) Understandability, which implies not only that the selected information must be intelligible but also that the users can understand it.

c) Verifiability, which implies that the accounting results may be corroborated by independent measurers using the same measurement methods.

d) Neutrality, which implies that the accounting information is directed towards the common needs of users rather than the particular needs of specific users.

e) Timeliness, which implies an early communication of information to avoid delays in economic decision-making.

f) Comparability, which implies that differences should not be the result of different financial accounting treatments.

g) Completeness. Which implies that all the information that 'reasonably' fulfils the requirements of other qualitative objectives should be reported?

### **True blood Report**

To develop objectives of financial statements, a Study Group was appointed in 1971 by American Institute of Certified Public accountants under the Chairmanship of Robert M. Trueblood. The Study Group solicited the views of more than 5000 corporations, professional firms, unions, public interest groups, national and international accounting organisations and financial publications. The study group conducted more than 50 interviews with executives from all sectors of the business and from government. To elicit the widest range of views, 35 meetings were held with institutional and professional groups representing major segments of the US economy.

The study group submitted its report to AICPA in October 1973. The objectives developed in the study Group Report are as follows:

1. The basic objective of financial statements is to provide information useful for making economic decisions.
2. An objective of financial statements is to serve, primarily, those users who have limited authority, ability, or resources to obtain information and who rely on financial statements as their principal source of information about an enterprise's economic activities.
3. An objective of financial statements is to provide information useful to investors and creditors for predicting, comparing and evaluating potential cash flows to them in terms of amount, timing and related uncertainty.
4. An objective of financial statements is to provide users with information for predicting, comparing, and evaluating enterprise earning power.
5. An objective of financial statements is to supply information useful in judging management's ability to utilize enterprise resources effectively in achieving the primary enterprise goal.
6. An objective of financial statements is to provide factual and interpretative information about transactions and other events which is useful for predicting, comparing and evaluating enterprise earning power. Basic underlying assumptions with respect to matters subject to interpretation, evaluation, prediction, or estimation should be disclosed.
7. An objective is to provide a statement of financial position useful for predicting, comparing and evaluating enterprise earning power. This statement should provide information concerning enterprise transactions and other events that are part of incomplete earning cycles. Current values



should also be reported when they differ significantly from historical costs. Assets and liabilities should be grouped or segregated by the relative uncertainty of the amount and timing of prospective realization of liquidation.

8. An objective is to provide a statement of periodic earnings useful for predicting, comparing and evaluating enterprise earning power. The net result of completed earning cycles and enterprise activities resulting in recognizable progress towards completion of incomplete cycles should be reported. Changes in values reflected in successive statements of financial position should also be reported, but separately, since they differ in terms of their certainty realization.

9. An objective is to provide a statement of financial activities useful for predicting, comparing, and evaluating enterprise earning power. This statements should report mainly on factual aspects of enterprise transactions having or expected to have significant cash consequences. This statement should report data that require minimal judgment and interpretation by the compiler.

10. An objective of financial statements is to provide information useful for the predictive process. Financial forecasts should be provided when they will enhance the reliability of users' predictions.

11. An objective of financial statements for governmental and non-profit organizations is to provide information useful for evaluating the effectiveness of management of resources in achieving the organization's goals. Performance measures should be qualified in terms of identified goals.

12. An objective of financial statements is to report on those activities of the enterprise affecting society which can be determined and described or measured and which are important to the role of the enterprise in its social environment.

The twelve objectives recommended in the report seem to fall into five tiers as described in Table 1. Tier I is the basic objective which underlies all financial reporting. Tier II objectives identify the financial statement users and their needs. Tier III objectives translate users' needs in terms of enterprise. Tier IV objectives describe information about the enterprise which satisfied or is presumed to satisfy users' needs. Tier V objectives concern skeletal financial statements directed at communicating the information identified by the objectives in Tier IV.

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### **1.3 BASIC OBJECTIVES OF FINANCIAL REPORTING**

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Financial reporting should provide information to help present and potential investors and creditors and other users in assessing the amounts, timing, and uncertainty of prospective cash receipts from dividends or interest and the proceeds from the sale, redemption, or maturity of securities or loans. The prospects for those cash receipts from dividends or interest and the proceeds from the sale, redemption, or maturity of

securities or loans, the prospects for those cash receipts are affected by an enterprise's ability to generate enough cash to meet its obligations when due and its other cash operating needs, to reinvest in operations, and to pay cash dividends, and may also be affected by perceptions of investors and creditors generally about that ability, which affect market prices of the enterprise's securities. Thus, financial reporting should provide information to help investors, creditors, and others assess the amount, timing and uncertainty of prospective net cash inflows to the related enterprise (Para 37).

Financial reporting should provide information about the economic resources of an enterprise, the claims to those resources (obligations of the enterprise to transfer resources to other entities and owners' equity) and the effects of transactions, events, and circumstances that change resources and claim to those resources (Para 40)

Financial reporting should provide information about an enterprise's financial performance during a period. Investors and creditors often use information about the past to help in assessing the prospects of an enterprise. Thus, although investment and credit decisions reflect investors' and creditors' expectations about future enterprise performance, those expectations are commonly based at least partly on evaluations of past enterprise performance (Para. 42)

The primary focus of financial reporting is information about an enterprise performance provided by measures of earnings and its components (Para 43)

Financial reporting should provide information about how an enterprise obtains and spends cash, about its borrowing and repayment of borrowing, about its capital transactions, including cash dividends and other distribution of enterprise resources to owners, and about other factors that may affect an enterprise's liquidity or solvency (Para 49).

Financial reporting should provide information about how management of an enterprise has discharged its stewardship responsibility to owners (stockholders) for the use of enterprise resources entrusted to it (Para 50).

Financial reporting should provide information that is useful to managers and directors in making decisions in the interests of owners (Para 52).

Besides the above objectives, the FASB Concept No. 1 contains the following important highlights;

1. Financial reporting is not an end in itself but is intended to provide information that is useful in making business and economic decisions.
2. The objectives of financial reporting are not immutable- they are affected by the economic, legal, political and social environment in which financial reporting takes place.

3. The objectives are also affected by the characteristics and limitations of the kind of information that financial reporting can provide.
  - I. The information pertains to business enterprises rather than to industries or the economy as a whole.
  - II. The information often results from approximate, rather than exact, measures.
  - III. The information largely reflects the financial effects of transactions and events that have already happened.
  - IV. The information is but one source of information needed by those who make decisions about business enterprises.
  - V. The information is provided and used at a cost.
4. The objectives in this statement (Concept No. 1) are those of general purpose external financial reporting by business enterprises.
  - a) The objective stem primarily from the needs external users who lack the authority to prescribe the information they want and must rely on information management communicates to them.
  - b) The objective are directed toward the common interest of many users in the ability of the enterprise favorable cash flows but are phrased using investment and credit decisions as a reference to give them a focus. The objectives are intended to be broad rather than narrow.
  - c) The objectives pertain to financial reporting and are not restricted to financial statements.
5. Investors' and 'Creditors' are used broadly and include not only those who have or contemplate having a claim to enterprise resources but also those who advise or represent them.
6. although investment and credit decisions reflect investor's and creditors expectations about future enterprise performance, those expectations are commonly based at least partly on valuations of past enterprise performance.
7. The primary focus of financial reporting is information about earnings and its components.
8. Information about enterprises earning based on accrual accounting generally provides a better indication of an enterprise's present and continuing ability to generate favorable cash flows than information limited to the financial effects of cash receipts and payments.
9. financial reporting is expected to provide information about an enterprise's financial performance during a period and about how management of an enterprise has discharged its stewardship responsibility to owners.

10. Financial accounting is not designed to measure directly the value of a business enterprises, but the information it provides may be helpful to those who wish to estimate its value.

11. Investors, creditors, and others may use reported earnings and information about the elements of financial statements in various ways to assess the prospects for cash flows. They may with for example, to evaluated management's performance, estimate 'earning power', predict future earnings, assess risk, or to confirm, change, or reject earlier predictions or assessments. Although financial reporting should provide basic information to aid them, they do their own evaluating, estimating, predicting, assessing, confirming, changing, or rejecting.

12. Management knows more about the enterprise and its affairs than investors, creditors or other outsiders' and accordingly can often increase the usefulness of financial information by identifying certain events and circumstances and explaining their financial effects on the enterprise.

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## **1.4 INDIAN PERSPECTIVE IN FINANCIAL REPRTING**

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In India, the basic purpose of financial reporting (as per Indian Companies Act. 1956) appears to provide shareholders of the company, financial statement and other related information. In India, shareholders, especially the existing shareholders, are the primary users of financial reporting. However, there are other potential users also who are equally interested in financial reporting information for making economic decisions. Therefore, the purpose of financial reporting in India should be to serve not only existing investors but prospective investors and creditors, and other external users as well.

### **GENERAL PURPOSE FINANCIAL REPORTING**

Generally speaking, the term 'financial reporting' is used to mean general purpose external financial reporting. Often it is said that the purpose of financial reporting is the preparation of general purpose reports for external users.

The users of financial statements include present and potential investors, employees, lenders, suppliers, and other trade creditors, customers, governments and their agencies and the public. They use financial statements in order to satisfy some of their different needs for information. These needs included the following:

**a) Investor** – The providers of risk capital and their advisors are concerned with the risk inherent, and return, provided by their investment, they need information to help them determine whether they should buy, hold or sell. Shareholders are also interested in information which enables them to assess the ability of the enterprise to pay dividends.

**b) Employees** – Employees and their representative groups are interested in information about the stability and profitability of their employers. They are also interested in information which enables them to

assess the ability of the enterprise to provide remuneration, retirement benefits and employment opportunities.

**c) Lenders** – Lenders are interested in information that enables them to determine whether their loans, and the interest attaching to them, will be paid when due.

**d) Suppliers and other trade creditors** – Suppliers and other creditors are interested in information that enable them to determine whether amounts owing to them will be paid when due. Trade creditors are likely to be interested in an enterprise over a shorter period than lenders unless they are dependent upon the continuation of the enterprises as a major customer.

**e) Customers** – Customers have an interest in information about the continuance of an enterprise, especially when they have a long-term involvement with, or are dependent on, the enterprise.

**f) Governments and their agencies** – Governments and their agencies are interested in the allocation of resources and, therefore, the activities of enterprises. They also require information in order to regulate the activities of enterprises, determine taxation policies and as the basis for national income and similar statistics.

**g) Public** – Enterprises affect members of the public in a variety of ways. For example, enterprises may make a substantial contribution to the local economy in many ways including the number of people they employ and their patronage of local suppliers. Financial statements may assist the public by providing information about the trends and recent developments in the prosperity of the enterprise and the range of its activities.

While all of the information needs of these users cannot be met by financial statements. There are needs which are common to all users. As investors are providers of risk capital to the enterprise, the provision of financial statements that meet their needs will also meet most of the needs of other users that financial statements can satisfy.

The management of an enterprise has the primary responsibility for the preparation and presentation of the financial statements of the enterprise. Management is also interested in the information contained in the financial statements that helps it carry out its planning, decision-making and control responsibilities. Management has the ability to determine the form and content of such additional information in order to meet its own needs. The reporting of such information, however, is beyond the scope of this framework. Nevertheless, published financial statements are based on the information used by management about the financial position, performance and changes in financial position of the enterprise.

Management as a user of information is as interested in information about assets, liabilities, earnings, and related elements as external users are, and need, generally, the same kind of information about these elements as external users. Thus, management is a major user of the same information

that is provided by external financial reporting. However, management's primary role in external financial reporting is that of communicating information for use by others. For that reason, it has a direct interest in the cost, adequacy, reliability, and understandability of external financial reporting.

### **SPECIFIC PURPOSE REPORT**

Financial reporting objectives in accounting literature so far has focused on general purpose financial reporting which aims to satisfy the information needs of all potential users. Company law provisions in almost all countries of the world have consistently accepted the utility of general purpose financial reporting. Due to this the separate (specific) needs of specific users have been largely ignored on the assumption that general purpose reports can satisfy the information needs of all external users. However, reasoning has also been made suggesting that the needs of specific users may be better served by presenting specific purpose reports to help them in their separately identifiable decision functions. For instance, financial reports submitted to obtain credit or loans, or government, or financial reports given to trade and industry may not satisfy other users' needs and expectations.

However, the proposal of specific purpose reports in company financial reporting is criticized on some counts.

Firstly, the cost of the developing specialized reports to satisfy special requirements of specific users may exceed the benefit when the company financial reporting policy is determined in its totality. Secondly, specialized needs of specific users cannot be ascertained with any degree of certainty. Thirdly, issuing multiple reports about the financial results of an enterprise can create confusion among various users. Multiple reports increase the perceived complexity of the environment complexity induce change in decision-makers' cognitive processing capabilities and, in turn, can decrease the effectiveness of decision-making by users. Fourthly, multiple reports may not be desirable and practicable from the standpoint of information economics.

To conclude, company financial reporting, in future, will continue to adhere to general purpose reporting system to aid investors, creditors, and other external users in their economic decisions. Meanwhile, in order to achieve the objectives of financial reporting (though general purpose reports) there is a continuous

need to investigate many vital aspects relating general purpose financial reports such as identifying information need of such users, determining the feasibility of providing general purpose information to meet these needs, determining the manner of reporting such information, and having a feedback from the users regarding the use and relevance of general purpose information.

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## 1.5 QUALITATIVE CHARACTERISTICS OF FINANCIAL REPORTING INFORMATION

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Qualitative characteristics or qualities necessary for information serve a major supporting role in the decision usefulness, decision model approach to accounting theory. Qualitative characteristics are the tributes that make the information provided in financial statements useful of users. Accounting information that is reported to facilitate economic decisions should possess certain characteristics or normative standards. The information must be useful in the formulation of objectives, themaking of decisions, or the direction and control of resources to accomplish objectives. The utility of information lies in its ability to reduce uncertainty about the actual state of affairs of a business enterprise to the user. The characteristics make information a desirable commodity and guide the selection of preferred accounting policies and methods form among available alternatives. These characteristics have been viewed as a hierarchy or qualities with usefulness for decision-making or most importance. The hierarchy of informational qualities which has been accepted by FASB (USA) in its Concept No. 2 Qualitative characteristics of Accounting Information is displayed in Table 12.2

International Accounting Standards Committee (IASC) has recognized the four principal qualitative characteristics of accounting information.

1.5.1 Understandability

1.5.2 Relevance

1.5.3 Reliability

1.5.4 Comparability

The other qualities suggested by IASC are materiality, faithful representation, substance over form, neutrality, Prudence, completeness, timeliness.

The qualitative characteristics that have been found possessing wider acceptance and recognition accounting literature are as follows;

### **1. Relevance**

Relevance is closely and directly related to the concepts of useful information. Relevance implies that all those items of information should be reported that may aid the users in making decisions and / or predictions. In general information that is given greater weight in decision-making is more relevant. Specially, it is information's capacity to make a difference that identifies it as relevant to a decision. American Accounting Association's Committee to Prepare a Statement of Basic Accounting Theory defines relevance as the primary standard and requires that information must bear upon or be usefully associated with actions it is designed to facilitate or results desired to be produced. Financial Accounting Standards Board in its Concept No. 1 (Para 47, 1978) comments:

“Relevant Accounting information must be capable of making a difference in a decision by helping users to form predictions about the outcomes of past, present and future events or to confirm or correct exceptions”.

The question of relevance arises after identification and recognition in of the purpose for which the information will be used. It means that information relevant for one purpose may not be necessarily relevant for other purposes. Information that is not relevant is useless because that will not aid users in making decisions. The relevant information also reduces decision-maker's uncertainty about future acts. A necessary test of the relevance of reportable data is the ability to predict events of interest to statement users. To say that accounting information has predictive value is not to say that it is itself a prediction. Predictive value here means value as an input into a predictive process, not value directly as a prediction.

In today's complex financial accounting environment, a general purpose report aims to fulfill the common needs of users so that information should be relevant to all users. In judging relevance of general purpose information, attention is focused on the common needs of user and specific needs of particular users will not be considered in this relevance information for all possible users and which may command universal relevance. However, this has been recognized a potentially satisfactory solution.

To conclude, relevance is the dominant criterion in taking decisions regarding information disclosure. It follows that relevant information must be reported. Relevance has been defined in accounting literature, but no satisfactory set of relevant items of information has been suggested. In this regard, an important task is to determine that needs of user (s) and the items of information that are relevant to target user (s).

## **2. Reliability**

Reliability is described as one of the two primary qualities relevance and reliability that make accounting information useful for decision-making. Reliable information is required to form judgment about the earning potential and financial position of a business firm. Reliability differs from item to item. Some items of information presented in an annual report may be more reliable than others. For example, information regarding plant and machinery may be less reliable than certain information about current assets because of differences in uncertainty of realization. Reliability is that quality which permits users of data to depend upon it with confidence as representative of what it purports to represent

## **3. Understandability**

Understandability is the quality of information that enables users to perceive its significance. The benefits of information may be increased by making it more understandable and hence useful to a wider circle of users. Presenting information which can be understood only by sophisticated users and not by others, creates a bias which is inconsistent with the standard of adequate disclosure. Presentation of information



should not only facilitate understanding but also avoid wrong interpretation of financial statement. Thus, understandable financial accounting information presents data that can be understood by users of the information and is expressed in a form and with terminology adopted to user's range of understanding. The Corporate Report observes:

“Understandability does not necessarily mean simplicity, or that information must be presented in elementary terms, for that may not be consistent with the proper description of complex economic activities. It does mean that judgment needs to be applied in holding the balance between the need to ensure that all material matters are disclosed and the need to avoid confusing users by the provision of too much detail. Understandability calls for the provision, in the clearest form, of all the information which the reasonably instructed reader can make use of and the parallel presentation of the main features for the use of the less sophisticated.”

Understandability of information is governed by a combination of user characteristics, and characteristics inherent in the information. Understandability should be determined in terms of broad classes of users (decision-makers) rather than particular user groups. Since company financial reporting aims at general purpose external financial reporting, all relevant users' needs should be considered in deciding the understandability of the information, and no decision should be based on specific circumstances of individual decision-makers.

#### **4. Comparability**

Economic decision required making choice among possible courses of actions. In making decision, the decision-maker will make comparisons among alternatives, which is facilitated by financial information. Comparability implies to have like things reported in a similar fashion and unlike things reported differently. Hendriksen defines comparability as “the quality or state of having enough like characteristics to make comparisons appropriate”. FASB (USA) defines comparability, “as the quality or state of having certain characteristics in common, and comparison is normally a quantitative assessment of the common characteristics. Clearly, valid comparison is possible only if the measurement used- the quantities or ratios- reliably represent the characteristic that is the subject of comparison”.

Financial reports of different firms are not able to achieve comparability because of differences in business operations of companies and also because of the management's viewpoints in respects of their transactions. Also, because there are different accounting practices to describe basically similar activities. Two corporate management may view the similar risk, uncertainly, benefit or sacrifice in different fashions and, thus, this would lead to different implications of financial statements. With information that facilitates interpretation, users are able to compare and assess the results of similar transactions and other events among enterprises.

Efforts, therefore, should be directed towards developing accounting standards to be applied in appropriate circumstances to facilitate comparisons and interpretation of data: areas of difference in accounting practices, which are not justified by difference in circumstances, should be narrowed; selection of an accounting practice should be based on the economic substance of an event or a transaction being measured and reported; and a desire to produce a particular financial statement result should not influence choice between accounting alternatives.

## 5. Consistency

Consistency of method over a period of time is a valuable quality that makes accounting numbers more useful. Consistent use of accounting principles from one accounting period to another enhances the utility of financial statements to users by facilitating analysis and understanding of comparative accounting data. It is relatively unimportant to the investor what precise rules or conventions are adopted by a company in reporting its earnings, if he knows what method is being followed and is assured that it is followed consistently from year to year. Lack of consistency produces lack of comparability. The value of inter-company comparisons is substantially reduced when material differences in income are caused by variations in accounting practices.

The quality of consistency can be applied in different situations, e.g. use of same accounting procedures by a single firm or accounting entity from period to period, the use of similar measurement concepts and procedures for related items within the statement of a firm for a single period, and the use of same procedures by different firms. If a change in accounting practices or procedures is made, disclosure of the change and its effects permits some comparability, although users can rarely make adjustments that make the data completely comparable.

Although consistency in the use of accounting principles from one accounting period to another is a desirable quality, but it, if pushed too far, will prove a bottleneck for bringing about improvement in accounting policies, practices, and procedures. No change to a preferred accounting method can be developing without sacrificing consistency; there is no way that accounting can develop without change. Users' needs in changing circumstances. When, it is found that current practices or presentations being followed are not fulfilling users' purposes, a new practice or procedure should be adopted. According to Backer, "different accounting methods are needed to reflect different management objectives and circumstances. The consensus of opinion among analysts interviewed was that standards are desirable as guidelines to financial reporting, but that management should be free to depart from these standards provided methods used and their effects are clearly disclosed".

Thus consistency and uniformity in accounting methods would not necessarily bring comparability. Instead of enforced uniformity, accounting standards should be developed which would be best or preferred methods in most cases. Such accounting standards should be

followed unless there is a compelling reason why they will not provide a correct and useful reflection of business operations and results. Also, full disclosure should be made of the alternative method applied and, whenever practical, of the monetary difference resulting from deviations from the standard. To conclude, consistency is desirable, until a need arises to improve practices, policies, and procedures.

## **6. Neutrality**

Neutrality is also known as the quality of freedom from bias' or objectivity. Neutrality means that, formulating or implementing standards, the primary concern should be the relevance and reliability of the information the results, not the effect that the new rule may have on a particular interest or user (s). a natural choice between accounting alternatives is free from bias towards a predetermined result. The objectives of (general purpose) financial reporting serve many different information users who have diverse interest, and no one predetermined result it likely to suit all user's interests and purposes. Therefore, accounting facts and accounting practices should be impartially determined and reported with no objective of purposeful bias toward any user or user group. If there is no bias in selection of accounting information reported, it cannot be said to favour one set of interests over another. It may, in fact, favour certain interests, but only because the information points that way.

To say that information should be free from bias is not to say that standards-setters or providers of information should not have a purpose in mind for financial reporting. In fact, information must be purposeful. Neutrality neither means 'without purpose' nor does it mean that accounting should be without influence on human behaviour. Accounting information cannot avoid affecting behaviour, nor should it. If it were otherwise, the information would be valueless-by definition, irrelevant and- the effort to produce it would be futile. It is, above all, the predetermination of a desired result, that is the negation of neutrality in accounting. To be neutral, accounting information must report economic activity as faithfully as possible, without colouring the image it communicates for the purpose of influencing behaviour in some particular direction.

## **7. Materially**

The concept of materiality permeates the entire field of accounting and auditing. The materiality concept implies that not all financial information need or should be communicated in accounting reports-only material information should be reported. Immaterial information may and probably should be omitted. Information should be disclosed in the annual report which is likely to influence economic decision of the users. Information that meets this requirement is material.

Generally, the decision-makers (investor, accountant and manager) see materiality in relation to actual assets or income. Investors see materiality in terms of the rate of changes or change in the rate of change. What

seems not to be material in business may turn out to be very important in the investment market. It has been established that the effect on earnings was the primary Standard to evaluate materiality in a specific case. Guidelines to test materiality are: amount of the item, trend of net income, average net income for a series of years, assets liability, trends and ratios establish meaningful analytical relationship of information contained in annual reports. Almost always, the relative rather than the absolute size of a judgment item determines whether it should

be considered material in a given situation. Losses from bad debts or pilferage that could be shrugged off as routine by a large business may threaten the continued existence of a small one. An error in inventory valuation may be material in a small enterprise for which it cut earnings in half, but immaterial in an enterprise for which it might make barely perceptible ripple in the earnings.

## **8. Timeliness**

Timeliness means having information available to decision-makers before it loses its capacity to influence decisions. Timeliness is an ancillary aspect of relevance. If information is either not available when it is needed or becomes available long after the reported events that it has no value for future action, it lacks relevance and is of little or no use.

Clearly, there are degrees of timeliness. Some reports need to be prepared quickly, say in case of takeover bid or strike. In some other contexts, such as routine reports by a business firm of its annual results, a longer delay in reporting information may materially affect the relevance and, therefore, the usefulness of information. But in order to have gain in relevance that comes with increased timeliness, it may involve sacrifices of other desirable characteristics of information, and as a result there may be an overall gain or loss in usefulness. For example, it may sometimes be desirable to sacrifice precision for timeliness, for an approximation produced quickly is often more useful than precise information that is reported after a longer delay. It can be argued that if in the interest of timeliness, the reliability of the information is sacrificed to a material degree; the usefulness of the information may be adversely affected.

## **9. Verifiability**

The quality of verifiability contributes to the usefulness of accounting information because the purpose of verification is to provide a significant degree of assurance that accounting measures represent, what they purport to represent. Verification does not guarantee the suitability of method used, much less the correctness of the resulting measure. It does convey some assurance that the measurement rule used, whatever it was, was applied carefully and without personal bias on the part of the measurer. In this process, verification implies and enhances consensus about measurements of some particular phenomenon.

The Accounting Principles Board of USA defines verifiability as: "Verifiable financial accounting information provides results that would

be substantially duplicated by independent measurers using the same measurement methods.”<sup>22</sup>

According to FASB, “Verifiability means no more than that several measurers are likely to obtain the same measure. It is primarily a means to attempting to cope with measurement problems stemming from the uncertainty that surrounds accounting measures and is more successful in coping with some measurement problems than others. Verification of accounting information does not guarantee that the information has a high degree of representational faithfulness and a measure with a high degree of verifiability is not necessarily relevant to the decision for which it is intended to be useful.”

## **10. Conservatism**

Conservatism is generally referred to as a convention that many accountants believe to be appropriate in making accounting decisions.

There is a place for a convention, such as conservatism – meaning prudence in financial accounting and reporting, because business and economic activities are surrounded by uncertainty, but it needs to be applied with care. Conservatism in financial reporting should no longer connote deliberate, consistent, understatement of net assets and profits. Conservatism is prudent reaction to uncertainty to try to ensure that uncertainties and risks inherent in business situations are adequately considered. Thus, if two estimates of amounts to be received or paid in the future are about equally likely, conservatism dictates using the less optimistic estimates. However, if two amounts are not equally likely, conservatism does not necessarily dictate using the more pessimistic amount rather than the more likely one. Conservatism no longer requires deferring recognition of income beyond the time that adequate evidence of its existence becomes available, or justifies recognizing losses before there is adequate evidence that they have been incurred.

## **11. Substance over Form (Economic Realism)**

Economic realism is not usually mentioned as a qualitative criterion in accounting literature, but it is important to investors. It is a concept that seems easy to understand but hard to define because perceptions of reality differ. In essence, economic reality means an accurate measurement, of the business operations, that is, economic costs and benefits generated in business activity. The definitional problem arises from cash v. accrual accounting, or the principle of matching costs with revenues. Accrual accounting is necessary for complex organizations, of course, but, where accruals and estimates have a considerable degree of uncertainty as to amount or timing, cash accounting would seem to come closer to economic realism.

There have been tendencies in accounting for “the media to become the message”, i.e. for accounting numbers to become the reality rather than the underlying facts they represent. These may give the illusion of steady earnings and as a result, both investors and management may feel to know

the facts about these fluctuations; if they find it useful to average earnings, they can do so themselves. The objective should be “to tell it like is”.<sup>25</sup>

The above mentioned characteristics (relevance, Materiality, understandability, comparability, consistency, reliability, neutrality, economic realism) make financial reporting information useful to users. These normative qualities of information are based largely upon the common needs of users.

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## **1.6 ASI, DISCLOSURE OF ACCOUNTING POLICIES**

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The Institute of Chartered Accountants of India (ICAI) issued ASI titled ‘Disclosure of Accounting Policies’ in November 1979. This standard is now mandatory and deals with the disclosure of significant accounting policies followed in preparing and presenting Financial Statements.

In general accounting policies are not at present regularly and fully disclosed in all financial statements. Many enterprises include in the Notes on the Accounts, description of some of the significant policies.

Even among the few enterprises that presently include in their annual reports a separate statement of accounting policies, considerable variation exists. The statement of accounting policies forms part of the accounts in some cases while in others it is given as supplementary information.

The purpose of this statement is to promote better understanding of financial statements by establishing through an accounting standard the disclosure of significant accounting policies and manner in which accounting policies are disclosed in the financial statements. Such disclosure would also facilitate a more meaningful comparison between financial statements of different enterprises.

### **ASI contains explanations on following points: Fundamental Accounting Assumptions**

1. Certain fundamental accounting assumptions underline the preparation and presentation of financial statement. They are usually not specifically stated because their acceptance and use are assumed. Disclosure is necessary if they are not followed.

The following have been generally accepted as fundamental accounting assumption;

**a) Going Concern** – The enterprise is normally viewed as a going concern, that is, as continuing in operation for the foreseeable future. It is assumed that the enterprise has neither the intention nor the necessity of liquidation or of curtailing materially the scale of the operation.

**b) Accrual** – Revenues and costs are accrued, that is, recognized as they are earned or incurred (and not as money is received or paid) and recorded in the financial statement of the periods to which they relate. (The considerations affecting the process or matching costs with revenues under the accrual assumption are not dealt with in this statement.)

## **2. Nature of Accounting Policies**

- a) The accounting policies refer to the specific accounting principle and the methods of applying those principles adopted by the enterprise in the preparation and presentation of financial statements.
- b) There is no single list of accounting policies which are applicable to all circumstances in which enterprises operate in a situation of diverse and complex economic activity make alternative accounting principles and methods of applying those principles acceptable. The choice of the appropriate accounting principles and the methods of applying those principles in the specific circumstances of each enterprise calls for considerable judgement by the management of the enterprise.
- c) The various statements of the institute of Chartered Accountants of India combined with the efforts of government and other regulatory agencies and progressive particularly in the case of corporate enterprises. While continuing efforts in this regard in future are likely to reduce the number still further, the availability of alternative accounting principles and methods of applying those principles is not likely to be eliminated altogether in view of the differing circumstances faced by the enterprises.

## **3. Areas in which deferring accounting policies are encountered**

The following are examples of the areas in which different accounting policies may be adopted different enterprises:

- Method of depreciation, depletion and amortization
- Treatment of expenditure during Construction
- Conversion of translation of foreign currency items
- Valuation of inventories
- Treatment of goodwill
- Valuation of investments
- Treatment of retirement benefits
- Recognition of profit on long-term contracts
- Valuation of fixed assets
- Treatment of contingent liabilities

The above list of example is not intended to be exhaustive.

## **4. Considerations in the Selection of Accounting policies**

The primary consideration in the selection of accounting policies by an enterprise is that the financial statements prepared and presented on the basis of such accounting policies should represent a true and fair view of

the state of affairs of the enterprise as at the balance sheet data and of the profit or loss for the period ended on that date.

For this purpose, the major considerations governing the selection and application of accounting policies are:

- a) Prudence** – In view of the uncertainty attached to future events, profits are not anticipated but recognized only when realized though not necessarily in cash. Provision is made for all known liabilities and losses even though the amount cannot be determined with certainty and represents only a best estimate in the light of available information.
- b) Substance over Form** – The accounting treatment and presentation in financial statement of transactions and events should be governed by their substance and not merely by the legal form.
- c) Materiality** – Financial statement should disclose all ‘material’ items, the knowledge of which might influence the decisions of the user of the financial statements.

## **5. Disclosure of accounting Policies**

- (i)** To ensure proper understanding of financial statement, it is necessary that all significant accounting policies adopted in the preparation and presentation of financial statements should be disclosed.
- (ii)** Such disclosure should form part of the financial statements.
- (iii)** It would be helpful to the reader of financial statement if they are all disclosed as such is one place instead of being scattered over several statements, schedules and notes.
- (iv)** Examples of matters in respect of which disclosure of accounting policies adopted will be required are contained in point No. 3. This list of examples is not, however, intended to be exhaustive.
- (v)** Any change in an accounting policy which has a material effect should be disclosed. The amount by which any item in the financial statements is affected by such change should also be disclosed to the extent as ascertainable. When such amount is not as certainable, wholly or in part, the fact should be indicated. If a change is made in the accounting policies which has no material effect on the financial statement for the current periods, but which is reasonably expected to have a material effect in later periods, the fact of such change should be appropriately disclosed in the period in which the change is adopted.
- (vi)** Disclosure of accounting policies or of changes therein cannot remedy a wrong or inappropriate treatment of the item in the accounts.

### **Accounting Standard in ASI**

- (i)** All significant accounting policies adopted in the preparation and presentation of financial statements should be disclosed.



(ii) The disclosure of the significant accounting policies as such should form part of the financial statement and the significant accounting policies should normally be disclosed in one place.

(iii) Any change in the accounting policies which has a material effect in the current period or which is reasonably expected to have a material effect in later periods should be disclosed. In the case of a change in accounting policies which has a material effect in the current period, the amount by which any item in the financial statements is affected by such change should also be disclosed to the extent ascertainable. Where such amount is not ascertainable, wholly or in part, the fact should be indicated.

(iv) If the fundamental accounting assumptions, viz. Going concern, consistency and accrual are following in financial statements, specific disclosure is not required. If a fundamental accounting assumption is not followed, the fact should be disclosed.

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## 1.7 NOTES ON ACCOUNTS IN CORPORATE ANNUAL REPORTS

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One of the important developments today in corporate reporting under schedules forming part of accounts and roles from part of accounts. Accounts normally consist of Balance Sheet and Profit & Loss Accounts and cash flow statement schedules for main part of accounts includes

- |     |            |   |
|-----|------------|---|
| (a) | Schedule A | - Share capital                                     |
| (b) | Schedule B | - Reserve & Surplus                                 |
| (c) | Schedule C | - Secured Loan                                      |
| (d) | Schedule D | - Unsecured Loan                                    |
| (e) | Schedule E | - Fixed assets                                      |
| (f) | Schedule F | - Investment  |
| (g) | Schedule G | - Current assets loans and advances                 |
| (h) | Schedule H | - Current Liabilities and provisions                |
| (i) | Schedule I | - Deferred revenue terms                            |
| (j) | Schedule J | - Contingent liability                              |
| (k) | Schedule K | - Sales and Service                                 |
| (l) | Schedule L | - Clts Increase                                     |
| (m) | Schedule M | - Manufacturing, construction and Operating expense |
| (n) | Schedule N | - Staff Expenses                                    |

- (o) Schedule O - Sales administrative and other expenses
- (p) Schedule P - Investors & borrowers
- (q) Schedule Q - Important accounting

Under Schedule Q viz significant accounting polices the are follow:

1. Basic of accounting
2. Sales and service income
3. Research & Development
4. Retirement benefits
5. Fixed Assets
6. Losses
7. Deprecations
8. Investment
9. Investor
10. Security premium account
11. Borrowing costs
12. Interest
13. Employee
14. Deferred revenue expenditure
15. Foreign currency transaction
16. Segment Reporting
17. Taxes on income
18. Accounting for Joint Ventures

**Note forming part of accounts:**

Under this a company the following are to the points of reporting by a company

1. Allotment of equity shares
2. Shareholder currently shares
3. Secured redeemable non point (NCBS) / Debentures
4. Loans and Mortgage
5. Consumer of finally debtors

6. Progress /money,
7. Balance with the schedule
8. Segment Reporting
9. Of related parts / related partly
10. Loss
11. Deferred tax assets / liabilities
12. Auditor remuneration
13. Vale of
14. Expenditure in foreign currency
15. Lest of SSI to when if company once more for so day
16. Sales corporate
17. Investor
18. Purchase of goods

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### **1.8 DIRECTOR'S REPORT: -**

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Director's report is a report submitted by the directors of a company to its shareholders, appraising them of the performance of the company under its direction. It is an exercise of self-evaluation. Director's report expresses the opinion of directors on the state of the company, explains performance and the financial results, discusses company's plans for expansion, diversification or modernization, tells about appropriation of profits, and elaborates company's future prospects and plans for investments. It is a synopsis of the company's activities during the year and during the interim period between the date of the balance sheet and date of the annual report. Director's report should take the investors into confidence by providing useful insights into the activities of the business, more than what the financial statements provide.

Director's report is valuable and if read intelligently, gives the investor good sense of company's working, its problems and future prospects.

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### **1.9 AUDITORS REPORT: -**

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Every company is subject to audit and an auditor makes a report to the members of the company on its state of affairs. It is a comment on accounts and on balance sheet and profit and loss account and other documents attached to the financial statements, which are laid in the AGM. Auditor's report to shareholders contains an opinion as to whether the financial statements present a true and fair view of the state of affairs of the company, in case of a balance sheet and of profit or loss in case of profit and loss account. They also report whether the books of accounts

are in agreement and whether there is any deviation from generally accepted accounting principles. It indicates the areas to which shareholders and investors must give due attention while assessing the financial strength of the company whose securities are being considered for investment.

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## 1.10 EXERCISE

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1. What do you mean by them accounting policy?
2. What is the remuneration of true blood report?
3. What are the primary objects of financial reporting?
4. Discuss the differ user of functional reporting?
5. What are the qualitative characteristics of financial reporting information?
6. What are the financial accounting
7. What are the areas in what different accounting plus are accounted? Discuss
8. Discuss important consideration in relating of accounting p
9. What do you mean by role on accounts in a corporate report?
10. Discuss schedules forming part of company annual report. Make a can study on a report?



# FINANCIAL REPORTING STANDARDS AND INDIAN -AS

## Unit Structure

- 2.1 Introduction
- 2.2 Meaning of IFRS
- 2.3 Objectives of IFRS
- 2.4 Scope of IFRS
- 2.5 List of IFRS
- 2.6 Challenges of IFRS
- 2.7 Convergence With IFRSs: Indian Perspective
- 2.8 Benefits of IFRS
- 2.9 Framework for the Preparation and Presentation of Financial Statements
- 2.10 IFRS -1: First Time adoption of IFRS
- 2.11 Solved Problem
- 2.12 Introduction to Borrowing Cost
- 2.13 Meaning and Definition of Borrowing Cost
- 2.14 Introduction to Segment Reporting
- 2.15 Explanatory Notes
- 2.16 Theoretical Questions on the Standard
- 2.17 Introduction to Earning per Share
- 2.18 Theory Questions
- 2.19 Accounting for Taxes on Income

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## 2.1 INTRODUCTION

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Accounting is the art and science of recording business transactions in best possible manner with proper selection and adoption of accounting policies and principles. Over the time it was felt necessary to ensure easy comparability the enterprises should follow uniform accounting methods. In India the Institute of Chartered Accountants of India governs the

profession of accountancy. The institute ensures professionalism and prudence in preparation and presentation of financial statements by issuing guidelines, accounting standards from time to time.

In today's world of globalization business enterprises have become more dependent on each other, across the nation and across the world. The globalization has forced more and more countries to open their doors for business expansion across borders and to foreign investments. Traditionally companies raised funds from domestic capital markets and financial institutions. The business was restricted to very few countries. The rapid expansion of international trade and internationalization of firms, the development of new communication technologies, and the emergence of international competitive forces has made it extremely necessary to have uniform and internationally acceptable accounting standards. Now it has been realized that under this global business scenario the business community is badly in need of a common accounting language that should be spoken by all of them across the world.

A financial reporting system supported by a strong governance, high quality standards and firm regulatory framework is the key to economic development. Indeed, sound financial reporting standards underline the trust that investors place in financial reporting information and thus play an important role in contributing to the economic development of a country. Different countries have local accounting standards which spell out the accounting treatment and disclose your requirements for preparing of financial statements, some sort of compatibility or convergence is necessary to enable all the stake holders to take appropriate economic decisions. This is sought to be ensured through the International Financial Reporting Systems (IFRS) adopted by International Accounting Standards Board (IASB). Most of the countries have started adopting IFRS or making their local GAAP convergent with IFRS. Major stock exchanges across the world today accept IFRS.

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## **2.2 MEANING OF IFRS**

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- IFRSs are principle-based standards.
- The principle-based standards have distinct advantage that the transactions cannot be manipulated easily to achieve a particular accounting.
- The Financial Accounting Standards Board (FASB), USA, is having a convergence project with the IASB and is broadly adopting the principle-based approach instead of rule-based approach.
- IFRSs lay down treatments based on the economic substance of various events and transactions rather than their legal form.
- The application of this approach may result into events and transactions being presented in a manner different from their legal form.

- To illustrate, as per IAS 32, preference shares that provide for mandatory redemption by the issuer are presented as a liability.

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## **2.3 OBJECTIVES OF IFRS:**

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### **WHY IFRS?**

A single set of accounting standards would enable internationally to standardize training and assure better quality on a global screen, it would also permit international capital to flow more freely, enabling companies to develop consistent global practices on accounting problems. It would be beneficial to regulators too, as a complexity associated with needing to understand various reporting regimes would be reduced.

### **OBJECTIVES OF IFRS:**

2.3.1 The main objective of IFRS is to develop in the public the interest of a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and other financial reporting to help participants in the world's capital markets and other users make economic decisions.

2.3.2 To promote the use and rigorous application of those standards; in fulfilling the objectives associated with it.

2.3.3 To take account of, as appropriate, the special needs of small and medium-sized entities and emerging economies.

2.3.4 To bring about convergence of national accounting standards and International Accounting standards and IFRS to high quality solutions.

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## **2.4 SCOPE OF IFRS:**

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All International Accounting Standards (IASs) and Interpretations issued by the former IASC (International Accounting Standard Committee) and SIC (Standard Interpretation Committee) continue to be applicable unless and until they are amended or withdrawn. IFRSs apply to the general purpose financial statements and other financial reporting by profit-oriented entities -- those engaged in commercial, industrial, financial, and similar activities, regardless of their legal form. Entities other than profit-oriented business entities may also find IFRSs appropriate.

General purpose financial statements are intended to meet the common needs of shareholders, creditors, employees, and the public at large for information about an entity's financial position, performance, and cash flows. Other financial reporting includes information provided outside financial statements that assists in the interpretation of a complete set of financial statements or improves users' ability to make efficient economic decisions. IFRS apply to individual company and consolidated financial statements. A complete set of financial statements includes a balance sheet, an income statement, a cash flow statement, a statement

showing either all changes in equity or changes in equity other than those arising from investments by and distributions to owners, a summary of accounting policies, and explanatory notes.

If an IFRS allows both a 'benchmark' and an 'allowed alternative' treatment, financial statements may be described as conforming to IFRS whichever treatment is followed. In developing Standards, IASB intends not to permit choices in accounting treatment. Further, IASB intends to reconsider the choices in existing IASs with a view to reducing the number of those choices. IFRS will present fundamental principles in bold face type and other guidance in non-bold type (the 'black-letter'/'grey-letter' distinction). Paragraphs of both types have equal authority. The provision of IAS 1 that conformity with IAS requires compliance with every applicable IAS and Interpretation requires compliance with all IFRSs as well.

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## **2.5 LIST OF IFRS:**

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- IFRS 1: First-time Adoption of International Financial Reporting Standards
- IFRS 2: Share-based Payment
- IFRS 3: Business Combinations
- IFRS 4: Insurance Contracts
- IFRS 5: Non-current Assets Held for Sale and Discontinued Operations
- IFRS 6: Exploration for and Evaluation of Mineral Resources
- IFRS 7: Financial Instruments: Disclosures
- IFRS 8: Operating Segments
- IFRS 9: Financial Instruments

### **International Accounting Standards (IAS)**

IAS relates to standards on various aspects of accounting issues. These are mainly relevant for maintenance of accounts as well as disclosure of Information.

- IAS 1: Presentation of Financial Statements.
- IAS 2: Inventories
- IAS 7: Cash Flow Statements
- IAS 8: Accounting Policies, Changes in Accounting Estimates and Errors
- IAS 10: Events After the Balance Sheet Date
- IAS 11: Construction Contracts
- IAS 12: Income Taxes
- IAS 16: Property, Plant and Equipment (summary)



- IAS 17: Leases
- IAS 18: Revenue
- IAS 19: Employee Benefits
- IAS 20: Accounting for Government Grants and Disclosure of Government Assistance
- IAS 21: The Effects of Changes in Foreign Exchange Rates
- IAS 23: Borrowing Costs
- IAS 24: Related Party Disclosures
- IAS 26: Accounting and Reporting by Retirement Benefit Plans
- IAS 27: Consolidated Financial Statements
- IAS 28: Investments in Associates
- IAS 29: Financial Reporting in Hyperinflationary Economies
- IAS 31: Interests in Joint Ventures
- IAS 32: Financial Instruments: Presentation
- IAS 33: Earnings per Share
- IAS 34: Interim Financial Reporting
- IAS 36: Impairment of Assets
- IAS 37: Provisions, Contingent Liabilities and Contingent Assets
- IAS 38: Intangible Assets
- IAS 39: Financial Instruments: Recognition and Measurement
- IAS 40: Investment Property
- IAS 41: Agriculture

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## **2.6 CHALLENGES OF IFRS**

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### **Economic Environment**

- Some IFRSs require fair value approach to be followed, examples include:
  - IAS 39, Financial Instruments: Recognition and Measurement
  - IAS 41, Agriculture
- The markets of many economies such as India normally do not have adequate depth and breadth for reliable determination of fair values.
- With a view to provide further guidance on the use of fair value approach, the IASB is developing a document.
- Till date, no viable solution of objective fair value measures is available.

### **SME concerns**

#### **SMEs face problems in implementing IFRSs because of:**

- Scarcity of resources and expertise with the SMEs to achieve compliance
- Cost of compliance not commensurate with the expected benefits

**Keeping in view the difficulties faced by the SMEs, the IASB is developing an IFRS for SMEs.**

#### **Training to Preparers**

- Some IFRSs are complex.
- There is lack of adequate skills amongst the preparers and users of Financial Statements to apply IFRSs.
- Proper implementation of such IFRSs requires extensive education of preparers

#### **Interpretation**

- A large number of application issues arise while applying IFRSs.
- There is a need to have a forum which may address the application issues in specific cases.

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## **2.7 CONVERGENCE WITH IFRSS:**

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- Indian Accounting Standards (ASs) are formulated on the basis of the IFRSs.
- While formulating ASs, the endeavor of the ICAI remains to converge with the IFRSs.
- The ICAI has till date issued 29 ASs corresponding to IFRSs.
- Some recent ASs, issued by the ICAI, are totally at par with the corresponding IFRSs, e.g., the Standards on 'Impairment of Assets' and 'Construction Contracts'.
- While formulating Indian Accounting Standards, changes from the corresponding IAS/ IFRS are made only in those cases where these are unavoidable considering:
  - Legal and/ or regulatory framework prevailing in the country.
  - To reduce or eliminate the alternatives so as to ensure comparability.
  - State of economic environment in the country

- Level of preparedness of various interest groups involved in implementing the accounting standards.

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## **2.8 BENEFITS OF IFRS**

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The forces of globalization prompt more and more countries to open their doors to foreign investment and as businesses expand across borders the need arises to recognize the benefits of having commonly accepted and understood financial reporting standards. Following are some of the benefits of adopting IFRS -

- Transparency and comparability
- Low cost of capital
- Eliminates need for multiple reporting
- True value of acquisition
- Cross border transaction
- Sets a benchmark
- Improvement in planning and forecasting

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## **2.9 FRAMEWORK FOR THE PREPARATION AND PRESENTATION OF FINANCIAL STATEMENTS:**

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This Framework sets out the concepts that underlie the preparation and presentation of financial statements for external users. The Framework deals with: The objective of financial statements; the qualitative characteristics that determine the usefulness of information in financial statement; The Definition, recognition and measurement of the elements from which financial statements are constructed; and Concept of capital and capital maintenance. The Objective of Financial statements is to provide useful information to users of financial statements in making economic decision. Financial Statements are prepared to provide information on Financial Position, Operating Performance and changes in financial position of an entity Financial Statements are normally prepared on the assumption that entity is a going concern and will continue in operation for the foreseeable future, and prepared on accrual basis of accounting. The four Qualitative characteristics are Understandability, relevance; reliability and comparability are the attributes that make the financial information useful to users. The elements directly related to the measurement of financial position are assets, liabilities and equity. An item that meets the definition of an element should be recognized if: it is probable that any future economic benefit associated the item will flow to or from the entity. The item has a cost or value that can be measured with reliability. Measurement is the process of determining the monetary amounts at which each element in the financial statements is to be recognized and carried in the Balance Sheet and Income statement. The concept of capital maintenance is concerned with how an entity defines

the capital that it seeks to maintain. It provides the linkage between the concepts of capital and the concepts of profit because it provides the point of reference by which profit is measured.

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## **2.10 IFRS -1: FIRST TIME ADOPTION OF IFRS**

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An entity shall prepare and present an opening IFRS statement of financial position at the date of transition to IFRSs. This is the starting point for its accounting under IFRSs. An entity shall prepare an opening IFRS balance sheet at the date of transition to IFRSs. This is the starting point for its accounting under IFRSs. An entity need not present its opening IFRS balance sheet in its first IFRS financial statements. In general, the IFRS requires an entity to comply with each IFRS effective at the end of its first IFRS reporting period. In particular, the IFRS requires an entity to do the following in the opening IFRS statement of financial position that it prepares as a starting point for its accounting under IFRSs: recognize all assets and liabilities whose recognition is required by IFRSs; not to recognize items as assets or liabilities if IFRSs do not permit such recognition; IFRS-1. IFRS-1 reclassify items that it recognized under previous GAAP as one type of asset, liability or component of equity, but are different type of asset, liability or component of equity under IFRSs. Apply IFRSs in measuring all recognized assets and liabilities. The IFRS grants limited exemptions from these requirements in specified areas where the cost of complying with them would be likely to exceed the benefits to users of financial statements. The IFRS also prohibits retrospective application of IFRSs in some areas; particularly where retrospective application would require judgments by management about past conditions after the outcome of a particular transaction is already known. The IFRS requires disclosures that explain how the transition from previous GAAP to IFRSs affected the entities reported financial position, financial performance and cash flows.

**OBJECTIVE OF THIS STANDARD:** The objective of this IFRS is to specify the financial reporting by an entity when it undertakes a share-based payment transaction. In particular, it requires an entity to reflect in its profit or loss and financial position the effects of share-based payment transactions, including expenses associated with transactions in which share options are granted to employees.

### **IFRS -2: SHARE-BASED PAYMENTS**

The IFRS requires an entity to recognize share-based payment transactions in its financial statements, including transactions with employees or other parties to be settled in cash, other assets, or equity instruments of the entity. There are no exceptions to the IFRS, other than for transactions to which other Standards apply. This also applies to transfers of equity instruments of the entity's parent, or equity instruments of another entity in the same group as the entity, to parties that have supplied goods or services to the entity. This IFRS sets out measurement principles and specific requirements for three types of share-based payment transactions: equity-settled share-based payment

transactions, in which the entity receives goods or services as consideration for equity instruments of the entity (including shares or share options); (b) cash-settled share-based payment transactions, in which the entity acquires goods or services by incurring liabilities to the supplier of those goods or services for amounts that are based on the price (or value) of the entity's shares or other equity instruments of the entity; and (c) transactions in which the entity receives or acquires goods or services and the terms of the arrangement provide either the entity or the supplier of those goods or services with a choice of whether the entity settles the transaction in cash or by issuing equity instruments.

The IFRS also sets out requirements if the terms and conditions of an option or share grant are modified (e.g. an option is reprised) or if a grant is cancelled, repurchased or replaced with another grant of equity instruments. For example, irrespective of any modification, cancellation or settlement of a grant of equity instruments to employees, the IFRS generally requires the entity to recognize, as a minimum, the services received measured at the grant date fair value of the equity instruments granted. For cash-settled share-based payment transactions, the IFRS requires an entity to measure the goods or services acquired and the liability incurred at the fair value of the liability. Until the liability is settled, the entity is required to re-measure the fair value of the liability at each reporting date and at the date of settlement, with any changes in value recognized in profit or loss for the period.

### **IFRS -3: BUSINESS COMBINATIONS:**

The objective of the IFRS is to enhance the relevance, reliability and comparability of the information that an entity provides in its financial statements about a business combination and its effects. It does that by establishing principles and requirements for how an acquirer:

- (a) Recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquire;
- (b) Recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase.
- (c) Determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination.

**Points:** Core principle an acquirer of a business recognizes the assets acquired and liabilities assumed at their acquisition-date fair values and discloses information that enables users to evaluate the nature and financial effects of the acquisition. Applying the acquisition method a business combination must be accounted for by applying the acquisition method, unless it is a combination involving entities or businesses under common control. One of the parties to a business combination can always be identified as the acquirer, being the entity that obtains control of the other business (the acquiree). Formations of a joint venture or the acquisition of

an asset or a group of assets that does not constitute a business are not business combinations.

#### **IFRS -4: INSURANCE CONTRACTS:**

The objective of this IFRS is to specify the financial reporting for insurance contracts by any entity that issues such contracts (described in this IFRS as an insurer) until the Board completes the second phase of its project on insurance contracts. In particular, this IFRS requires: limited improvements to accounting by insurers for insurance contracts. disclosure that identifies and explains the amounts in an insurer's financial statements arising from insurance contracts and helps users of those financial statements understand the amount, timing and uncertainty of future cash flows from insurance contracts.

#### **IFRS -5: NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS:**

The objective of this IFRS is to specify the accounting for assets held for sale, and the presentation and disclosure of discontinued operations. In particular, the IFRS requires: assets that meet the criteria to be classified as held for sale to be measured at the lower of carrying amount and fair value less costs to sell, and depreciation on such assets to cease; and assets that meet the criteria to be classified as held for sale to be presented separately in the statement of financial position and the results of discontinued operations to be presented separately in the statement of comprehensive income.

#### **IFRS-6: EXPLORATION FOR AND EVALUATION OF MINERALS:**

The objective of this IFRS is to specify the financial reporting for the exploration for and evaluation of mineral resources. POINTS: Exploration and evaluation expenditures are expenditures incurred by an entity in connection with the exploration for and evaluation of mineral resources before the technical feasibility and commercial viability of extracting a mineral resource are demonstrable. Exploration for and evaluation of mineral resources is the search for mineral resources, including minerals, oil, natural gas and similar non-regenerative resources after the entity has obtained legal rights to explore in a specific area, as well as the determination of the technical feasibility and commercial viability of extracting the mineral resource. Exploration and evaluation assets are exploration and evaluation expenditures recognized as assets in accordance with the entity's accounting policy.

#### **IFRS-7: FINANCIAL INSTRUMENTS DISCLOSURE:**

The objective of this IFRS is to require entities to provide disclosures in their financial statements that enable users to evaluate: the significance of financial instruments for the entity's financial position and performance; and the nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the reporting date, and

how the entity manages those risks. The qualitative disclosures describe management's objectives, policies and processes for managing those risks. The quantitative disclosures provide information about the extent to which the entity is exposed to risk, based on information provided internally to the entity's key management personnel. Together, these disclosures provide an overview of the entity's use of financial instruments and the exposures to risks they create.

### **IFRS-8: OPERATING SEGMENTS:**

#### **This IFRS shall apply to:**

(a) The separate or individual financial statements of an entity: whose debt or equity instruments are traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets), or that files, or is in the process of filing, its financial statements with a securities commission or other regulatory organization for the purpose of issuing any class of instruments in a public market.

(b) The consolidated financial statements of a group with a parent: whose debt or equity instruments are traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets), or that files, or is in the process of filing, the consolidated financial statements with a securities commission or other regulatory organization for the purpose of issuing any class of instruments in a public market. IFRS-8

### **IFRS - Indian Context**

Convergence with IFRS has gained momentum in recent years all over the World.

India is committed to adopt IFRS from 2011.

United States of America has announced its intention to adopt IFRS from 2014 and it also permits foreign private filers in the

U.S. Stock Exchanges to file IFRS compiled Financial Statement, without requiring the presentation of reconciliation statement.

In this scenario of globalization, India cannot insulate itself from the developments taking place worldwide. In India, so far as the ICAI is concerned, its aim has always been to comply with the IFRS to the extent possible with the objective to formulate sound financial reporting standards. The ICAI, being a member of the International Federation of Accountants (IFAC), considers the IFRS and tries to integrate them, to the extent possible, in the light of the laws, customs, practices and business environment prevailing in India. The Preface to the Statements of Accounting Standards, issued by the ICAI, categorically recognizes the same. Now, as the world globalizes, it has become imperative for India also to make a formal strategy for convergence with IFRS with the objective to harmonize with globally accepted accounting standards.

In the present era of globalization and liberalization, the World has become an economic village. The globalization of the business world and the attendant structures and the regulations, which support it, as well as the development of e-commerce make it imperative to have a single globally accepted financial reporting system. A number of multinational companies are establishing their businesses in various countries with emerging economies and vice versa.

The entities in emerging economies are increasingly accessing the global markets to fulfill their capital needs by getting their securities listed on the stock exchanges outside their country. Capital markets are, thus, becoming integrated consistent with this World-wide trend. The use of different accounting frameworks in different countries, which require inconsistent treatment and presentation of the same underlying economic transactions, creates confusion for users of financial statements. This confusion leads to inefficiency in capital markets across the world. Therefore, increasing complexity of business transactions and globalization of capital markets call for a single set of high quality accounting standards. High standards of financial reporting underpin the trust investors place in financial and non-financial information. Thus, the case for a single set of globally accepted accounting standards has prompted many countries to pursue convergence of national accounting standards with IFRS.

The paradigm shift in the economic environment in India during last few years has led to increasing attention being devoted to accounting standards as a means towards ensuring potent and transparent financial reporting by any corporate.

ICAI, being a premier accounting body in the country, took upon itself the leadership role by establishing ASB, more than twenty five years back, to fall in line with the international and national expectations. Today, accounting standards issued by the Institute have come a long way.

The ICAI as the accounting standard - setting body in the country has always made efforts to formulate high quality Accounting Standards and has been successful in doing so. Indian Accounting Standards have withstood the test of time. As the world continues to globalize, discussion on convergence of national accounting standards with International Financial Reporting Standards (IFRS) has increased significantly.

At present, the ASB of ICAI formulates the AS based on IFRS. However, these standards remain sensitive to local conditions, including the legal and economic environment. Accordingly, AS issued by ICAI depart from corresponding IFRS in order to ensure consistency with legal, regulatory and economic environment of India.

Formation of IFRS Task Force by the Council of ICAI Recommendation of the IFRS Task Force submitted to the Council Full adoption of IFRS from accounting period commencing on or after 1 April 2011 Proposed to be applicable to listed entities and public interest entities such as banks,



insurance companies and large sized entities Involvement of various regulators (MCA, RBI, IRDA, Tax authorities and SEBI)

Draft Schedule VI and Accounting Standard 1 (Exposure Draft) consistent with IFRSs Convergence Strategy presented by Technical Directorate of ICAI on 02.02.2009:

– ICAI has begun the process of issuing IFRS equivalent AS with following proposed changes:

1. Removal of alternative treatments
2. Additional disclosures, where required
3. AS number will continue but IFRS number will be given in parenthesis
4. IFRICs will be issued as appendices

– ICAI has constituted a Group in liaison with government & regulatory authorities and this group has constituted separate core groups to identify inconsistencies between IFRS and various relevant acts.

**An entity:**

- i Whose equity or debt securities are listed or are in the process of listing on any stock exchange, whether in India or outside India; or
- ii Which is a bank (including a cooperative bank), financial institution, a mutual fund, or an insurance entity; or
- iii Whose turnover (excluding other income) exceeds rupees one hundred crores in the immediately preceding accounting year; or
- iv Which has public deposits and/or borrowings from banks and financial institutions in excess of rupees twenty five crores at any time during the immediately preceding accounting year; or
- v Which is a holding or a subsidiary of an entity which is covered in (i) to (iv) above

Transition to IFRS – Things to remember

**First year of reporting:**

Accounting period commencing on or after 1 April 2011 (Normally 1 April 2011 – 31 March 2012)

**Date of adoption:**

The first day of the first reporting financial year (1 April 2011)

**Date of reporting:**

The last day of the first reporting financial year (31 March 2012)

**Comparative year:**

Immediately preceding previous year (1 April 2010 – 31 March 2011)

**Date of transition:**

The beginning of the earliest period for which an entity presents full comparative information (1 April 2010)

First time adoption of IFRS on the date of reporting envisages-

1. Restatement of opening balances as at 1 April 2010
2. Presentation of comparative financial statements for the year 2010-11
3. Preparation and presentation of financial statements for the first year of reporting 2011-12
4. Explicit and unreserved statement of compliance with IFRS

All the above statements (as stated in 1 to 3 above) have to be drawn as per the IFRS in force on the date of reporting.

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## **2.11 INTRODUCTION TO BORROWING COST**

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Business enterprises borrow funds for acquiring, constructing, building, fixed & other assets. These assets take time to make them usable or saleable. Interest has to be paid on borrowed funds immediately from the date of borrower. Also there are other costs associated with borrower. This accounting standard aims at prescribing the treatment of borrowing cost.

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## **2.12 MEANING AND DEFINITION OF BORROWING COST**

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Borrowing costs are defined as interest and other cost incurred associated with borrowing of funds. These include following cost/charges:

1. Interest and commitment charge on borrowing.
2. Amortization of discounts or provision relating to borrowing.
3. Amortization of ancillary costs incurred in connection with arrangement of borrower.
4. Finance charges when the assets are acquired under finance leases.
5. Exchange difference arising from foreign currency borrowings to the extent they are regarded as an adjustment to interest costs.

This standard does not deal with cost of owners' equity or preference share capital.

### **Qualifying assets:**

An asset which takes substantial period of time to get ready for its intended use or sale is called as qualifying asset.

### **Examples of qualifying assets:**

1. Any tangible fixed asset which is in construction process or acquired fixed asset which is not ready for use or sale.

e.g. plant and machinery

2. Any tangible asset which are in development stage or acquired but not ready for use e.g. patents

3. Investment property

4. Inventories that require a substantial period to bring them into saleable condition.

As per these accounting standard borrowing costs, which is directly related to the acquisition, construction or production of qualifying assets should be capitalized. Amount of borrowing cost eligible for capitalization is equal to actual borrowing cost incurred during the period less any income on temporary investment on borrowing account.

### **Conditions for capitalization of borrowing cost:**

1. The borrowing cost which is directly attributable to acquisition, construction or production of qualifying asset is eligible for capitalization. Directly attributable cost are those cost which could have been avoided if the expenditure on the qualifying assets had not been made.

2. Qualifying asset will give future economic benefits to the enterprise.

### **Borrowing cost eligible for capitalization**

#### **a) Specific Borrowings**

Amount of borrowing cost to be capitalized:

Actual borrowing cost incurred during the period... xx

Less:

Income on temporary investment out of borrowed amount... (xx)

xx

#### **b) General borrowings:**

When the amount borrowed is generally used for acquisition of qualifying assets.

The borrowing cost to be capitalized should be decided by applying a capitalization rate to the expenditure of that asset. The capitalization rate

should be weighted average cost of borrowing. The amount of borrowing cost capitalized during a period shall not exceed the amount of borrowing cost incurred during the period.

### **Commencement of capitalization of borrowing costs:Conditions:**

Following 3 conditions must be fulfilled before the commencement of capitalization of borrowing cost.

- a) Activities which are essential to prepare the assets for its intended use should be in progress.
- b) Borrowing cost is incurred.
- c) Expenditure for acquisition, construction or production of a qualifying asset is being incurred.

This expenditure includes payment of cash, transfer of other assets or assumption of interest bearing liabilities. Progress payment received and grants received towards the cost incurred should be deducted from the expenditure.

**Suspension of capitalization of borrowing costs** Capitalization of borrowing costs should be suspended during extended periods in which active development is interrupted. However capitalization of borrowing cost is not suspended when a temporary delay is a necessary part of the process of getting an asset ready for its intended use or sale.

### **Cessation of capitalization:**

1. Capitalization of borrowing cost should cease when all the activities necessary to prepare the qualifying asset for its intended use or sale are substantially completed. It means all relevant activities which are essential for intended use or sale of qualifying assets should be completed.
2. Construction of the qualifying asset is carried on in parts/phase and each part/phase can be used independently, required activities are completed for such phase and it is ready for intended use or sale, capitalization of borrowing cost for such part/phase will cease.

### **Disclosure in financial statements:**

The financial statement should disclose:

1. The accounting policy adopted for borrowing cost
2. The amount of borrowing cost capitalized during the period

### **Substantial period:**

The “substantial period” of time essentially depends upon the facts and circumstances of each case. However, ordinarily a period of 12 months is considered as substantial period of time. Sometimes a shorter or longer period can be justified on the basis of facts and circumstances of each

case. In deciding the period, time which an asset takes, technologically and commercially to get it ready for its intended use or sale should be considered.

### **Fees paid for payment of loan**

The prepayment fees paid for liquidating high cost debt and availing low cost debt in place of high cost debt cannot be capitalized because it is not a borrowing cost as per AS16.

### **Exchange difference:**

Borrowing cost may include exchange differences arising from foreign currencies borrowings to the extent that they are regarded as an adjustment to interest cost.

AS16 covers exchange difference on the amount of principal of the foreign currency borrowings to the extent of differences between interest on local currency borrowings and interest on foreign currency borrowings.

### **Illustrations**

1. On 20-04-2010, KIC Ltd. obtained loan from the bank for Rs. 25,00,000 to be utilized as under:-

Construction of shed	Rs.10,00,000
Purchase of Machinery	Rs.7,50,000
Working Capital	Rs.5,00,000
Advance for purchase of Tempo	Rs.2,50,000

On 31<sup>st</sup>March, 2011, construction of shed was completed and machinery installed. Delivery of Tempo was not received. Total interest charged by the bank for the year ending 31<sup>st</sup>March, 2011 was Rs.4, 50,000. Show the treatment of interest under AS 16.

### **SOLUTION:-**

#### **AS 16 provide that:**

I ) A qualifying asset is an asset which takes a substantial period of time to get ready for intended use or sale.

ii) Assets which are ready for their intended use or sale when acquired are not qualifying assets.

iii) Borrowing cost that is directly attributable to acquisition, construction or production of a qualifying asset should be capitalized as part of cost of the asset.

Account Spent on	Qualifying asset or not	Interest to be capitalized	Interest to be charged to Profit & Loss A/c.
Construction of Shed	Yes		
Purchase of Machinery	No		
Working Capital	No		
Advance for purchase of Tempo	No		

2. Yoga Ltd. obtained a term loan of Rs. 2320 lakhs for purchase of machinery on 1-4-2010. The loan was immediately utilized as Rs.1624 lakhs for purchase of machinery which was ready for use on 31-3-2011, Rs. 232 lakhs for advance payment to the supplier for additional machinery and the balance 464 lakhs for financing working capital. Total, Interest on loan for the year ended 31<sup>st</sup> March ,2011 came to Rs.208.80 Lakhs

**Calculate**

- i) Average borrowing rate
- ii) Interest to be capitalized
- iii) Interest to be shown as expenses.

**Solution:-**

(Rs. In lakhs)

- i) Average borrowing rate =  $208.80/2320 \times 100 = 9\%$
- ii) Interest to be capitalized :9% of Rs.1624 Lakhs  
146.16
- iii) Interest to be considered as an expenses 9% of (232+ 464 )= 696 lakhs  
62.64  
-----  
208.80

3. Rani Ltd. borrowed Rs. 300 crores on 1-4-2010 for construction of boiler plant @11%p.a. The plant is expected to be completed in 4 years. The weighted Average cost of capital is 13% p.a. The accountant of Rani Ltd. capitalized interest of Rs.39 crores for the accounting period ending on 31-3-2011. Due to surplus fund out of Rs.300 crores in income of Rs. 7.00crores was earned and credited to Profit & Loss A/c.

Comment on above with reference to AS 16.

### **SOLUTION :**

As the company has borrowed Rs.300 crores for construction of a boiler plant it is a specific borrowing as per AS 16. In case a specific borrowing as per AS 16. In case a specific borrowing the total amount of borrowing cost incurred during the period less any income on the temporary investment on borrowed is to be capitalized. Interest to be capitalized is 33.00 less 7.00 =26 crores . The interest earned Rs.7.00 crores cannot be shown as income. It should be deducted from interest cost incurred for the purpose of capitalization.

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## **2.13 INTRODUCTION TO SEGMENT REPORTING**

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‘Segment Reporting’, issued by the Council of the Institute of Chartered Accountants of India. This standard comes into effect in respect of accounting periods commencing on or after 1.4.2001 and is mandatory in nature, from that date, in respect of the following:

- (i) Enterprises whose equity or debt securities are listed on a recognized stock exchange in India, and enterprises that are in the process of issuing equity or debt securities that will be listed on a recognized stock exchange in India as evidenced by the board of directors’ resolution in this regard.
- (ii) All other commercial, industrial and business reporting enterprises, whose turnover for the accounting period exceeds Rs. 50 crores

### **OBJECTIVE**

The objective of this Statement is to establish principles for reporting financial information, about the different types of product of and services an enterprise produces and the different geographical areas which it operates. Such information helps users of financial statements:

- a) better understand the performance of the enterprise;
- b) better assess the risks and returns of the enterprise; and
- c) Make more informed judgments about the enterprise as a whole.

Many enterprises provide groups of products and services or operate in geographical areas that are subject to differing rates of profitability, for growth, future prospects, and risks. Information about different types of products and services of an enterprise and its operations in different geographical areas – often called segment information is relevant to assessing the risks and return of a diversified or multi-locational enterprise but may be determinable from the aggregated data. Therefore, reporting of segment information is widely regarded as necessary for meeting the needs of users of financial statements.

### **SCOPE**

1. The Statement should be applied in presenting general purpose financial statements.

2. The requirements of this Statement are also applicable in case of consolidated financial statements.
3. An enterprise should comply with the requirements of this Statement fully and not selectively.
4. If a single financial report contains both consolidated financial statements and the separate financial statements of the parent, segment information need be presented only on the basis of the consolidated financial statements. In the context of reporting of segment information in consolidated financial statements, the references in this statement to any financial statement items should construed to be the relevant items as appearing in the consolidated financial statements.

## DEFINITIONS

The following terms are used in this statement with the meanings specified:

**A business segment** is a distinguishable component of an enterprise that is engaged in providing an individual product or service or a group of related products or services and that is subject to risks and returns that are different from those of other business segments. Factors that should be considered in determining whether products or services are related include:

- a) the nature of the products or services;
- b) the nature of the production processes;
- c) the type or class or customers for the products or services;
- d) the methods used to customers for the products or provide the services; and
- e) If applicable, the nature of the regulatory environment, for example, banking, insurance, or public utilities.

**A geographical segment** is a distinguishable component of an enterprise that is engaged in providing products or services within a particular economic environment. Factors that should be considered in identifying geographical segments include:

- a) similarity of economic and political conditions;
- b) relationships between operations in different geographical areas;
- c) proximity of operations;
- d) special risks associated with operations in a particular area;
- e) exchange control regulations; and
- f) the underlying currency risks.



**A reportable segment** is a business segment or a geographical segment identified on the basis of foregoing definitions for which segment information is required to be disclosed by this Statement.

**Enterprise revenue** is revenue from sales to external customers as reported in the statement of profit and loss.

**Segment revenue** is the aggregate of

- I. the portion of enterprise revenue that is directly attributable to a segment.
- II. the relevant portion of enterprise revenue that can be allocated on a reasonable basis to the segment, and
- III. revenue from transaction with other segments of the enterprise.

**Segment revenue does not include:**

- a) extraordinary items as defined in AS 5, Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies;
- b) interest or dividend income, including interest earned on advances or loans to other segments unless the operations of the segments are primarily of a financial nature; and
- c) Gains on sales of investments or on extinguishment of debt unless the operations of the segment are primarily of a financial nature.

**Segment expense is the aggregate of**

- I. the expense resulting from the operating activities of a segment that is directly attributable to the segment, and
- II. the relevant portion of enterprise expense that can be allocated on a reasonable basis to the segment, including expense relating to transactions with other segments of the enterprise.

**Segment expense does not include:**

- a) extraordinary items as defined in AS 5, Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies;
- b) interest expense, including interest incurred on advances or loans from other segments, unless the operations of the segment are primarily of a financial nature<sup>3</sup>;
- c) losses on sales of investments or losses on extinguishment of debt unless the operations of the segment are primarily of a financial nature;
- d) income tax expense; and
- e) General administrative expenses, head-office expenses, and other expenses that arise at the enterprise level and relate to the enterprise

as a whole. However, costs are sometimes incurred at the enterprise level on behalf of a segment. Such costs are part of segment expense if they relate to the operating activities of the segment and if they can be directly attributed or allocated to the segment on a reasonable basis.

**Segment result** is segment revenue less segment expense.

**Segment assets** are those operating assets that are employed by a segment in its operating activities and the either are directly attributable to the segment or can be allocated to the segment on a reasonable basis.

If the segment result of a segment includes interest or dividend income, its segment assets include the related receivables, loans, investments, or other interest or dividend generating assets.

Segment assets do not include income tax assets.

Segment assets are determined after deducting related allowances/provisions that are reported as direct offsets in the balance sheet of the enterprise.

Examples of segment assets include current assets that are used in the operating activities of the segment and tangible and intangible fixed assets. If a particular item of depreciation or amortization is included in segment expense, the related asset is also included in segment assets. Segment assets do not include assets used for general enterprise or head-office purposes. Segment assets include operating assets shared by two or more segments if a reasonable basis for allocation exists. Segment assets include goodwill that is directly attributable to a segment or that can be located to a segment on a reasonable basis, and segment expense includes related amortization of goodwill. If segment assets have been revalued subsequent to acquisition, then the measurement of segment assets reflects those revaluations.

**Segment liabilities** are those operating liabilities that result from the operating activities of a segment and that either are directly attributable to the segment or can be allocated to the segment on a reasonable basis.

If the segment result of a segment includes interest expense, its segment liabilities include the related interest-bearing liabilities.

Segment liabilities do not include income tax liabilities.

Segment accounting policies are the accounting policies adopted for preparing and presenting the financial statements of the enterprise as well as those accounting policies that relate specifically to segment reporting.

Examples of segment liabilities include trade and other payables, accrued liabilities, customer advance, product warranty, provision, and other claims relating to the provision of goods and service. Segment liabilities do not include borrowings and other liabilities that are incurred for financing rather than operating purposes. The liabilities of segment whose

operations are not primarily of a financial nature do not include borrowings and similar liabilities because segment result represents an operating, rather than a net-of-financing, profit or loss. Further, because debt is often issued at the head-office level on an enterprise-wide basis, it is often not possible to directly attribute, or reasonably allocate, the interest-bearing liabilities to segments.

### **Business and Geographical Segments**

Business and geographical segments of an enterprise for external reporting purposes should be those organizational units for which information is reported to the board of directors and to the chief executive office for the purpose of evaluating the unit's performance and for making decision about future allocations of resources, except as provided in paragraph 25.

If internal organizational and management structure of an enterprise and its system of internal financial reporting to the board of directors and the chief executive office are based neither on individual products or services or groups or related products/services nor on geographical areas, paragraph 20(b) requires that the directors and management of the enterprise should choose either business segments or geographical segments as the primary segment reporting format of the enterprise based on their assessment of which reflects the primary source of the risks and returns of the enterprise, with the other as its secondary reporting format. In that case, the directors and management of the enterprise should determine its business segments and geographical segments for external reporting purposes based on the factors in the definitions in paragraph 5 of this Statement, rather than on the basis of its system of internal financial reporting to the board of directors and chief executive officer, consistent with the following:

- a) if one or more of the segment reported internally to the directors and management is a business segment or a geographical segment based on the factors in the definitions in paragraph 5 but others are not, sub-paragraph (b) below should be applied only to those internal segments that do not meet the definitions in paragraph 5 (that is, an internally reported segment that meets the definition should not be further segmented);
- b) for those segments reported internally to the directors and management that do not satisfy the definitions in paragraph 5, management of the enterprise should look to the next lower level of internal segmentation that reports information along product and service lines or geographical lines, as appropriate under the definitions in paragraph 5; and
- c) if such an internally reported lower-level segment meets the definition of business segment or geographical segment based on the factors in paragraph 5, the criteria in paragraph 27 for identifying reportable segments should be applied to the segment.

## Reportable Segments

A business segment or geographical segment should be identified as a reportable segment if:

a) its revenue from sales to external customers and from transactions with other segments is 10 per cent more of the total revenue, external and internal, of all segments; or

b) its segment result, whether profit or loss, is 10 per cent or more of –

I. the combined result of all segments in profit, or

II. the combined result of all segments in loss, whichever is greater in absolute amount;

c) its segment result, whether profit or loss, is 10 per cent or more of –

I. the combined result of all segments in profit, or

II. the combined result of all segments in loss, whichever is greater in absolute amount; its segment assets are 10 per cent or more of the total assets of all segments.

d) A business segment or a geographical segment which is not a reportable segment as per paragraph 27, may be designated as reportable segment despite its size at the discretion of the management of the enterprise. If that segment is not designated as a reportable segment, it should be included as an unallocated reconciling item.

e) If total external revenue attributable to reportable segments constitutes less than 75 per cent of the total enterprise revenue, additional segments should be identified as reportable segments, even if they do not meet the 10 per cent thresholds in paragraph 27, until at least 75 per cent of total enterprise revenue is included in reportable segments.

f) The 10 per cent thresholds in this Statement are not intended to be a guide for determining materiality for any aspect of financial reporting other than identifying reportable business and geographical segments.

g) A segment identified as a reportable segment in the immediately preceding period because it satisfied the relevant 10 per cent thresholds should continue to be a reportable segment for the current period notwithstanding that its revenue, result and assets all no longer meet the 10 per cent thresholds.

h) If a segment is identified as a reportable segment in the current period because it satisfies the relevant 10 per cent thresholds, preceding-period segment data that is presented for comparative purposes should, unless it is impracticable to do so, be restated to reflect the newly reportable segment as a separate segment, even if that segment, did not satisfy the 10 per cent thresholds in the preceding period.

## Segment Accounting Policies

1. Segment information should be prepared in conformity with the accounting policies adopted for preparing and presenting the financial statement of the enterprise as a whole.

2. There is a presumption that the accounting policies that the directors and management of an enterprise have chosen to use in preparing the financial statements of the enterprise as a whole are those that the directors and management believe are the most appropriate for external reporting purposes. Since the purpose of segment information is to help user of financial statements better understand and make more informed judgements about the enterprise as a whole, this Statement requires the use, in preparing segment information, of the accounting policies adopted for preparing and presenting the financial statements of the enterprise as a whole. That does not mean, however, that the enterprise accounting policies are to be applied to reportable segments as if the segments were separate stand-alone reporting entities. A detailed calculation done in applying a particular accounting policy at the enterprise wide level may be allocated to segments if there is a reasonable basis for doing so. Pension calculations, for example, often are done for an enterprise as a whole, but the enterprise-wide figures may be allocated to segments based on salary and demographic data for the segments.

3. This Statement does not prohibit the disclosure of additional segment information that is prepared on a basis other than the accounting policies adopted for the enterprise financial statements provided that (a) the information is reported internally to the board of directors and the chief executive officer for purposes of making decisions about allocating resources to the segment and assessing its performance and (b) the basis of measurement for this additional information is clearly described.

4. Assets and liabilities that relate jointly to two or more segments should be allocated to segments if, and only if, their related revenues and expenses also are allocated to those segments.

5. The way in which asset, liability, revenue, and expense items are allocated to segments depends on such factors as the nature of those items, the activities conducted by the segment, and the relative autonomy of the segment. It is not possible or appropriate to specify a single basis of allocation that should be adopted by all enterprises; nor is it appropriate to force allocation of enterprise assets, liability, revenue, and expense items that relate jointly to two or more segments, if the only basis of making those allocations is arbitrary. At the same time, the definitions of segment revenue, segment expense, segment assets, and segment liabilities are interrelated, and the resulting allocations should be consistent. Therefore, jointly used assets and liabilities are allocated to segments if, and only if, their related revenues and expenses also are allocated to those segments. For example, an asset is included in segment assets if, and only if, the related depreciation or amortization is included in segment expense.

## Disclosure

Paragraphs 39-46 specify the disclosures required for reportable segments for primary segment reporting format of an enterprise. Paragraphs 47-51 identify the disclosures required for secondary reporting format of an enterprise. Enterprises are encouraged to make all of the primary-segment disclosures identified in paragraphs 39-46 for each reportable secondary segment although paragraphs 47-51 require considerably less disclosure on the secondary basis. Paragraphs 53-59 address several other segment disclosure matters. Appendix III to this Statement illustrates the application of these disclosure standards.

### Primary Reporting Format

1. The disclosure requirements in paragraphs 40-46 should be applied to each reportable segment based on primary reporting format of an enterprise. An enterprise should disclose the following for each reportable segment:

- a) segment revenue, classified into segment revenue from sales to external customers and segments revenue from transactions with other segments;
- b) segment result;
- c) total carrying amount of segment assets;
- d) total amount of segment liabilities;
- e) total cost incurred during the period to acquire segment assets that are expected to be used during more than one period (tangible and intangible fixed assets);
- f) total amount of expense included in the segment result for depreciation and amortization in respect of segment assets for the period; and
- g) Total amount of significant non-cash expenses, other than depreciation and amortization in respect of segment assets that were included in segment expense and, therefore, deducted in measuring segment result.

2. Paragraph 40 (b) requires an enterprise to report segment result. If an enterprise can compute segment net profit or loss or some other measure of segment profitability other than segment result, without arbitrary allocations, reporting of such amount (s) in addition to segment result is encouraged. If that measure is prepared on a basis other than the accounting policies adopted for the financial statements of the enterprise, the enterprise will include in its financial statements a clear description of the basis of measurement.

3. An example of a measure of segment performance above segment result in the statement of profit and loss is gross margin on sales. Examples of measures of segment performance below segment result in the statement of profit and loss are profit or loss from ordinary activities (either before or after income taxes) and net profit or loss.

4. Accounting Standard 5, 'Net Profit or Loss for the Period, Prior Items and changes in Accounting Policies' requires that "when items of income and expense within profit or loss from ordinary activities are of such size, nature or incidence that their disclosure is relevant to explain the performance of the enterprise for the period, the nature and amount of such items should be disclosed separately". Examples of such items include write-downs of inventories, legislative changes having retrospective application, litigation settlements, and reversal of provisions. An enterprise is encouraged, but not required, to disclose the nature and amount of any items of segment revenue and segment expense that are of such size, nature, or incidence that their disclosure is relevant to explain the performance of the segment for the period. Such disclosure is not intended to change the classification of any such items of revenue or expense from ordinary to extraordinary or to change the measurement of such items. The disclosure, however, does change the level at which the significance of such items is evaluated for disclosure purposes from the enterprise level to the segment level.

5. An enterprise that reports the amount of cash flows arising from operating, investing and financing activities of a segment need not disclose depreciation and amortization expense and non-cash expenses of such segment pursuant to sub-paragraphs (f) and (g) of paragraph 40.

6. AS 3, Cash Flow Statements; recommends that an enterprise present a cash flow statement that separately reports cash flows from operating, investing and financing activities. Disclosure of information regarding operating, investing and financing cash flows of each reportable segment is relevant to understanding the enterprise's overall financial position, liquidity, and cash flows. Disclosure of segment cash flow is, therefore, encouraged, though not required. An enterprise that provides segment cash flow disclosures need not disclose depreciation and amortization expense and non-cash expenses pursuant to sub-paragraphs (f) and (g) of paragraph 40.

7. An enterprise should present a reconciliation between the information disclosed for reportable segments and the aggregated information in the enterprise financial statements. In presenting the reconciliation, segment revenue should be reconciled to enterprise revenue; segment result should be reconciled to enterprise net profit or loss; segment assets should be reconciled to enterprise assets; and segment liabilities should be reconciled to enterprise liabilities.

### **Secondary Segment Information**

1. Paragraphs 39-46 identify the disclosure requirements to be applied to each reportable segment based on primary reporting format of an enterprise. Paragraphs 48-51 identify the disclosure requirements to be applied to each reportable segment based on secondary reporting format of an enterprise, as follows:

a) if primary format of an enterprise is business segments, the required secondary-format disclosures are identified in paragraph 48;

b) if primary format of an enterprise is geographical segments based on location of assets (where the products of the enterprise are produced or where its service rendering operation are based). The required secondary-format disclosures are identified in paragraphs 49 and 50;

c) if primary format of an enterprise is geographical segments based on the location of its customers (where its products are sold or services are rendered), the required secondary-format disclosures are identified in paragraphs 49 and 51.

2. If primary format of an enterprise for reporting segment information is business segments, it should also report the following information:

a) Segment revenue from external customers by geographical area based on the geographical location of its customers, for each geographical segment whose revenue from sales to external customers is 10 per cent or more of enterprise revenue;

b) The total carrying amount of segment assets by geographical location of assets, for each geographical segment whose segment assets are 10 per cent or more of the total assets of all geographical segments; and

c) The total cost incurred during the period to acquire segment assets that are expected to be used during more than one period (tangible and intangible fixed assets) by geographical location of assets, for each geographical segment whose segment assets are 10 per cent or more of the total assets of all geographical segments.

3. If primary format of an enterprise for reporting segment information is geographical segments (whether based on location of assets or location of customers), it should also report the following segment information for each business segment whose revenue from sales to external customers is 10 per cent or more of enterprise revenue or whose segment assets are 10 per cent or more of enterprise revenue or whose segment assets are 10 per cent or more of the total assets of all business segments:

a) segment revenue from external customers;

b) the total carrying amount of segment assets; and

c) the total cost incurred during the period to acquire segment assets that are expected to be used during more than one period (tangible and intangible fixed assets).

4. If primary format of an enterprise for reporting segment information is geographical segments that are based on location of assets, and if the location of its customers is different from the location of its assets, then the enterprise should also report revenue from sales to external customers for each customer-based geographical segment whose revenue from sales to external customers is 10 per cent or more of enterprise revenue.



5. If primary format of an enterprise for reporting segment information is geographical segments that are based on location of customers, and if the assets of the enterprise are located in different geographical areas from its customers, then the enterprise should also report the following segment information for each asset-based geographical segment whose revenue from sales to external customers or segment assets are 10 per cent or more to total enterprise amounts:

- a) The total carrying amount of segment assets by geographical location of the assets; and
- b) The total cost incurred during the period to acquire segment assets that are expected to be used during more than one period (tangible and intangible fixed assets) by location of the assets.

### **Illustrative Segment Disclosures**

Appendix III to this Statement presents an illustration of the disclosures for primary and secondary formats that are required by this Statement.

### **Other disclosures**

1. In measuring and reporting segment revenue from transactions with other segments. Inter-segment transfers should be measured on the basis that the enterprise actually used to price those transfers. The basis of pricing inter-segment transfers and any change therein should be disclosed in the financial statements.
2. Changes in accounting policies adopted for segment reporting that have a material effect on segment information should be disclosed. Such disclosure should include a description of the nature of the change, and the financial effect of the change if it is reasonably determinable.
3. AS 5 requires that changes in accounting policies adopted by the enterprise should be made only if required by statute, or for compliance with an accounting standard or if it is considered that the change would result in a more appropriate presentation of events or transactions in the financial statements of the enterprise.
4. Changes in accounting policies adopted at the enterprise level that affect segment information are dealt with in accordance with AS 5. AS 5 requires that any change in an accounting policy which has a material effect should be disclosed. The impact of, and the adjustments resulting from, such change, if material, should be shown in the financial statements of the period in which such change is made, to reflect the effect of such change. Where the effect of such change is not ascertainable, wholly or in part, the fact should be indicated. If a change is made in accounting policies which has no material effect on the financial statements for the current period but which is reasonably expected to have a material effect in later periods, the fact of such change should be appropriately disclosed in the period in which the change is adopted.

5. Some changes in accounting policies relate specifically to segment reporting. Examples include changes in identification of segments and changes in the basis for allocating revenues and expenses to segments. Such changes can have a significant impact on the segment information reported but will not change aggregate financial information reported for the enterprise. To enable users to understand the impact of such changes, this Statement requires the disclosure of the nature of the change and the financial effect of the change, if reasonably determinable.

6. An enterprise should indicate the types of products and services included in each reported business segment and indicate the composition of each reported geographical segment, both primary and secondary, if not otherwise disclosed in the financial statements.

7. To assess the impact of such matters as shifts in demand, changes in the prices of inputs or other factors of production, and the development of alternative products and processes on a business segment, it is necessary to know the activities encompassed by the segment. Similarly, to assess the impact of changes in the economic and political environment on the risks and returns of a geographical segment, it is important to know the composition of that geographical segment.

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## **2.14 EXPLANATORY NOTES:**

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### **Objective:**

The objective of this Statement is to establish principles for reporting financial information, about the different types of products and services an enterprise produces and the different geographical areas in which it operates which facilitates meaningful reading and analysis of statement of account of an enterprise.

### **Business Segment:**

Business segments are distinguishable components of enterprises as to:

- Product or group of products or services or group of services  
e.g. Tractors and Jeep as reported by Mahindra and Mahindra
- Production process e.g. Dry linker process and wet clinker process in Cement.
- Type or class of customers' e.g. corporate finance and Retail Finance in case of Banking as reported in ICICI.
- Nature of regulatory policy if applicable. eg. Banking, insurance, or public utilities.

**Geographical Segment:** Geographical segments are distinguishable components of enterprise as to asset situation and customer situation.

**Primary format:** as per the provision of AS-17 the Enterprise has to present segment information under primary and secondary format.

The selection of Business or geographical segment as primary is based on the risk and returns attached to it.

E.g. in case of manufacturing enterprise the products manufactured may have more risks and returns attached to it rather than the location of its customers. In such case business segment is presented under primary format.

Similarly in case of service sectors the area of customers or its asset base may have more risks and returns attached to it rather than the type of services provided by it.

1. Attention is specifically drawn to paragraph 4.3 of the Preface, according to which accounting standards are intended to apply only to material items.

2. Reference may be made to the section titled 'Announcements of the Council regarding status of various documents issued by the Institute of Chartered Accountants of India' appearing at the beginning of this Compendium for a detailed discussion on the implications of the mandatory status of an accounting standard.

3. See also General Clarification (GC) – 14/2002, issued by the Accounting Standards Board, published elsewhere in this compendium.

4. The Council, at its 224th meeting, held on March 8-10, 2002, considered the matter relating to disclosure of corresponding previous year figures in respect of segment reporting in the first year of application of AS 17. The Council decided that in the first year of application of AS 17, corresponding previous year figures in respect of segment reporting need not be disclosed (See Chartered Accountant', April 2002, pp. 1242).

E.g. software developers have risks and returns more directly related to the countries it exports than the type of software it develops. In such case geographical segment is presented under primary format.

Once primary format is selected the other segment is presented under secondary format.

### **Steps involved in selection and disclosure of segment information as required by segment reporting.**

**Step 1.** Identify the Primary and Secondary segments as per the provision of para 19.

The segments will either be Business segment (para 5) or geographical segment, which further could be customer wise or asset wise. (refer to appendix I)

**Step 2.** Identify the reportable segments as per the provision of para 27, the quantitative thresholds are the 10% limit i.e. either its

- Segment revenue (gross)/Total revenue of all segments (external customers) is at least 10%; or
- Segment assets/total assets of all segments is a least 10% (excluding income tax asset); or
- Segment result (profit or loss)/ combined results of all segments of all segments is at least 10%. (refer to para 5 for def of segment result)

Further it should be noted that if a segment has been a reportable segment in last year it shall then be considered as reportable segment even though it may fail to satisfy 10% criteria this year. Also in case a segment which becomes reportable for firsttime this year then previous year data should be disclosed to the extent possible (or practical)

**Step 3.** In case where the total revenue from external customer of the reportable segments is less than 75% of total revenue of all segments (external) then additional segments should be identified as reportable segments, even if they do not meet the 10 per cent thresholds in paragraph 27, until at least 75 per cent of total enterprise revenue is included in reportable segments. (Refer to Q1 provided in self-study.)

**Step 4.** Segment information should be prepared in conformity with the accounting policies adopted for preparing and presenting the financial statements of the enterprise as a whole.

### Step 5. Disclosure Requirements

Primary Segment (Business Segment)

Particulars	A	B	C	Eliminations	Total
Segments revenue					
External					
Domestic					
Export					
Inter segment					
TOTAL REVENUE					
Segment Results					
Unallocated Co. exp.	-	-	-		
Profit before interest and					
Tax					
Interest Cost	-	-	-		
Profit before tax					
Other information					

Segment assets (fixed + current)					
Unallocable assets	-	-	-		
Total assets					
Segments Liabilities					
Unallocable Liabilities					
Total					

<b>SECONDARY SEGMENTS (Geog)</b>	Domestic	Mid east	America	Europe	Pacific
External Revenue by location of customers.					
Carrying Amount of segments assets by location					
Cost incurred for Acquisition of tangible and intangible assets.					

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## **2.15 THEORETICAL QUESTIONS ON THE STANDARD**

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1. What do you mean by business segment and geographical segment?
2. What are the quantitative thresholds for deciding reportable segments?
3. What are the inclusions and exclusions of segment revenue?

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## **2.16 INTRODUCTION TO EARNING PER SHARE**

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Accounting Standard (AS) 20, ‘Earnings Per Share’, issued by the Council of the Institute of Chartered accounts of India, come into effect in respect of accounting periods commencing on or after 1-4- 2001 and is mandatory in nature, from that date, in respect of enterprises whose equity shares or potential equity shares are listed on a recognized stock exchange in India. An enterprise which has neither equity shares nor potential equity shares which are so listed but which discloses earnings per share, should calculate and disclose earnings per share in share in accordance with this Standard from the aforesaid date 3. The following is the text of the Accounting Standard.

## OBJECTIVE

The objective of this Statement is to prescribe principles for the determination and presentation of earnings per share, which will improve comparison of performance among different enterprises for the same period and among different accounting periods for the same enterprise. The focus of this Statement is on the denominator of the earnings per share calculation. Even though earnings per share data has limitations because of different accounting policies used for determining 'earnings', a consistently determined denominator enhances the quality of financial reporting.

## SCOPE

1. This Statement should be applied by enterprises whose equity shares or potential equity shares are listed on a recognized stock exchange in India. An enterprise which has neither equity shares nor potential equity shares which are so listed but which discloses earnings per share should calculate and disclose earnings per share in accordance with this Statement.<sup>4</sup>

2. In consolidated financial statements, the information required by this Statement should be presented on the basis of consolidated information.<sup>5</sup>

3. This Statement applies to enterprises whose equity or potential equity shares are listed on a recognized stock exchange in India. An enterprise, which has neither equity shares nor potential equity shares, which are so listed is not required to disclose earnings per share. However, comparability in financial reporting among enterprises is enhanced if such an enterprise that is required to disclose by any statute or chooses to disclose earnings per share calculates earnings per share in accordance with the principles laid down in this Statement. In the case of a parent (holding enterprise), users of financial statements are usually concerned with, and need to be informed about, the results of operations of both the enterprise itself as well as of the group as a whole. Accordingly, in the case of such enterprise, this Statement requires the presentation of earnings per share information on the basis of consolidated financial statements as well as individual financial statements of the parent. In consolidated financial statements, such information is presented on the basis of consolidated information.

## DEFINITIONS

For the purpose of this Statement, the following terms are used with the meanings specified:

**An equity share** is a share other than a preference share. Equity shares participate in the net profit for the period only after preference shares. An enterprise may have more than one class of equity shares. Equity shares of the same class have the same rights to receive dividends.

**A preference share** is a share carrying preferential rights to dividends and repayment of capital.

**A financial instrument** is any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity shares of another enterprise. For this purpose, a financial asset is any asset that is

- a) Cash;
- b) A contractual right to receive cash or another financial asset from another enterprise.
- c) A contractual right to exchange financial instruments with another enterprise under condition that are potentially favorable; or
- d) An equity share of another enterprise.

A financial liability is any liability that is a contractual obligation to deliver cash or another financial asset to another enterprise or to exchange financial instruments with another enterprise under conditions that are potentially unfavorable.

**A potential equity share** is a financial instrument or other contract that entitles, or may entitle, its holder to equity shares.

Examples of potential equity shares are:

- a) Debt instruments or preference shares, that are convertible into equity shares;
- b) Share warrants;
- c) Options including employee stock option plans under which employees of an enterprise are entitled to receive equity shares as part of their remuneration and other similar plans; and
- d) Shares which would be issued upon the satisfaction of certain conditions resulting from contractual arrangements (contingently issuable shares), such as the acquisition of a business or other assets, or shares issuable under a loan contract upon default of payment of principal or interest, if the contract so provides.

## **PRESENTATIONS**

An enterprise should present basic and diluted earnings per share on the face of the statement of profit and loss for each class or equity shares that has a different right to share in the net profit for the period. An enterprise should present basic and diluted earnings per share with equal prominence for all periods presented.

This Statement requires an enterprise present basic and diluted earnings per share, even if the amounts disclosed are negative (a loss per share).

## MEASUREMENT

### Basic Earnings per Share

1. Basic earnings per share should be calculated by dividing the net profit or loss for the period attributable to equity shareholders by the weighted average number for equity shares outstanding during the period.
2. For the purpose of calculating basic earnings per share, the net profit or loss for the period attributable to equity shareholders should be the net profit or loss for the period after deducting preference dividends and any attributable tax thereto for the period.
3. All items of income and expense which are recognized in a period, including tax expense and extraordinary items, are included in the determination of the net profit or loss for the period unless an Accounting Standard requires or permits otherwise (see Accounting Standard (AS) 5, Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies). The amount of preference dividends and any attributable tax thereto for the period is deducted from the net profit for the period (or added to the net loss for the period) in order to calculate the net profit or loss for the period attributable to equity shareholders.
4. The amount of preference dividends for the period that is deducted from the net profit for the period is:
  - a) The amount of any preference dividends on non-cumulative preference shares provided for in respect of the period; and
  - b) The full amount of the required preference dividends for cumulative preference shares for the period, wither or not the dividends have been provided for. The amount of preference dividends for the period does not include the amount of any preference dividends for cumulative preference shares paid or declared during the current period in respect of previous periods.
5. If an enterprise has more than one class of equity shares, net profit or loss for the period is apportioned over the different classes of shares in accordance with their dividend rights.

### Per Share – Basic

1. For the purpose of calculating basic earnings per share, the number of equity shares should be the weighted average number of equity shares outstanding during the period.
2. The weighted average number of equity shares outstanding during the period reflects the fact that the amount of shareholders' capital may have varied during the period as a result of a larger or lesser number of shares outstanding at the beginning of the period, adjusted by the number of equity shares bought back or issued during the period multiplied by the time-weighting factor. The time-weighting factor is the number of days for which the specific shares are outstanding as a proportion of the



total number of days in the period; a reasonable approximation of the weighted average is adequate in many circumstances.

Appendix illustrates the computation of weighted average number of shares.

3. In most cases, shares are included in the weighted average number of shares from the date the consideration is receivable, for example:

- a) Equity shares issued in exchange for cash are included when cash is receivable;
- b) Equity shares issued as a result of the conversion of a debt instrument to equity shares are included as to the date of conversion;
- c) Equity shares issued in lieu of interest or principal on other financial instruments are included as of the date interest ceases to accrue;
- d) Equity shares issued in exchange for the settlement of a liability of the enterprise are included as of the date the settlement becomes effective;
- e) Equity shares issued as consideration for the acquisition of an asset other than cash are included as of the date on which the acquisition is recognized; and
- f) Equity shares issued for the rendering of services to the enterprise are included as the services are rendered.

In these and other cases, the timing of the inclusion of equity shares is determined by the specific terms and conditions attaching to their issue. Due consideration should be given to the substance of any contract associated with issue.

4. Equity shares issued as part of the consideration in an amalgamation in the nature of purchase are included in the weighted number of shares as of the date of the acquisition because the transferee incorporates the results of the operations of the transferor into its statement of profit and loss as from the date of acquisition. Equity shares issued during the reporting period as part of the consideration in an amalgamation in the nature of merger are included in the calculation of the weighted average number of shares from the beginning of the reporting period because the financial statements of the combined enterprise for the reporting period are prepared as if the combined entity had existed from the beginning of the reporting period. Therefore, the number of equity shares used for the calculation of basic earnings per share in an amalgamation in the nature of merger is the aggregate of the weighted average number of shares of the combined enterprise, adjusted to equivalent shares of the enterprise whose are outstanding after the amalgamation.

5. Partly paid equity shares are treated as a fraction of an equity share to the extent that they were entitled to participate in dividends relative to a fully paid equity share during the reporting period.

Appendix II illustrates the computations in respect of partly paid equity shares.

6. Where an enterprise has equity shares of different nominal values but with the same divided rights, the number of equity shares is calculated by converting all such equity shares into equivalent number of shares of the same nominal value.

7. Equity shares which are issuable upon the satisfaction of certain conditions resulting from contractual arrangements (contingently issuable shares) are considered outstanding, and included in the computation of basic earnings per share from the date when all necessary conditions under the contract have been satisfied.

8. The weighted average number of equity shares outstanding during the period and for all periods presented should be adjusted for events, other than the conversion of potential equity shares that have changes the number of equity shares outstanding, without a corresponding change in resources.

9. Equity shares may be issued, or the number of shares outstanding may be reduced, without a corresponding change in resources. Examples include:

- a) A bonus issue;
- b) A bonus element in any other issue, for example a bonus element in a rights issue to existing shareholders;
- c) A share split; and
- d) A reverse share split (consolidation of shares).

10. In case of a bonus issue or a share split, equity shares are issued to existing shareholders for no additional consideration. Therefore, the number of equity shares outstanding is increased without an increase in resources. The number of equity shares outstanding before the event is adjusted for the proportionate change in the number of equity shares outstanding as if the event had occurred at the beginning of the earliest period reported. For example, upon a two-for-one bonus issue, the number of shares outstanding prior to the issue is multiplied by a factor of three to obtain the new total number of shares, or by a factor of two to obtain the number of additional shares.

Appendix III illustrates the computation of weighted average number of equity shares in case of a bonus issue during the period.

11. The issue of equity shares at the time of exercise or conversion of potential equity shares will not usually give rise to a bonus element, since the potential equity shares will usually have been issued for full value, resulting in a proportionate change in the resources available to the

enterprise. In a rights issue, on the other hand, the exercise price is often less than the fair value of the shares. Therefore, a rights issue usually includes a bonus element. The number of equity shares to be used in calculating basic earnings per share for all periods prior to the rights issue is the number of equity shares outstanding prior to the issue, multiplied by the following factor:

Fair value per share immediately prior to the exercise of rights  
Theoretical ex-rights fair value per share

The theoretical ex-rights fair value per share is calculated by adding the aggregate fair value of the shares immediately prior to the exercise of the rights to the proceeds from the exercise of the rights, and dividing by the number of shares outstanding after the exercise of the rights. Where the rights themselves are to be publicly traded separately from the shares prior to the exercise date, fair value for the purposes of this calculation is established at the close of the last day on which the shares are traded together with the rights.

Appendix IV illustrates the computation of weighted average number of equity shares in case of a rights issue during the period.

### **Diluted Earnings Per Share**

1. For the purpose of calculating diluted earnings per share, the net profit or loss for the period attributable to equity shareholders and the weighted average number of shares outstanding during the period should be adjusted for the effects of all dilutive potential equity shares.

2. In calculating diluted earnings per share, effect is given to all dilutive potential equity shares that were outstanding during the period, that is:

a) The net profit for the period attributable to equity shares is:

I. Increased by the amount of dividends recognized in the period in respect of the dilutive potential equity shares as adjusted for any attributable change in tax expense for the period;

II. Increased by the amount of interest recognized in the period in respect of the dilutive potential equity shares as adjusted for any attributable change in tax expense for the period; and

III. Adjusted for the after-tax amount of any other changes in expenses or income that would result from the conversion of the dilutive potential equity shares.

b) The weighted average number of equity shares outstanding during the period is increased by the weighted average number of additional equity shares which would have been outstanding assuming the conversion of all dilutive potential equity shares.

3. For the purpose of this Statement. Share application money pending allotment or any advance share application money as at the balance sheet date, which is not statutorily required to be kept separately and is being utilized in the business of the enterprise, is treated in the same manner as dilutive potential equity shares for the purpose of calculation of diluted earnings per share.

### **Dilutive Potential Equity Share**

1. Potential equity shares should be treated as dilutive when, and only when, their conversion to equity shares would decrease net profit per share from continuing ordinary operations.

2. An enterprise used net profit from continuing ordinary activities as “the control figure” that is used to establish whether potential equity shares are dilutive or anti-dilutive. The net profit from continuing ordinary activities is the net profit from ordinary activities (as defined in AS 5) after deducting preference dividends and any attributable tax thereto and after excluding items relating to discontinued operations<sup>6</sup>.

3. Potential equity share are anti-dilutive when their conversion to equity shares would increase earnings per share from continuing ordinary activities or decrease loss per share from continuing ordinary activities. The effects of anti-dilutive potential equity shares are ignored in calculation diluted earnings per share.

4. In considering where potential equity shares are dilutive or anti-dilutive, each issue or series of potential equity shares is considered separately rather than in aggregate. The sequence in which potential equity shares are considered may affect whether or not they are dilutive. Therefore, in order to maximize the dilution of basic earnings per share, each issue or series of potential equity share is calculated. Where the earnings per incremental share is the least, the potential equity share is considered most dilutive and vice-versa.

Appendix VII illustrates the manner of determining the order in which dilutive securities should be included in the computation of weighted average number of shares.

5. Potential equity shares are weighted for the period they were outstanding. Potential equity shares that were cancelled or allowed to lapse during the reporting period are included in the computation of diluted earnings per share only for the portion of the period during which they were outstanding. Potential equity shares that have been converted into equity shares during the reporting period are included in the calculation of diluted earnings per share from the beginning of the period to the date of conversion; from the date of conversion, the resulting equity shares are included in computing both basic and diluted earnings per share.

## Restatement

1. If the number of equity or potential equity shares outstanding increases as a result of a bonus issue or shares split or decreases as a result of a reverse share split (consolidation of shares), the calculation of basic and diluted earnings per share should be adjusted for all the periods presented. If these changes occur after the balance sheet date but before the date on which the financial statements are approved by the board of directors, the per share calculations for those financial statements and any prior period financial statements are approved by the board of directors, the per share calculations for those financial statements and any prior period financial statement presented should be based on the new number of shares. When per share calculation reflect such changes in the number of shares, that fact should be disclosed.

2. An enterprise does not restate diluted earnings per share of any prior presented for changes in the assumptions used or for the conversion of potential equity shares into equity shares outstanding.

3. An enterprise is encouraged to provide a description of equity share transaction or potential equity share transactions, other than bonus issues, share splits and reverse share splits (consolidation or shares) which occur after the balance sheet date when they are of such importance that non-disclosure would affect the ability of the users of the financial statements to make proper evaluations and decisions. Examples of such transactions include:

- a) The issue of shares for cash;
- b) The issue of shares when the proceeds are used to repay debt or preference shares outstanding at the balance sheet date;
- c) The cancellation of equity shares outstanding at the balance sheet date;
- d) The conversion or exercise of potential equity shares, outstanding at the balance sheet date, into equity shares;
- e) The issue of warrants, options or convertible securities; and
- f) The satisfaction of conditions that would result in the issue of contingently issuable shares.

4. Earnings per share amount are not adjusted for such transactions occurring after the balance sheet date because such transactions do not affect the amount of capital used to produce the net profit or loss for the period.

## Disclosure

1. In addition to disclosures as required by paragraphs 8, 9 and 44 of this Statement, an enterprise should disclose the following:

a) The amounts used as the numerators in calculating basic and diluted earnings per share, and a reconciliation of those amounts to the net profit or loss for the period;

b) The weighted average number of equity shares used as the denominator in calculating basic and diluted earnings per share, and a reconciliation of these denominators to each other; and

2. Contracts generating potential equity shares may incorporate terms and conditions which affect the measurement of basic and diluted earnings per share. These terms and conditions may determine whether or not any potential equity shares are dilutive and, if so, the effect on the weighted average number of shares outstanding and any consequent adjustments to the net profit attributable to equity shareholders. Disclosure of the terms and conditions of such contracts is encouraged by this Statement.

3. If the enterprise discloses, in addition to basic and diluted earnings per share, per share amounts using a reported component of net profit other than net profit or loss for the period attributable to equity shareholders, such amounts should be calculated using the weighted average number of equity shares determined in accordance with this Statement. If a component of net profit is used which is not reported as a line item in the statement of profit and loss, a reconciliation should be provided between the component used and a line item which is reported in the statement of profit and loss. Basic and diluted per share amounts should be disclosed with equal prominence.

4. An enterprise may wish to disclose more information than this Statement requires. Such information may help the users to evaluate the performance of the enterprise and may take the form of the per share amounts for various components of net profit, e.g. profit from ordinary activities<sup>7</sup>. Such disclosures are encouraged. However, when such amounts are disclosed, the denominators need to be calculated in accordance with the Statement in order to ensure the comparability of the per share amounts disclosed.

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## **2.17 THEORY QUESTIONS**

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1. What do you mean by potential equity share?
2. How do you calculate Basic EPS if bonus shares are issued in that year?
3. How do you calculate theoretical ex right price?
4. What are the disclosure requirements of this standard?

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## 2.18 ACCOUNTING FOR TAXES ON INCOME

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Accounting standard (AS) 22, 'Accounting for Taxes on Income', issued by the Council of the Institute of Chartered Accountants of India, comes into effect in respect of accounting periods commencing on or after 1-4-2001. It is mandatory in nature for:

- a) All the accounting periods commencing on or after 01.04.2001, in respect of the following:
  - i) Enterprises whose equity or debt securities are listed on a recognized stock exchange in India and enterprises that are in the process of issuing equity or debt securities that will be listed on a recognized stock exchange in India as evidenced by the board of directors' resolution in this regard.
  - ii) All the enterprises of group, if the parent present consolidated financial statements and the Accounting Standard is mandatory in nature in respect of any of the enterprises of that group in terms of (i) above.
- b) All the accounting periods commencing on or after 01.04.2002, in respect of companies not covered by (a) above.
- c) All the accounting periods commencing on or after 01.04.2003, in respect of all other enterprises.

The Guidance Note on Accounting for Taxes on Income, issued by the Institute of Chartered Accountants of India in 1991, stands withdrawn from 1.4.2001.

### OBJECTIVE

The objective of this Statement is to prescribe accounting treatment for taxes on income. Taxes on income are one of the significant items in the statement of profit and loss of an enterprise. In accordance with the matching concept, taxes on income are accrued in the same period as the revenue and expenses to which they relate. Matching of such taxes against revenue to a period special problems arising from fact that a number of cases, taxable income may be significantly different from the accounting income. This divergence between taxable income and accounting income arises due to two main reasons. Firstly, there are difference between items of revenue and expenses as appearing in the statement of profit and loss and the items which are considered as revenue, expenses or deductions for tax, purposes. Secondly, there are differences between the amount in respect of a particular item of revenue or expense as recognized in the statement of profit and loss and the corresponding amount which is recognized for the computation of taxable income.

### SCOPE

1. This Statement should be applied in accounting for taxes on income. This includes the determination of the amount of the expense or saving related to taxes on income in respect of accounting period and the disclosure of such an amount in the financial statements.

2. For the purpose of this Statement, taxes on income include all domestic and foreign taxes which are based on taxable income.

3. This Statement does not specify when, or how, an enterprise should account for taxes that are payable on distribution of dividends and other distributions made by the enterprise.

## DEFINITIONS

For the purpose of this Statement, the following terms are used with the meaning specified:

**Accounting income (loss)** is the net profit or loss for a period, as reported in the statement of profit and loss, before deducting income tax expense or adding income tax saving.

**Taxable income (tax loss)** is the amount for the income (loss) for a period, determined in accordance with the tax laws, based upon which income tax payable (recoverable) is determined.

**Tax expense (tax saving)** is the aggregate of current tax and deferred tax charged or credited to the statement of profit and loss for the period.

**Current tax** is the amount of income tax determined to be payable (recoverable) in respect of the taxable income (tax loss) for a period.

**Deferred tax** is the tax effect of timing differences.

**Timing differences** are the differences between taxable income and accounting income for a period that originate in one period and are capable of reversal in one or more subsequent periods.

**Permanent differences** are the differences between taxable income and accounting income for a period that originate in one period do not reverse subsequently.

**Taxable income** is calculated in accordance with tax laws. In some circumstances, the requirements of these laws to compute taxable income differ from the accounting policies applied to determine accounting income. The effect of this difference is that the taxable income and accounting income may not be the same.

The differences between taxable and accounting income can be classified into permanent differences and timing differences. **Permanent differences** are those differences between taxable income and accounting income which originate in one period and do not reverse subsequently. For instance, if for the purpose of computing taxable income, the tax laws allow only a part of an item of expenditure, the disallowed amount would result in a permanent difference.

**Timing differences** are those differences between taxable, income and accounting income for a period that originate in one period and are capable of reversal in one or more subsequent periods. Timing differences arise because the periods in which some items of revenue and expenses



are included in taxable income do not coincide with the period in which such items of revenue and expenses are included or considered in arriving at accounting income. For example, machinery purchased for scientific research related to business is fully allowed as deduction in the first year for tax purposes whereas the same would be charged to the statement of profit and loss as depreciation over its useful life. The total depreciation charged on the machinery for accounting purposes and the amount allowed as deduction for tax purposes will ultimately be the same, but periods over which the depreciation is charged and the deduction is allowed will differ. Another example of timing difference is a situation where, for the purpose of computing taxable income, tax laws allow depreciation on the basis of the written down value method, whereas for accounting purposes, straight line method is used. Some other examples of timing differences arising under the Indian tax laws are given in Appendix

**Unabsorbed depreciation and carry forward of losses** which can be set-off against future taxable income are also considered as timing differences and result in deferred tax assets, subject to consideration of prudence.

## RECOGNITION

1. Tax expense for the period, comprising current tax and deferred tax, should be included in the determination of the net profit or loss for the period.
2. Taxes on income are considered to be an expense incurred by the enterprise in earning income and are accrued in the period as the revenue and expenses to which they relate. Such matching may result into timing differences. The tax effects of timing differences are included in the tax expense in the statement of profit and loss and as deferred tax assets (subject to the consideration of prudence as set out in paragraphs 15-18) or as deferred tax liabilities, in the balance sheet.
3. An example of tax effect of a timing difference that results in a deferred tax asset is an expense provided in the statement of profit and loss but not allowed as a deduction under Section 43B of the Income-tax Act, 1961.

This timing difference will reverse when the deduction of that expense is allowed under Section 43B in subsequent year(s). An example of tax effect of a timing difference resulting in a deferred tax liability is the higher charge of depreciation allowable under the Income-tax Act, 1961, compared to the depreciation provided in the statement of profit and loss. In subsequent years, the differential will reverse when comparatively lower depreciation will be allowed for tax purposes.

4. Permanent differences do not result in deferred tax assets or deferred tax liabilities.
5. Deferred tax should be recognized for all the timing differences, subject to the consideration of prudence in respect of deferred tax assets as set out in paragraphs 15-18.

6. This Statement requires recognition of deferred tax for all the timing differences. This is based on the principle that the financial statements for a period should recognize the tax effect, whether current or deferred, of all the transactions occurring in that period.

7. Except in the situation stated in paragraph 17, deferred tax assets should be recognized and carried forward only to the extent that there is a reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be realized.

8. While recognizing the tax effect of timing differences, consideration of prudence cannot be ignored. Therefore, deferred tax assets are recognized and carried forward only to the extent that there is a reasonable certainty of their realisation. This reasonable level of certainty would normally be achieved by examining the past record of the enterprise and by making realistic estimates of profits of the future.

9. Where an enterprise has unabsorbed depreciation or carry forward of losses under tax laws, deferred tax assets should be recognized only to the extent that there is virtual certainty supported by convincing evidence that sufficient future taxable income will be available against which such deferred tax assets can be realized.

10. The existence of unabsorbed depreciation or carry forward of losses under tax laws is strong evidence that future taxable income may not be available. Therefore, when an enterprise has a history of recent losses, the enterprise recognizes deferred tax assets only to the extent that it has timing differences the reversal of which will result in sufficient income or there is other convincing evidence that sufficient taxable income will be available against which such deferred tax assets can be realized. In such circumstances, the nature of the evidence supporting its recognition is disclosed.

## **RE-ASSESSMENT OF UNRECOGNIZED DEFERRED TAX ASSETS**

At each balance sheet date, an enterprise re-assesses unrecognized deferred tax assets. The enterprise recognizes previously unrecognized deferred tax assets to the extent that it has become reasonably certain or virtually certain, as the case may be (see paragraphs 15 to 18), that sufficient future taxable income will be available against which such deferred tax assets can be realized. For example, an improvement in trading conditions may make it reasonably certain that the enterprise will be able to generate sufficient taxable income in the future.

## **MEASUREMENT**

Current tax should be measured at the amount expected to be paid to (recovered from) the taxation authorities, using the applicable tax rates and tax laws.

Deferred tax assets and liabilities should be measured using the tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax assets and liabilities are usually measured using the tax rates and tax laws that have been enacted. However, certain announcements of tax rates and tax laws by the government may have the substantive effect of actual enactment. In these circumstances, deferred tax assets and liabilities are measured using such announced tax rate and tax laws.

When different tax rates apply to different levels of taxable income, deferred tax assets and liabilities are measured using average rates.

Deferred tax assets and liabilities should not be discounted to their present value.

The reliable determination of deferred tax assets and liabilities on a discounted basis requires detailed scheduling of the timing of the reversal of each timing difference. In a number of cases such scheduling is impracticable or highly complex. Therefore, it is inappropriate to require discounting of deferred tax assets and liabilities. To permit, but not to require, discounting would result in deferred tax assets and liabilities which would not be comparable between enterprises. Therefore, this Statement does not require or permit the discounting of deferred tax assets and liabilities.

## **REVIEW OF DEFERRED TAX ASSETS**

The carrying amount of deferred tax assets should be reviewed at each balance sheet date. An enterprise should write-down the carrying amount of a deferred tax asset to the extent that it is no longer reasonably certain or virtually certain, as the case may be (see paragraphs 15 to 18), that sufficient future taxable income will be available against which deferred tax asset can be realized. Any such write-down may be reversed to the extent that it becomes reasonably certain or virtually certain, as the case may be (see paragraphs 15 to 18), that sufficient future taxable, income will be available.

## **PRESENTATION AND DISCLOSURE**

1. An enterprise should offset assets and liabilities representing current tax if the enterprise:
  - a. Has a legally enforceable to set recognized amounts; and
  - b. Intends to settle the asset and the liability on a net basis.
2. An enterprise will normally have a legally enforceable right to set off an asset and liability representing current tax when they relate to income taxes levied under the same governing taxation laws and the taxation laws permit the enterprise to make or receive a single net payment.

3. An enterprise should offset deferred tax assets and deferred tax liabilities if:

- a) The enterprise has a legally enforceable right to set off assets against liabilities representing current tax; and
- b) The deferred tax assets and the deferred tax liabilities relate to taxes on income levied by the same governing taxation laws.

4. Deferred tax assets and liabilities should be distinguished from assets and liabilities representing current tax for the period. Deferred tax assets and liabilities should be disclosed under a separate heading in the balance sheet of the enterprise, separately from current assets and current liabilities.

5. The break-up of deferred tax assets and deferred tax liabilities into major components of the respective balance should be disclosed in the notes to accounts.

6. The nature of the evidence supporting the recognition of deferred tax assets should be disclosed, if an enterprise has unabsorbed depreciation or carry forward of losses under tax laws.

### **TRANSITIONAL PROVISIONS**

1. On the first occasion that the taxes on income are accounted for in accordance with this Statement, the enterprise should recognize, in the financial statement, the deferred tax balance that has accumulated prior to the adoption of this Statement, as deferred tax asset/liability with a corresponding credit/change to the revenue reserves, subject to the consideration of prudence in case of deferred tax assets (see paragraphs 15-18). The amount so credited/charged to the revenue reserves should be the same as that which would have resulted if this Statement has been in effect from the beginning.<sup>3</sup>

2. For the purpose of determining accumulated deferred tax in the period in which this Statement is applied the first time, the opening balanced of assets and liabilities for accounting purposes and for tax purposes are compared and the differences, if any, are determined. The tax effects of these differences, if any, should be recognized as deferred tax assets or liabilities, if these differences are timing differences. For example, in the year in which an enterprise adopts this Statement, the opening balance of a fixed asset is Rs. 100 for accounting purposes and Rs. 60 for tax purposes. The difference is because the enterprise applies written down value method of depreciation for calculating taxable income whereas for a accounting purposes straight line method is used. This difference will reverse in future when depreciation for tax purposes will be lower as compared to the depreciation for a accounting purposes. In the above case, assuming that enacted tax rate for the year is 40% and that there are no other timing differences, deferred tax liability of Rs. 16 [(Rs. 100 – Rs. 60) x 40%] would be recognized. Another example is an expenditure that has already been written off for accounting purposes in

the year of its incurrance but is allowable for tax purposes over a period of time. In this case, the asset representing that expenditure would have a balance only for tax purposes but not for accounting purposes. The difference between balance of the asset for tax purposes and the balance (which is nil) for accounting purposes would be a timing difference which will reverse in future when this expenditure would be allowed for tax purposes. Therefore, a deferred tax asset would be recognized in respect of this difference subject to the consideration of prudence (see paragraphs 15 – 18).



## **VALUATION OF BUSINESS FOR AMALGAMATION AND MERGER**

### **Unit Structure :**

- 3.1 Introduction
- 3.2 Need for valuation of Goodwill
- 3.3 Factors affecting Goodwill
- 3.4 Characteristics of Goodwill
- 3.5 Need for valuation of Goodwill
- 3.6 Valuation of Assets
- 3.7 Future maintainable profit
- 3.8 Normal Rate of return
- 3.9 Capital Employed
- 3.10 Methods of valuation of Goodwill
- 3.11 Illustrations

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### **3.1 INTRODUCTION**

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Goodwill means the reputation of a Business concern which enables businessmen to earn extra profit, as compared to other concern. Goodwill means various advantages of reputation and connections of a business.

Mr. Kohler defines goodwill as “the current value of expected future income in excess or normal return on the investment in net tangible assets:”

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### **3.2 NEED FOR VALUATION**

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The need for valuation of goodwill depends on the form of a business organisation. The circumstances in which the goodwill is valued are given below

Form of Business Organisation	Need for valuation
Sole proprietor Partnership firm	<p>Sale of business</p> <p>Conversion into partnership</p> <p>Admission of partner</p> <p>Retirement / Death of partner</p> <p>Change in profit sharing ratio</p> <p>Amalgamation of firm</p> <p>Dissolution on account of sale of business.</p> <p>Conversion into Private / public Limited company.</p>
Company	<p>Mergers / Acquisitions of business</p> <p>Transfer of controlling block of shares</p> <p>Sale of Business</p> <p>Conversion of one class of shares into another.</p>

### 3.3 FACTORS AFFECTING GOODWILL

A firm may earn more profits than other firms in the same type of industry because of numerous factors some of which are stated below:

Sr. No.	Main Factors	Sub factors
I	Managerial and Human Resource Factors	<ul style="list-style-type: none"> <li>• Superior Management team</li> <li>• Superb Organisation</li> <li>• Exclusive Training programmes for employees.</li> <li>• Co-ordinal labour relationship.</li> <li>• Discovery of talent.</li> <li>• Experienced work force</li> <li>• Long standing experience</li> </ul>
II	Product / Service Factors	<ul style="list-style-type: none"> <li>• Secretor patent manufacturing</li> <li>• Exclusive know-how</li> <li>• Economies of scale of production</li> <li>• Foreign collaboration</li> <li>• Quality and reliability</li> </ul>

III	Marketing Factors	<ul style="list-style-type: none"> <li>• Effective advertisement</li> <li>• Market dominance</li> <li>• Favourable attitude of customers</li> <li>• Adequate selling outlets</li> <li>• Adequate service centres</li> <li>• Established list of customers</li> <li>• Exclusive selling arrangements</li> </ul>
IV	Physical factors	<ul style="list-style-type: none"> <li>• Strategic location</li> <li>• Availability of raw material</li> <li>• Exclusive infrastructural facilities</li> <li>• Adequate input availability like power, man power etc.</li> </ul>
V	Fiscal Factors	<ul style="list-style-type: none"> <li>• Cost saving</li> <li>• Cost of financing</li> <li>• Tax exemptions / deduction benefits</li> <li>• Good credit rating</li> </ul>
VI	Other Factors	<ul style="list-style-type: none"> <li>• Good public image</li> <li>• Favourable Government regulations</li> <li>• Good relationship with suppliers</li> </ul>

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### **3.4 CHARACTERISTICS OF GOODWILL :**

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1. It is an intangible or invisible asset.
2. It's value is not fixed. It is subject to fluctuation due to internal as well as external factors in value.
3. It can not valued in isolation.
4. Its valuation is attached to the total value of the business.
5. It has value only on going concern basis.
6. It is either created internally or purchased from outside.
7. Because off Goodwill a firm is able to earn excess profits than the other firms in the same class of business.
8. value of Goodwill may differ due to different method used. In certain cases it is not transferable.



### 3.5 NEED FOR VALUATION OF GOODWILL

In case of partnership firm the necessity of valuating goodwill arises in connection with the following. Whenever there is change in constitution of the business and partnership deed.

1. When there is a change in the profit-sharing ratio among the partners.
2. When a new partner is admitted.
3. When a partner retires or dies and
4. When the firm sells its business to a company or is amalgamated with another firm.

In case of joint stock company the necessity of valuation of goodwill arises in the following circumstances: -

- 1) When the business of the company is taken over by another company. e.g. amalgamations, absorptions, mergers.
- 2) When stock exchange quotations not being available, shares have to be valued for taxation purpose e.g. wealth tax etc.
- 3) When large stock of shares of the company have to be bought or sold.
- 4) When the management wants to write back goodwill, which was previously written off.
- 5) When the company is being taken over by the government.

### 3.6 VALUATION OF ASSETS

When Goodwill is to be raised / valued, it is necessary to revalue various Assets as guidelines issued by I. C. A. I. some of these are stated below.

1.	Fixed Assets		
	As 6	:	Depreciation
	As. 10	:	Fixed Assets
	As. 12	:	Government Grants Received / receivable for revenue expenses or capital expenditure.
	As. 16	:	Borrowing Cost
	As. 19	:	Leases (Treatment of various types of lease Assets in the books of lessee / lessor.
	As. 22	:	Accounting for Taxes on Income (e.g. Deferred tax; assets and liabilities)
	As. 26	:	Intangible Assets
	As. 28	:	Impairment of Assets
	As. 29	:	Provisions, Contingent Liabilities and contingent Assets.)

### 3.7 DETERMINATION OF FUTURE MAINTAINABLE PROFIT [F.M.P]

Determination of Future maintainable profit under normal circumstances is most important and complicated task: F. M. P. is subject to evolution of many factors such as capability of company's management, future govt. policies; general and economical trend etc. For determining F. M. P. non operating expenses and incomes are not to be considered. It is decided on the basis of average post Trading profits subject to certain changes that may have effect on future earning of the business concerns.

#### 1) Calculation of past average earnings :

In order to calculate F. M. P. the profit of the previous year can be considered, if necessary. Such business profit should be making adjusted to make it acceptable for averaging.

Average profit may be simple average or weighted average profit.

#### a) Simple average profit

$$= \frac{\text{Total average profit}}{\text{No. of years}}$$

b) When profit shows increasing on depreciating tendency weighted average profit should be calculated.

Weighted Average profit

$$= \frac{\text{Total weighted profits / products}}{\text{Total weights}}$$

#### Calculation of F. M. P.

Particulars	Rs.	Rs.
Average Trading profit after tax	X	
Add: Income Tax	X	
$\frac{[W.P.A.T. \times \text{Tax Rate}]}{[1 - \text{Tax Rate}]}$		
Average Profit before Tax		X
Add: Increase in profit in Future		
i) Saving in expenses	X	
ii) Additional income likely to earn in future	X	X
Less : i) Additional Exp. likely to incurred in future	X	X
ii) Income earned in past but not expected to earn.	X	(X)
iii) Abnormal gain credited to profit & Loss A/c	X	X
F. M. P. before Tax		XY
Less : Income Tax (Revised)		(X)
F. M. P. after Tax		XX

**Note :** Goodwill can be classified as

i) Purchased Goodwill

ii) Internet Goodwill

iii) Goodwill due to various associate with Govt. / political parties etc.

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### **3.8 NORMAL RATE OF RETURN [N. R. R.]**

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The term N. R. R. means the rate of return that will satisfy an ordinary investor in the industry concerned. NRR differs from industry to industry. It is also depends upon business risk as well as financial risk in the business.

If N. R. R. not given in the problem, it can be calculated as under.

$$N.R.R. = \frac{\text{Dividend per equity share in similar Co.}}{\text{Market value per share in similar company}}$$

**Note :** N. R. R. may adjusted for various changes in the basis satiation related to business concern

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### **3.9 CAPITAL EMPLOYED**

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The goodwill of a business depends on the amount of capital employed also. It is the present value of tangible trading assets minus all liabilities. Non Trading assets such as investments in shares should be excluded. Similarly intangible assets. Such as goodwill useless patents and Trade marks should be excluded.

It is considered desirable to use average capital employed in place of capital employed since capital employed as calculated from the balance sheet will be on a certain date only

Average capital employed can be calculated as under : -

$$A.C.E. = \frac{\text{opening capital} + \text{closing capital}}{2}$$

OR

$$= \text{Opening capital} \times \frac{1}{2} \text{ of profit earned during the year .}$$

OR

$$= \text{Closing capital} - \frac{1}{2} \text{ of the profit earned during the year.}$$

Average Capital employed can be calculated from given Balance Sheet on the particular date. It is calculated as under:

## ASSETS SIDE APPROACH

Valuation Of Business  
For Amalgamation  
And Merger

	Rs.	Rs.
All tangible trading Assets at revised value	X	
Otherwise at book value recorded as well as unrecorded assets (except goodwill, non trade investment, fictitious assets, differed revenue expenditure)	X X	XX
Less: Third parties liabilities payable recorded as well as unrecorded, e.g. debentures loans, current liabilities provisions etc. Tangible capital employed at the end of the year.	X X	(X) X
Less : Half of the profit earned during the year.		(X)
Average capital employed		XX

**Note:** Half of profit earned should be deducted only when profit was not withdrawn.

**Note :** Capital employed represents the fair value of Net Tangible Trading Assets used in the business for earning the profits.

- i) Non trade investment should be excluded.
- ii) Goodwill and fictitious assets shown in the balance sheet should be excluded.
- iii) Unproductive assets should be excluded.
- iv) Assets should taken at fair value to the business.
- v) External recorded or unrecorded liabilities should considered at amount payable. [i.e. premium payable on redemption of debentures etc]
- vi) Debenture redemption fund is not a liability.
- vii) Works men profit shearing fund is liability.
- viii) Works men compensation fund is liability to the extent actual amount payable.
- ix) Liabilities relating to non-trade assets should be excluded.

## LIABILITY SIDE APPROACH

Liability side approach may be adopted for deciding average capital employed. It is adjusted owners fund (share holders fund). It can be calculated as under:

	Rs.
Paid up share capital (equity + Preference share-capital)	xxx
Add: Reserves and surplus (accumulated profits)	xxx
Add : Revaluation OR Profits	xxx
	xxx
Less : i) Revaluation loss <span style="float: right;">X</span>	
ii) Fictitious assets <span style="float: right;">X</span>	
iii) Non Trading Assets <span style="float: right;">X</span>	
	xxx
Trading capital employed at the end of the year	xxx
Less : Half of the profit earned should be deducted onlyif profit was not withdrawn	(xx)
Average capital employed	xxxx

---

### 3.10 METHODS OF VALUATION OF GOODWILL

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- **NO. OF YEARS PURCHASE OF SALES OR GROSS FEES**

Under this method the purchaser usually professional firms, pays to the vendor the amount of goodwill, calculated on the basis of net sales or fees received during the particular period.

This method is very simple and suitable for valuation of goodwill of professional firms. The period for gross fees received or net sales are settled by agreement between buyer and vendor.

- **NO. OF YEARS PURCHASED METHOD**

Under this method net profit of past few years is worked out. Goodwill is valued either by adding the profit of post three years or by considering average trade net profit.

*Goodwill = Average adjusted Trade net profit × no. of years purchase.*

**• NO. OF YEARS OF PURCHASE OF FUTURE MAINTAINABLE PROFIT**

Under this method the profits which are likely to be earned in future over the certain period of time are first estimated. To arrive at Future Maintainable Profits (F.M.P.) past profits over the years, after adjusting non-recurring factors as well as expected future events which were not there in the past are also considered.

$$\text{Goodwill} = F.M.P. \times \text{No. of years purchase.}$$

**• SUPER PROFIT METHOD**

In this case the future maintainable profits of the firm are compared with the normal profits of the firm super profit is the excess OR the profit earned by firm over the normal profit earned by the concern.

Super profit is excess of F. M. P. over normal profit.

$$\text{Super Profit} = F.M.P. - \text{Normal profit.}$$

**Normal Profit**

It is average profit earned by the similar concern in the industry. It is decided on the basis of average capital employed and normal rate of return expected by the investors on capital employed.

$$\text{Normal profit} = \text{Average Capital Employed} \times \frac{NRR}{100}$$

**METHODS OF VALUATION OF GOODWILL UNDER SUPER PROFIT**

**1) Purchase OR Super Profit Method**

Goodwill = Super profit X no. of years purchase under this method the no. of years of purchase will differ from industry to industry and from firm to firm.

**2) Capitalization of super profit**

Under this method the amount of super profit is capitalized at the normal rate of return. This method tries to find out the amount of capital required for earning the super profit.

$$\text{Goodwill} = \frac{\text{super profit}}{N.R.R.} \times 100$$

**3) Sliding scale of valuation of super profit**

This method is the variation of the purchased method. It is based on assumption that the greater amount OR super profit, the more difficult it is in future to maintain. If the super profit is greater more possibility of competition and therefore is difficult to maintain the same over the many years.

In this method the super profit is divided in two or three divisions / slide each of this is multiplied by different no. of years purchase, descending order from the first division.

E.g. If super profit is estimated Rs. 75,000 goodwill be calculated as under:

	Rs.
First Rs. 25,000 say three years purchases (25,000 x 3)	75,000
Second Rs. 25,000 for two years purchases (25,000 x 2)	50,000
Third Rs. 25,000 one years purchases (25,000 x 1)	25,000
Goodwill Rs.	1,50,000

### 3) Annuity method of Super Profit

Annuity takes into consideration time value money. Payment of Goodwill is made immediately for Super Profit likely to be earned in future. Goodwill in this case is the discounted value of the Super Profit.

$$\text{Goodwill} = \text{Super Profit} \times \text{Reference to annuity table}$$

### 4) Capitalisation of F. M. P. method

Under this method, goodwill is the excess of capitalize & value of F. M. P. over net tangible trading assets. Following are the steps to taken for valuating Goodwill under this method.

**Step 1 :** Find out F.M.P.

$$\text{Step 2 : Capitalised value of F.M.P.} = F.M.P. \times \frac{100}{N.R.R.}$$

**Step 3 :** net tangible Trading Assets

Total Tangible Trading Assets	x
Less : Third parties liabilities payable	(x)
	-----
Net tangible Trading Assets	x

**Step 4 : Goodwill**

$$= \text{Capitalized value of F.M.p.} - \text{Net Tan gible Trading Assets.}$$

**Note :** The value of Goodwill remains the same in case ofcapitalization of super profit or capitalization of F. M. P.

### 3.11 ILLUSTRATIONS

#### Illustration 1:

Ashok & Co. decided to purchase the business Sonu & Co. on 31-12-2010. Profits of Sonu & Co. for the last 6 year's were :

	Rs.
2005	10,000
2006	8,000
2007	12,000
2008	16,000
2009	25,000
2010	31,000

The following additional information about Sonu & Co. is also supplied :

- A casual income of Rs. 3,000 was included in the profits of 2007 which can never be expected in future.
- Profit of 2008 was reduced by Rs. 1,000 as a result of an extraordinary loss by fire.
- After acquisition of the business. Ashok & Co. has to pay insurance premium amounting to Rs. 1,000 which was not paid by Sonu & Co.
- Ashok the proprietor of, Ashok & Co. was employed in a firm at a monthly salary of Rs. 1,000 p.m. The business of Sonu & Co. was managed by a salaried manager who was paid a monthly salary of Rs. 400. Now, Mr. Ashok decides to manage the firm after replacing the manager.

Compute the value of goodwill on the basis of 3 years purchase of the average profit for the last 4 years.

#### Solution : Statement showing adjusted profit

Years	2007 (Rs.)	2008 (Rs.)	2009 (Rs.)	2010 (Rs.)
Profits Adjustments	12,000	16,000	25,000	31,000
<b>a)</b> Casual income not likely to be earned	(3,000)	NIL	NIL	NIL
<b>b)</b> Loss by fire	NIL	1,000	NIL	NIL
Adjusted- Trading Profits	9,000	17,000	25,000	31,000

$$\begin{aligned} \text{Average profits} &= \frac{9000 + 17000 + 25000 + 31000}{4} \\ &= 20500 \end{aligned}$$



	Rs.
Average Profits	20,500
Less : Insurance Premium payable	(1,000)
Add : Salary of Managers not payable (400 p.m. x 12 mths.)	+ 4,800
Less : Cost of Services of Ashok (1000 p.m. x 12 mths)	(12,000)
F. M. P.	12,300

Therefore, Adjusted average profit = 12300

Therefore, Goodwill = Average Profit X 3

$$= 12300 \times 3$$

$$= 36900$$

### Illustration : 2

The year wise results of the earnings of Ashok & Co. as disclosed by her profit and Loss Account are like this.

2006	Rs.	50,000	(Profit)
2007	Rs.	60,000	(Profit)
2008	Rs.	90,000	(Profit)
2009	Rs.	5,000	(Loss)
2010	Rs.	60,000	(Profit)

K Brothers are interested in purchasing the above business. Calculate the amount of goodwill payable by K Brothers to Asha & Co. taking following factors into consideration :

- i) Goodwill is to be calculated at three years purchase of the average profits of the previous five years.
- ii) Asha & Co. earned Rs. 30,000 from adventure of speculative nature in 2008. Out of this gain. Rs. 10,000 were credited to her Profit & Loss Account in that very year. No entry was made in the account for the remaining gain.
- iii) The machinery was destroyed by fire in 2005. Loss amounting to Rs 70,000 being terminal depreciation was set off against Profit & Loss Account of 2009.
- iv) Asha & Co. engaged the service of an expert who is drawing a salary of

Rs. 2000 per month K. Being an expert himself, does not need the service of that man. At present Mr. K is a manager in Q & Sons and is drawing a salary of Rs. 1500 per month. After the purchase of above business Mr. K has to resign from his employment.

Valuation Of Business  
For Amalgamation  
And Merger

**Solution :**

**Calculation of Actual Average Profit**

	Profit Given (Rs.)	Adjustment (Rs.)	Adjusted Profit (Rs.)
2006	50,000	NIL	50,000
2007	60,000	NIL	60,000
2008	90,000	-10,000	80,000
2009	-5,000	70,000	65,000
2010	6,000	NIL	<u>60,000</u>
		Total	<u>3,15,000</u>

$$\text{Average Profit} = \frac{3,15,000}{5} = 63,000$$

$$\text{Add Salary experts no longer required} = \frac{24,000}{87,000}$$

Less : Fair remuneration of K (18,000)

Actual average Profit 69,000

$$\begin{aligned} \text{Calculation of Goodwill} &= 69,000 \times 3 \\ &= \text{Rs. } 2,07,000 \end{aligned}$$

**Illustration : 3**

The following is the Balance Sheet Sun Ltd. As on 31<sup>st</sup> December, 2010.

Liabilities	Rs.	Assets	Rs.
Fully paid up capital 12000	1200000	Goodwill	40000
shares of Rs. 100 each		Land & Bldg.	780000
General Reserve	160000	Plant & Machinery	300000
Profit & Loss A/c	100000	10% Government Securities	
Creditors	80000	(F.V. 50000)	60000
Bills Payable	40000	Debtors	220000
		Bills Receivable	60000
		Stock in trade	120000
	<u>1580000</u>		<u>1580000</u>

The company earned net profits for the past years as follows: (This amounts include interest received from Government Securities).

2007 Rs.	100000
2008 Rs.	200000
2009 Rs.	300000
2010 Rs.	400000

The value of the goodwill should be computed at three years purchase of the average super profit for four years. The normal rate of return on capital employed in a similar business organisation is 12%.

**Solutions :**

- a) Average Capital Employed = Assets at a realisable value – Liabilities payable

Assets at Realisable value :

Land & Bldg.	780000
Plant & Machinery	300000
Debtors	220000
Bills Receivable	60000
Stock in trade	<u>120000</u>
	1480000
Less : Liabilities payable	
Creditors	80000
Bills Payable	<u>40000</u>
Capital Employed	<u>1360000</u>

- b) Normal rate of return = 12 %

c) Normal Profit =  $1360000 \times 12\%$   
= 163200

d) Average Past Profit =  $\frac{100000 + 200000 + 300000 + 400000}{4}$

=  $\frac{1000000}{4}$

= 250000 – 5000 (*Interest on Govt. Securities @10% on F.V.*)

= 245000

- e) Future maintainable profit = Average past Trading Profit = 245000

- f) Super profit + FMP – Normal Profit

= 245000 – 163200

= 81800

**Illustration : 4**

Ascertain the value of goodwill of Bahts & Co. carrying on business as retail traders from the following information

**Balance Sheet as on 31<sup>st</sup> December, 2010**

Liabilities	Rs.	Assets	Rs
Paid up capital 2500 shares of Rs. 100 Each	250000	Goodwill	25000
Profit & Loss A/c	56650	Land & Bldg.	110000
Bank Overdraft	58350	Plant & Machinery	100000
Creditors	90500	Stock	150000
Provision for taxation	19500	Debtors	45000
		Investment	45000
	475000		475000

The company commenced operations in with a paid up capital of Rs. 250000. The profits earned before providing for taxation (at 50%) have been as follows :

	Rs.
2006	62000
2007	64000
2008	71000
2009	78000
2010	85000

Average dividend paid by the company is at 12½% which is taken as a reasonable return expected on Capital invested in the business.

Goodwill is to be calculated with reference to Capitalisation of future maintainable profits method.

**Solution :**

a) Average Capital Employed = Assets at a realizable value – Liabilities payable

Assets at Realised value

Land & Bldg.	110000	
Plant & Machinery	100000	
Stock	150000	
Debtors	45000	
Investment	<u>45000</u>	450000
Bank Overdraft	58350	
Creditors	90500	
Provision for taxation	<u>19500</u>	<u>168350</u>
Capital Employed		<u>281650</u>

b) Normal rate of return = 12.5%

$$\begin{aligned} \text{c) Avg. Past Profit} &= \frac{62000 + 64000 + 71000 + 78000 + 85000}{5} = \frac{360000}{5} \\ &= 72000 \end{aligned}$$

d) Future maintainable Profit :

<i>Ave. Past Profit</i>	72000
<i>Less : Tax 50%</i>	<u>-36000</u>
<i>FMP after Tax</i>	<u>36000</u>

e) Capitalised value of maintainable profit.

$$\begin{aligned} &= \frac{FMP}{NRR} \times 100 \\ &= \frac{36000}{13.5} \times 100 \\ &= 288000 \end{aligned}$$

f) Value of Goodwill = Capitalised value of maintainable profits – Actual Cap. Employed

$$\begin{aligned} &= 288000 - 281650 \\ &= 6350 \end{aligned}$$

**Illustration : 5**

The following is the Balance Sheet of Sarah Ltd. As on 31<sup>st</sup> December, 2010

Liabilities	Rs.	Assets	Rs.
Paid up share capital 1000 shares of Rs. 200 each	200000	Goodwill Land & Bldg.	30000 170000
Capital Reserve	40000	Plant & Machinery	160000
General Reserve	60000	Vehicles	70000
Bank Loan	50000	Stock in trade	60000
Profit & Loss A/c	20000	Debtors	50000
Creditors	130000	Investment	30000
Bills Payable	40000		
Provision for taxation	30000		
	570000		570000

On Dec. 31, 2010 the asses were revalued as follows :

Land & Bldg.	Rs.	200000
Plant & Machinery	Rs.	150000
Vehicles	Rs.	60000

The company earned profit after depreciation & taxation as follows :

2008	Rs.	60000
2009	Rs.	70000
2010	Rs.	80000

The average of these profits are expected to be earned in future.

The valuation of goodwill should be based on two year's purchase of the annual super profit. It is considered that 10% is a reasonable return on tangible capital.

You are required to value the goodwill.

**Solution :**

a) Average Capital Employed = Assets at a realisable value – Liabilities payable

<b>Assets at Realisable value :</b>	<b>Rs.</b>	
Land & Bldg.	200000	
Plant & Machinery	150000	
Vehicles	60000	
Stock	60000	
Debtors	50000	
Investment	<u>30000</u>	
	550000	
Less : Liabilities		
Creditors	130000	
Bills Payable	40000	
Tax Provision	30000	
Bank Loan	<u>50000</u>	<u>250000</u>
Capital Employed		<u>300000</u>

- b) Normal rate of return = 10%
- c) Normal Profit = 300000 x 10%
- = 30000

$$\text{d) Average Past Profit} = \frac{60000 + 70000 + 80000}{3} = \frac{210000}{3}$$

$$= 70000$$

e) Future Maintainable Profit = 70,000

f) Super Profit = F.M.P. – Normal Profit

$$= 70000 - 30000$$

$$= 40000$$

g) Value of Goodwill = Super Profit X No. of years purchase

$$= 40000 \times 2$$

$$= 80000$$

### Illustration : 6

The net profits of a company before providing for taxation for the past five years Rs. 40000, Rs. 41,000, Rs. 42500, Rs. 43000 & Rs. 43500. The capital employed in the business is Rs. 400000 on which a reasonable rate of return of 15% is expected. It is expected that the company will be able to maintain its super profits for the next five years.

- a) Calculate the value of goodwill of business on the basis of an annuity of one rupee for five years at 15% interest as Rs. 4%.
- b) How would your answer differ if goodwill is calculated by capitalising the excess of the annual average distributable profits over the reasonable return on capital employed on the basis of the same return of 15%?
- c) Calculate goodwill on 4 years purchase of super profit.

### Solutions :

a) Avg. Capital Employed = Rs. 100000

b) NRR = 15%

c) Normal Profit =  $1,00,000 \times 15\% = \text{Rs. } 15000$

d) Avg. Past Profit =  $\frac{40,000 + 41,000 + 42,500 + 43,000 + 43,500}{5}$   
= 42,000

e) F.M.P.

N.P.B.T.            42,000

Tax@40%            16,800

FMP after Tax    25,200

f) Super profit =  $25200 - 15000 = 10200$

g) Value of Goodwill = Super Profit X No. of years purchases.

$$= 10200 \times 5 = 51000$$

Capitalisation Method :

$$\begin{aligned} \text{Capitalisation value} &= \frac{FMP}{NRR} \times 100 \\ &= \frac{25200 \times 100}{15} = 168000 \end{aligned}$$

Value of Goodwill =  $168000 - 100000 = 68000$

Value of Goodwill an annuity of Rs. 1 =  $10200 \times 4.10 = 41820$



**Illustration : 7**

The following are particulars in respect of Maru Ltd.

- i. Capital employed in the business is Rs. 4200000.
- ii. A reasonable rate of return expected in a similar type of business is 10%.
- iii. Net profit of the company after providing for depreciation & taxation for the past four years were :  
Rs. 400000, Rs. 420000, Rs. 460000 & Rs. 480000
- iv. It is expected that the company will be able to maintain its super profit for the next four years.

You are required to calculate the value of goodwill.

- a) On the basis of annuity of super profit method taking the present value of an annuity of Re. 1 for four years at 7% interest as Rs. 3.39.
- b) By capitalising the excess of the annual average distributable profits over a reasonable return on capital employed on the basis of the return of 7%.

**Solution :**

a) i) Capital Employed = Rs. 12,00,000

ii) NRR = 7%

iii) Standard Profit = 1200000 X 7% = 84000

iv) Avg. Past Profit =  $\frac{100000 + 120000 + 160000 + 180000}{4}$   
= 140000

v) FMP

Avg. Past Profit 140000

-140000

vi) Super Profit = FMP – Normal profit  
= 140000 – 84000  
= 56000

vii) Value of Goodwill

*Goodwill* =  $\frac{\text{Super Profit}}{\text{NRR}} \times 100$   
=  $\frac{56000}{7} \times 100$   
= Rs. 8,00,000

### Illustration : 8

The following is the Balance Sheet of X Limited as on 31<sup>st</sup> March 2010.

Liabilities	Rs.	Assets	Rs.
Share Capital 5,000 shares of Ts.100 each	5,00,000	Goodwill	1,25,000
Reserve Fund	1,50,000	Land & Building	1,80,000
		Less : <u>36,000</u>	1,44,000
Workmen compensation Fund	25,000	Depreciation Plant & Machinery (at cost)	2,40,000
Workmen Profit Sharing Fund	45,000	Less : <u>40,000</u>	2,00,000
Profit & Loss Account	1,50,000	Investments (to provide replacement of Plant & Machinery)	1,00,000
Creditors	2,30,000	Book Debts	3,60,000
Other Liabilities	1,00,000	Less : Provision <u>30,000</u>	3,30,000
		Stock	2,00,000
		Cash at Bank	75,000
		Preliminary Expenses	26,000
	12,00,000		12,00,000

### Further Information

- 1) The profits after tax @ 50% earned by the company for the three years were as under :
  - Year ended 31<sup>st</sup> March 2008 Rs. 5,10,000
  - Year ended 31<sup>st</sup> March 2009 Rs. 7,73,000
  - Year ended 31<sup>st</sup> March 2010 Rs. 8,90,000
- 2) X Ltd. had been carrying on business for the past several years. The company is to be taken over by another company. For this purpose you are required to value Goodwill by "capitalization of maintainable profits method". For this purpose following additional information is available:
  - a) The new company expects to carry on business with its own board of directors, without any addition. The fees paid by X Ltd. to its directors amounted to Rs. 2,000 p.m.
  - b) The new company expects a large increase in volume of business and therefore, will have to take an additional office for which it will have to pay extra rent of Rs. 36000 p.a.
  - c) As on 31<sup>st</sup> March 2010 Land and Buildings were worth Rs. 4,00,000 whereas Plant and Machinery were worth only Rs. 1,80,000. There is sufficient provision for doubtful debts. There is no fluctuation in the values of investments and stocks.
  - d) Liability under Workmen Compensation Fund was only Rs. 10,000.
- 3) The expected rate of return on similar business may be taken at 15%.
- 4) The expected rate of Tax likely to be 40%.

You are required to value Goodwill according to above instructions. All your workings should form part of your answer. Consider average capital employed the same as closing capital employed for your calculations. [Consider weighted average profit]

**Solution :**

Future Maintainable Profits

Year	N.P.A.T.	Add Income Tax	N.P.B.T.	Weight	Product
2007-8	5,10,000	5,10,000	10,20,000	1	10,20,000
2008-9	7,73,000	7,73,000	15,46,000	2	30,92,000
2009-10	8,90,000	8,90,000	17,80,000	3	53,40,000
				6	94,52,000

$$\text{Average profit before tax} = \frac{94,52,000}{6} = 15,75,333$$

Add : Expenses Not Payable in future (directors fees)	24,000
Less : Additional Expenses (extra Rent)	<u>(36,000)</u>
Adjusted Profit (before tax)	<u>15,63,333</u>
Less : tax @ 40%	<u>[6,25,333]</u>
Net Profit after tax, or Future Maintainable Profit	<u>9,38,000</u>

2) Capital Employed (Excluding Goodwill)

Particulars		Rs.	Rs.
Assets			
Land & Building (Market Value)		6,00,000	
Plant & Machinery (Market Value)		1,00,000	
Investment (cost) (See note)		1,00,000	
Debtors (Net)		3,30,000	
Stock (cost)		2,00,000	
Cash		75,000	
	(A)		14,05,000
Less: Liabilities :			
Creditors		2,30,000	
Other Liabilities		1,00,000	
Workmen's Compensation Fund (actual)		10,000	
Workmen's Profit sharing Fund		45,000	
	(B)		(3,85,000)
Closing Capital employed as on 31-3-2002	(A-B)		10,20,000

3) Expected Rate of Return = 15% (given)

4) Value of business by capitalization of Future Maintainable Profits at 15%.

$$= F.M.P. \times \frac{100}{NRR} = \frac{9,38,000}{15} \times 100 = 62,53,333$$

5) Goodwill = Value of business Less Capital Employed

$$= 6253333 - 1020000$$

$$= 52,33,333$$

**Working Notes :**

- 1) Investments are included in capital employed because they are trading investments meant for replacement of Plant and Machinery.
- 2) In the absence of information (regarding rate and method of depreciation) no adjustment is made to Future Maintainable Profit for depreciation on revalued Land & Building and Plant & Machinery.

**Illustration : 9**

Sandwich, Pizza and Burger are partners in a firm sharing profits and losses in the ratio of 5:2:1. The partnership deed provides that in the event of retirement or death of a partner goodwill is to be valued at three years' purchase of Weighted Average of Future Maintainable Profits over a Period of four years, (the weights being four for the immediate year after the event, three for the next year, two for the third year and one for the last year) in excess of 12.5% of Capital Employed in the business at the time of retirement/death. On 31<sup>st</sup> December, 2010 Pizza retired. The Balance Sheet of the firm was as follows:

Liabilities	Rs.	Assets	Rs.
Capitals		Fixed Assets	5,00,000
Sandwich	7,00,000	Net current assets	8,00,000
Pizza	3,50,000		
Burger	2,50,000		
	13,00,000		13,00,000

Sales during the year ended 31<sup>st</sup> December 2001 totalled Rs. 1 crore and were at a gross margin of 10%. The expenses amount to 30% of Gross Profit. It is expected that sales will increase at 20% cumulative rate of growth every year. Gross Profit margin percentage being reduced to 9%. The expenses would continue to be at 30% of Gross Profit. Calculate goodwill which is to be credited to Pizza.

(Apr. 2000, adapted)

**Solution :**

1) Calculation of Future Maintainable Profits (FMO)

Particulars	2011	2012	2013 Rs.	2014
	Rs. '000)	Rs. ('000)	('000)	Rs. ('000)
Sales (Increase by 20%)	12,000	14,400,00	17,280,0 0	20,736,00
Gross Margin (9% on Sale)				
Less : Expenses likely to arise in future (30% of Gross Profit)	1,080	1,296,00	1,555,20	1,866,24
FMP	324	388,80	466.56	559.87
Weights (as given)	756	907.20	1,088,64	1,306.37
	X 4	X 3	X 2	X 1
Weighted FMP (Products)	3024	2,721,60	2,177,28	1,306.37

$$\begin{aligned} \text{Weighted Average of FMP} &= \frac{\text{Weighted FMP}}{\text{Total of Weights}} \\ &= \frac{3,024 + 2,721.60 + 2,177.28 + 1,306.37}{10} = \frac{9,229.25}{10} \\ &= \text{Rs. } 922,925 \end{aligned}$$

2) Capital Employed = Rs. 13,00,000

3) Normal profit = Capital Employed X Normal Rate of Return (given)  
= 13,00,000 X 12.5% = 1,62,500

4) Super Profit = FMP – Normal Profit  
= 922,925 – 162500 = 760425

5) Goodwill = Super Profit X no. of years purchased  
= 760425 X 3 = 22,81,280

6) Goodwill to be credited to Pizza's A/c  
= 2281,280 X  $\frac{2}{8}$  = Rs.570320



## VALUATION OF SHARES AND BUSINESS

### Unit Structure :

- 4.1 Introduction
- 4.2 Need for Valuation of Shares
- 4.3 Factors Affecting Share Valuation
- 4.4 Methods of Valuation of Shares
- 4.5 Valuation of Equity Shares Having Different paid up Value
- 4.6 Valuation of Shares before Bonus and after Issue of Bonus Shares
- 4.7 Valuation of Equity Shares before right Issue and after right Issue of Shares
- 4.8 Valuation of Equity Shares before Conversion of Debentures and after Debentures Conversion into Equity Shares
- 4.9 Valuation of Share before Sub-Division and after Sub-Division
- 4.10 Valuation of Shares from Point of View of Minority / Majority Shareholders
- 4.11 Valuation of Preference Share
- 4.12 Solved Problems on Valuation of Shares
- 4.13 Valuation of Business
- 4.14 Solved Problems on Valuation of Business
- 4.15 Key Points on Valuation of Goodwill, Shares and Business
- 4.16 Exercise on Valuation of Goodwill, Shares and Business

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### 4.1 INTRODUCTION

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Share means share in a public or private Ltd. company. The shares of the private Ltd. Company are never quoted on stock Exchange. Also not all the public companies shares are quoted on the stock exchange. It's value cannot be easily ascertained. A public company may either be widely held or closely held. A closely held public company means a company having very few share holders. Each shareholder owing a substantial part of the share capital. A widely held public company means a company having large number of share holders spread over the entire country thus, it has innumerable share holders. Share of only such companies are quoted on

one or more stock exchanges. The prices of such shares depend upon various factors like demand and supply, market sentiments etc

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## **4.2 NEED FOR VALUATION OF SHARES**

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Shares of a company are to be valued at different occasions as follows:

- a) When shares of one class are to be converted into shares of another class.
- b) When shareholders want to take loan from financial institution against the security of shares held by him.
- c) When shares are to be transferred, bought or sold
- d) When the companies are amalgamated, absorbed, merged or reconstructed.
- e) When the Government wants to compensate the shareholders on the nationalization of the company.
- f) Whenever there is a death of a shareholder and the distribution of shares held by him is to be made among the legal heirs.

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## **4.3 FACTORS AFFECTING SHARE VALUATION**

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Following factors affect the share value:

- 1) Nature of business.
- 2) Market conditions as regards the companies doing the similar business and existing competition.
- 3) Demand and supply of shares in recognized stock exchange.
- 4) Earning capacity of the company and growth prospectus.
- 5) Goodwill of the company.
- 6) Reputation of the management.
- 7) Anticipated legislative measures
- 8) General economic conditions and policies of the Government.

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## **4.4 METHODS OF VALUATION OF SHARES**

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Generally there are two types of shares:

- a) Equity shares
- b) Preference shares

Whenever there are preference shares and Equity shares, the Articles of Association must be referred for the purpose of finding out the respective rights of share holders.

Preference shareholders have priority as regards dividends and repayment of Capital. At the same time if Preference shares are participating, there value depends upon the share in supply as per Articles of Association. In such circumstances the valuation of Preference share is also important.

Value of Equity shares depends upon whether they are quoted or unquoted.

In case of quoted shares the value should be as per the quoted in the recognized stock exchange.

Primarily following are the methods of valuation of shares.

- a) Intrinsic value
- b) Yield value Basic
- c) Fair value
- d) Earning Capacity method
- e) Capitalization of maintainable profits.

• **INTRINSIC VALUE :**

This is also called as “Net Assets Value” or “NAV” of Liquidation value or Breakup value or Asset Backing value.

This method OR valuation is based on the assumption of liquidation of company. Here it is assumed that the company going into liquidation in near future. All the assets are sold and all the liabilities are paid of and then the remaining surplus is distributed among the Equity shareholders.

**Steps to find the intrinsic value.**

**Step No. 1 – Find out amount available to Equity Shareholders**

All Assets at current market value including goodwill. non trade investments but excluding fictitious assets.

Goodwill	xxx	
Land and Building	xxx	
Plant and Machinery	xxx	
Furniture and Fixtures	xxx	
Vehicles	xx	
Trade and non trade investments	xxx	
Stock	xxx	
Debtors and Bills Receivable	xxx	
Cash and Bank Balances	xxx	
Loans Advances and prepaid expenses	xxx	
		xxx
Less : All liabilities at current values excluding share capital and Reserves and Surplus	xxx	



Debentures and Accrued Interest	xxx	
Long term loans	xxx	
Creditors and Bills payable	xxx	
Outstanding Expenses	xxx	
Proposed / unpaid Dividend	xxx	
Provision for Taxation	xxx	
Other liabilities payable	xxx	(xxx)
		xxx
Less : Dues to Preference shareholders	xxx	
Paid Preference share Capital	xxx	
Arrears of dividend (if any)	xxx	
Premium payable on redemption (if any)	xxx	(xxx)
Amount available to Equity shareholders		xxxx

**Step No. II: Intrinsic Value per Equity share**

If all the shares are fully paid up

$$= \frac{\text{Amount available to equity shareholders}}{\text{No. of equity shares}}$$

**Points to be remembered:**

While calculating the net asset value the following points should be remembered.

- 1) only market value of the assets should be considered. If market value is not given then the book value should be considered.
- 2) All assets recorded and unrecorded should be taken into account.
- 3) goodwill also should be considered as per instruction of the problems.
- 4) Non trading assets should be considered.

**Merits of intrinsic Value method :**

- 1) it is very sureful when the company is being liquidated.
- 2) It takes into account both types of Assets.
- 3) It is simple to use in valuation of different types of equity shares.

**Demerits of Intrinsic Value Method :**

- 1) It is difficult to estimate the realizable value of assets.
- 2) the assumption of liquidation is contradictory with the normal of assumption of going concern principal.
- 3) The value of goodwill is very much subjective.

- YIELD VALUE BASIS**

This method of valuation is based on the assumption of going concern principal. Here it is assumed that the company shall carry on business profitability for many years to come. Therefore, value of shares is based on the amount or profit that would be available to Equity shareholders as dividend.

**Steps to calculate yield value:**

a) Find out Future maintainable Profit (F. M. P.) Same as in Goodwill Valuation		XXX
Add : back interest on Non-Trade Investment		<u>XXX</u>
Less :		XXX
i. Transfer to Reserve as required under law	XXX	
ii. Preference Dividend	<u>XXX</u>	
F. M. P. available to Equity shareholders		<u>(XXX)</u> XXX

b)  $Find\ out\ rate\ of\ F.M.P. = \frac{F.M.P}{Paidup\ equity\ capital} \times 100$

c)  $Yield\ Value = \frac{Rate\ of\ F.M.P.}{N.R.R.} \times Amt.Paid\ per\ share$

ALTERNATIVELY

d)  $Capitalised\ value\ of\ F.M.P. = \frac{F.M.P.}{N.R.R} \times 100$

e)  $Yield\ Value = \frac{Capitalized\ Value\ of\ F.M.P.}{No.of\ Equity\ shares}$

- FAIR VALUE**

This method takes into account both the above methods

$$Fair\ Value = \frac{Interinsic\ Value + Yield\ Value}{2}$$

- EARNING CAPACITY VALUE**

Under this method, value of share is decided on earning capacity of the company:

Steps to calculate Earning capacity

a) *Earning = Net profit tax + Interest on long term loans*

b) *Capital employed = Net Worth + Long Term loans*

*OR = Assets – Short Term liabilities*

*OR = Fixed Assets + Investment + Working Capital*

c) *Rate of Earning =  $\frac{\text{Earning} \times 100}{\text{Capital Employed}}$*

d) *Value per Equity Share*

*=  $\frac{\text{Rate of Earning}}{N.R.R} \times \text{Paidup value per Equity Share}$*

• **CAPITALISATION OF F. M. P. METHOD**

Under this method F. M. P. is capitalized at N. R. R. Steps to calculate value per share

a) Calculate F. M. P. available to Equity share holders

b) Capitalized value of F. M. P.

*=  $\frac{F.M.P.}{N.R.R.} \times 100$*

c) Value per share

*=  $\frac{\text{Capitalized value of F.M.P.}}{\text{Paidup Equity Share Capital}} \times \text{Paidup amount per Share}$*

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## **10.5 VALUATION OF EQUITY SHARES HAVING DIFFERENT PAID UP VALUE**

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### **INTRINSIC VALUE:**

A company may have Equity shares of same face value, but in some cases shares may partly called up / paid up.

For purpose of valuation a notional call equal to unpaid / uncalled amount on each category of equity shares, should be made to make all Equity shares fully paid up. Notional call amount should be added to net Assets available to equity shareholders. Total amount will be available to Equity Shareholders. when all shares are fully paid up value of Equity shares can be determined as under:

Net Assets available to Equity shares (As calculated earlier)		x
Add : Unpaid share capital	xx	
Add national call on partly called up shares, to make shares fully paid up		<u>+x</u>
Net Assets available to Equity shareholders, when all shares are fully paid up		xx

$$\text{Value of full paid Equity shares} = \frac{\text{Total Amount}}{\text{Total No. of Equity shares}}$$

Value of partly paid up share

$$= \text{Value of fully paid share} - \text{National call per share}$$

Value can be determined as under

[When no notional call is to be made]

Intrinsic value of an Equity Share

$$= \frac{\text{Amt. available to equity shareholders}}{\text{Total paidup Equity share capital}} \times \text{Paidup amt. of each class of Equity Share}$$

### YIELD VALUE

For calculating yield value of Equity Share having different paid up value following procedure should be followed:

**Step I** → Calculate F. M. P. i.e. profit available for Equity dividend.

**Step II** → Calculate Rate of F. M. P.

$$= \frac{F.M.P.}{\text{Paidup Equity Capital}} \times 100$$

$$\text{Yield Value} = \frac{\text{Rate of F.M.P.}}{N.R.R.} \times \text{Paidup value per Equity share}$$

### SOLVED PROBLEMS Illustration : 1

From following as certain fair value of Equity share.

Particulars	Rs.
5,000 Equity Shares of Rs. 100 each fully paid up	5,00,000
3,000 Equity shares of Rs. 100 each Rs. 60 paid up	1,80,000
12,000 Equity shares of Rs. 100 each Rs. 40 paid up	4,80,000
	11,60,000

Net Assets were valued at Rs. 44,50,000

Adjusted Average profit after Tax amounted to 49,30,000 and N. R. R. is 20%.

**Solution :**

Statement showing Total amount available to Equity Shareholders.

Particulars	Rs.	Rs.
Net Assets valued (given)		44,50,000
Add : Notional call made		
On 5000 Equity Share @ Rs. 40 each	2,00,000	
On 12000 Equity Share @ Rs. 60 each	7,20,000	9,20,000
Total Amount		53,70,000

$$\text{Intrinsic Value of Fully Paid up Equity share} = \frac{\text{Total Amount}}{\text{Total No. Equity Shares}}$$

$$= \frac{53,70,000}{20,000} = 268.50$$

Value of partly paid Equity Share = value of fully paid share – Notional call per share

$$\begin{aligned} \text{Value of Equity Share Rs. 60 paid up} &= 268.50 - 40 \\ &= 228.50 \end{aligned}$$

$$\begin{aligned} \text{Value of Equity Share Rs. 40 paid up} &= 268.50 - 60 \\ &= 208.50 \end{aligned}$$

**Value Yeild**

1. F.M.P. = 30,60,000 given

$$2. \text{Rate of F.M.P.} = \frac{\text{F.M.P}}{\text{Paidup Equity Share Capitl}} \times 100$$

$$= \frac{49,30,000}{11,60,000} \times 100 = 425\%$$

$$\text{Yield Value} = \frac{\text{Rate of F.M.P}}{\text{N.R.R.}} \times \text{Paid amt.per equity share}$$

$$\text{Yield Value of fully paid Equity Share} = \frac{425}{20} \times 100 = \text{Rs.2125}$$

$$\text{Yield Value of Equity Share Rs.60 paid up} = \frac{425}{20} \times 60 = \text{Rs.1275}$$

$$\text{Yield value Equity Share Rs.40 paid up} = \frac{425}{20} \times 40 = \text{Rs.850}$$

$$\text{Fair Value of Equity Share} = \frac{\text{Intrinsic Value} + \text{Yield Value}}{2}$$

$$\text{Value of full paid Equity Share} = \frac{268.50 + 2125}{2} = \text{Rs.1196.75}$$

$$\text{Value of Equity Share, Rs.60 paid up} = \frac{228.50 + 1275}{2} = \text{Rs.751.75}$$

$$\text{Value of Equity Share Rs.40 paid up} = \frac{208.50 + 850}{2} = 529.25$$

Particulars	Intrinsic Value Rs.	Yield Value Rs.	Fair Value Rs.
a) Rs. 100 fully paid up Equity Share	268.50	2125	1196.75
b) Rs. 100 Equity Share, 60 paid up	228.50	1275	751.70
c) Rs. 100 Equity Share Rs. 40 paid up	208.50	850	529.25

#### 4.6 VALUATION OF SHARES BEFORE BONUS AND AFTER ISSUE OF BONUS SHARES

A prosperous company may issue bonus shares by capitalizing reserves. Bonus shares allotted to existing Equity shares holders at free of cost. Issue of Bonus Shares increases Equity Shares and Equity capital. However Net Assets of the company remains at same amount, therefore after bonus issue value of Equity share reduces.

##### Illustration : 2

A Ltd. had an issued capital of 50,000 Equity shares of Rs. 100 each, Rs. 75 paid up. The General Reserve of the company stood at Rs. 90,00,000.

Net Assets valued at Rs. 5,00,00,000.

It was resolved to use a part of General Reserve as under :

- a) to make shares fully paid
- b) to issue 25,000 bonus share of Rs. 100 each at par. Find out intrinsic value of Equity share before Bonus and After Bonus Issue.

**Solution :**

Equity Share Capital Rs. No. of Equity Shares

Before Bonus	After Bonus
37,50,000	75,00,000
50,000	75,000

*Intrinsic value of Equity Share*

*Net Assets available to Equity shareholders*

*No. of Equity Shares*

$$\text{Before Bonus} = \frac{5,00,00,000}{50,000} = \text{Rs. } 1000$$

$$\text{After Bonus} = \frac{5,00,00,000}{75,000} = \text{Rs. } 666.67$$

---

#### 4.7 VALUATION OF EQUITY SHARES BEFORE RIGHT ISSUE AND AFTER RIGHT ISSUE OF SHARES.

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Right shares are issued to employees and / or to existing Equity shareholders at particular amount. Right share price indirectly includes bonus element also. After right shares issued number of Equity shares and Equity share capital increases. Net Assets available to Equity shareholders also increases by proceeds received on right shares issue.

**Illustration : 3**

ZA Ltd. had an issued capital of 40,000 Equity Shares of Rs.10 Each fully paid up. Company decided to issue right share at the rate 3 share for every 5 shares @ Rs. 250 each; entire amount payable on application. Net assets before right issue was Rs. 170,00,000.

Assuming right issue was subscribed find intrinsic value of Equity Shares Before right and after right.

**Solution :**

	Before Rights	After Rights
a) No. of Equity Shares	40,000	64,000
b) Equity Share Capital	4,00,000	6,40,000
c) Net Assets available to Equity share holders	[170,00,000 + 60,00,000]	
	1,70,00,000	2,30,00,000

## 4.8 VALUATION OF EQUITY SHARES BEFORE CONVERSION OF DEBENTURES AND AFTER DEBENTURES CONVERSION INTO EQUITY SHARES

If debentures are converted into Equity shares, it increases it Equity share capital, number of Equity shares and Net worth. Since after conversion debenture interest is not to be payable, it increase F. M. P. also. Therefore it has impact on both net worth and F. M.P.

### Illustration : 4

The following particulars are available from Balance Sheet of Ketan Ltd.

- a) 60,000 Equity shares of Rs 10 each fully paid up.
- b) 5,000 12% Debentures of Rs. 100 each.
- c) Net Assets available to Equity shareholders be conversion of Debentures, Rs. 1, 24,00,000.
- d) Average net profit before tax Rs. 36, 00,000.
- e) Income Tax rate @ 40%.

Debentures are redeemable @ 20% premium. Debentures are converable into Equity share of Rs. 10 each priced at Rs. 50 N. R.R. = 15%

You are require to find out fair value of Equity share after conversion of debenture; assuming all debentures exercise their right in favour of conversion.

### *Solution*

#### *I. Debenture holders claim*

12% Debentures	= 5,00,000
Premium payable on redemption @ 20%	= <u>1,00,000</u>
Total Claim	= <u>6,00,000</u>

$$\begin{aligned}
 \text{II. No. of share issued} &= \frac{\text{Claim of Debenture holders}}{\text{Issue of one equity share}} \\
 &= \frac{6,00,000}{50} = 12000 \text{ Equity Shares}
 \end{aligned}$$



<b>III. F. M. P. After conversion</b>	<b>Rs.</b>
N. P. Before Tax	36,00,000
Add: saving in Debenture interest [ 5,00,000 x 12%]	60,000
M. P. B. T (after conversion)	36,60,000
Less Income Tax @ 40%	14,64,000
F. M. P. after conversion [No debenture payable]	21,96,000

<i>IV. Net Assets Before Conversion</i>	= 1,24,00,000
<i>Add : Debentures no more payable</i>	+ 5,00,000
<i>Net Assets after Conversion</i>	<u>1,29,00,000</u>
<i>[Amt. available to Equity shareholders]</i>	

*V. No. of shares after debentures conversion.*  
 = 60,000 + issued to Debenture holders  
 = 60,000 + 12,000 = 72,000  
*Equity Capital = Rs.7,20,000*

$$A) \text{ Intrinsic Value} = \frac{\text{Net Assets available to Equity Shareholders}}{\text{No. of Equity Shares}}$$

$$= \frac{1,29,00,000}{72,000} = 179.17$$

*B) Yield Value*

i) *F.M.P.* = 21,96,000

ii)  $\text{Rate of F.M.P.} = \frac{\text{F.M.P.}}{\text{Paidup Equity Capital}} \times 100$

$$= \frac{21,96,000}{7,20,000} \times 100 = 305\%$$

$$\text{Yield Value} = \frac{\text{Rate of F.M.P.}}{\text{N.R.R.}} \times \text{Paidup amt. per Equity share}$$

$$= \frac{305}{15} \times 10 = ` 203.33$$

$$\text{Fair Value} = \frac{\text{Intrinsic Value} + \text{Yield Value}}{2}$$

$$= \frac{179.17 + 203.33}{2} = ` 191.25$$

**Note :** In case of conversion of preference shares into Equity shares, Income Tax benefit are not available while calculating

F. M. P.

- I) F.M.P. = Average Profit after Tax – transfer reserve if any.
- II) No. of Equity shares and Equity share capital share increased due to Equity share allotted to preference share holders.

---

#### 4.9 VALUATION OF SHARE BEFORE SUB-DIVISION AND AFTER SUB-DIVISION

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In such case number of Equity shares only changes (i.e. increases) Equity share capital remain at same amount. Net Assets also remain same. Value of Equity shares can be calculated as usual.

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#### 4.10 VALUATION OF SHARES FROM POINT OF VIEW OF MINORITY / MAJORITY SHAREHOLDERS

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Shareholders may be classed into two categories namely:

##### a) Minority Shareholders :

These shareholders holding smaller portion of share capital of the company. Such shareholders are interested in the rate of dividend declared by the company and appreciation in share- market value. However, valuation of such shares is based on the dividend declared by the company.

$$\text{Value per share} = \frac{\text{Average Rate of dividend}}{\text{N.R.R.}} \times \text{Amt. paid per Equity Share}$$

##### a) Majority shareholders:

These shareholders are holding larger portion of share capital. Such shareholders are interested in F. M. P. Therefore yield value of shares should be preferred. However in case change in holding / transfer / amalgamation etc. fair value or intrinsic value may be calculated.

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#### 4.11 VALUATION OF PREFERENCE SHARE :

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Values of Preference share depend upon type of preference shares, which are stated in Articles of Association.

##### a) When Preference shares are non-participating (having priority)

In such case value of Preference Share will be equal to its paid up value plus premium on redemption if any payable plus arrears of Preference dividend if any.

$$\text{Intrinsic Value} = \frac{\text{paid up pref. capital} + \text{Arrears of Dividend} + \text{Premium on redemption if payable}}{\text{No. of Pref. Shares}}$$

**b) When Preference shares are participating:**

In such a case, Preference share holders get a share in surplus as per provisions of Articles of association.

$$\text{Intrinsic} = \frac{\text{paidup pref. share capital} + \text{surplus} + \text{Arrears of Dividend if any}}{\text{No. of Preference Shares}}$$

**c) When Preference share are having no Preference over Equity Shares:**

In such a case, the net assets to all shareholders should be divided between Equity and Preference share holders in the ratio of their paid up capital

$$\text{Intrinsic Value} = \frac{\text{Net Assets available to preference shareholders}}{\text{No. of Preference Shares}}$$

---

**4.12 SOLVED PROBLEMS ON VALUATION OF SHARES**

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**Illustration: 5**

The following information made available:

<b>Issued &amp; paid up capital</b>	<b>Rs.</b>
10% Preference shares of Rs. 100 each	5, 00,000
Equity share capital (Rs. 10 each)	15, 00,000
Reserve & Surplus	20, 00,000
Preliminary Expenses	20,000

All fixed Assets (including Goodwill) were under valued by Rs.10, 20,000 current Assets were over valued by Rs. 1, 00,000.

You are required to value Preference share if,

- a) When Preference share are non-participating
- b) When Preference share are participating; having 10% share in surplus
- c) When Preference shares are having no Preference over Equity shares :

**Solution :**

Statement showing Net Assets a surplus (Liability side Approach)

Particulars	Rs.	Rs.
10% Preference share capital (100 each)		5,00,000
Equity share capital		15,00,000
Reserves & Surplus		20,00,000
Revaluation profit on Fixed Assets		10,20,000
		50,20,000

<b>Less :</b>	20,000	
i) Preliminary Expenses		
ii) Loss on revaluation on current Assets	1,00,000	(1,20,000)
Net Assets		49,00,000
Less :		
i) Preference Share capital	5,00,000	
ii) Equity Share capital	15,00,000	(20,00,000)
Surplus on Liquidation		29,00,000

**Valuation :**

**a) When Preference Share not participating intrinsic value**

$$= \frac{\text{Paidup Pref. Share Capital} + \text{Arrears of dividend}}{\text{No. of preference shares}}$$

$$= \frac{5,00,000}{5,000} = \text{Rs. } 100 \text{ each}$$

**b) When Preference share participating, having 10% share in surplus :**

*∴ surplus available to pref. share holders*

$$= 29,00,000 \times 10\% = \text{Rs. } 29,00,000$$

*Intrinsic Value =*

$$\frac{\text{Paidup pref. Share Capital} + \text{surplus} + \text{Arrears of dividend}}{\text{No. of preference shares}}$$

$$\frac{5,00,000 + 2,90,000}{5000} = \frac{79,00,000}{5,000}$$

$$= \text{Rs. } 158 \text{ per Preference share.}$$

**c) When Preference shares having no Preference over Equity Shareholders :**

in this case, net assets of the company required to divide in the ratio of paid up share capital

$$\therefore \text{Preference Share Capital} : \text{Equity Share Capital}$$

$$5,00,000 \quad : \quad 1,50,000$$

$$\therefore 1:3$$

Therefore net assets available to Preference shareholder

$$= 49,00,000 \times \frac{1}{4} = 12,25,000$$

$$\text{Intrinsic Value} = \frac{\text{Net Assets Available to preference shareholders}}{\text{No of preference share}}$$

$$= \frac{12,25,000}{5000}$$

$$= \text{Rs. } 245$$

**Illustration : 6**

Following is the summarized Balance Sheet of R. K. Ltd. as on 31-3-2010.

Liabilities	Rs.	Assets	Rs.
3,00,000 Equity Shares of Rs. 10 each fully paid	30,00,000	Goodwill	1,00,000
Reserves	30,00,000	Building	9,00,000
Long Term Loan	20,00,000	Machinery	40,00,000
Current Liabilities	54,00,000	Vehicles	1,00,000
		Shares in subsidiary Ltd.	
		3000 Equity Shares of Rs. 100 each (at cost)	3,00,000
		Current Assets	8,00,000
	1,34,00,000		1,34,00,000

Find out the value of net assets basis of Equity shares of P.K. Ltd. On basis of the following information :

- Goodwill is valued at Rs. 10,00,000, Machinery at Rs. 49,50,000, Building at Rs. 20,00,000 & Vehicles at Rs. 50,000.
- Current Assets & Current Liabilities are to be taken at Book Value.
- Shares of T Ltd. are to be valued on the basis of Net Assets Shares of T Ltd.

**Balance Sheet of T Ltd. as on 31.3.2010**

Liabilities	Rs.	Assets	Rs.
5000 Equity shares of Rs. 100each		Fixed Assets	9,00,000
Reserves	5,00,000	Current Assets	11,00,000
Current Liabilities	8,00,000		
	7,00,000		
	20,00,000		20,00,000

Fixed Assets of T Ltd. revalued at Rs. 12,00,0002-actual current liabilities payable Rs. 6,00,000.

**Solution :**

Net Assets Basis :

a)	Goodwill	10,00,000	
	Machinery	49,50,000	
	Building	20,00,000	
	Vehicles	50,000	
	Current Assets	80,00,000	
	Equity Shares of T. Ltd.	10,20,000	
			<u>152,20,000</u>
	<b>Less : Liability</b>		
	Long Term Loan	20,00,000	
	Current Liabilities	54,00,000	<u>-(7,40,000)</u>

*Net Assets available for Equity shareholder* 1,44,80,000

$$\begin{aligned}
 \text{intrinsic Value} &= \frac{\text{Net Assets available for ESH}}{\text{No. of equity Shares}} \\
 &= \frac{1,44,80,000}{3,00,000} \\
 &= 48.27
 \end{aligned}$$

a) *Net Assets value / Equity share of T Ltd.*

<i>Fixed Assets</i>	12,00,000
<i>Current Assets</i>	<u>11,00,000</u>
	23,00,000
<i>Less : Current Liabilities</i>	<u>(6,00,000)</u>
<i>Net Assets</i>	<u>17,00,000</u>

$$\begin{aligned} \text{Intrinsic Value} &= \frac{17,00,000}{5,000} \\ &= 340 \end{aligned}$$

b) *Revaluation of investment*

$$\begin{aligned} &340 \times 3000 \text{ Equity shares} \\ &= 10,20,000 \end{aligned}$$

**Illustration : 7**

Z Ltd. has the following items appearing in it's BalanceSheet as on 31<sup>st</sup> March, 2010

Liabilities	Rs.	Assets	Rs.
Shares Capital :		Goodwill	3,50,000
Equity shares Rs. 10	10,00,000	Freehold property	4,50,000
10% Preference Shares Rs. 10	5,00,000	Plant & Machinery	12,50,000
Profit & Loss A/c	5,00,000	Investment	1,00,000
Bank Loan	10,00,000	Stock	5,00,000
Current Liabilities	1,50,000	Debtors	3,50,000
		Bank & Cash	1,50,000
	31,50,000		31,50,000

1) The profit for the past three years ended 31<sup>st</sup>

March, 2008 Rs. 1,40,000

March, 2009 Rs. 3,25,000

March, 2010 Rs. 5,50,000

1) The profit shown above are after debiting

a) Goodwill @ Rs. 50,000 p.a.

b) Dividend on Preference shares as applicable.

c) Dividend on Equity capital @ Rs. 10% in 2009 & @ Rs. 12% in 2010

2) The recent value of fixed assets revealed property is worth Rs. 5,00,000 & Machinery worth Rs. 25,00,000.

4) The investment are trade investment worth Rs. 2,50,000.

Obsolete & worthless stock included above is Rs. 4,00,000. This can also realize Rs. 50,000.

You are required to calculate –

a) F. M. P. applying weights.

2008	-	1
2009	-	2
2010	-	3

b) Value Equity shares on basis of – capitalized value of F. M.

P. @ 8½%.

c) Intrinsic value of Equity shares.

**Solution :**

F. M. P.

	2008	2009	2010
Add: Goodwill written off	50,000	50,000	50,000
Add : Equity share Dividend	-	1,00,000	1,20,000
Net Profit (after dividend)	1,40,000	3,25,000	5,50,000
Weight	1,90,000	4,75,000	7,20,000
	X 1	X 2	X 3
	1,90,000	9,50,000	21,60,000

$$\begin{aligned}
 a) \text{Weighted Avg.} &= \frac{\text{Total Products}}{\text{Total of weights}} \\
 &= \frac{33,00,000}{6} \\
 &= \text{FMP} = 5,50,000
 \end{aligned}$$

b) Capitalised Value of maintainable profit

$$\begin{aligned}
 &= \frac{\text{FMP after tax}}{\text{NRR}} \times 100 \\
 &= \frac{5,50,000}{8\frac{1}{3}}
 \end{aligned}$$

c) Values at Equity share on the basis of capitalized value of

$$\begin{aligned}
 \text{FMP} &= \frac{\text{Capital Value FMP}}{\text{No. of Equity share}} \\
 &= \frac{66,00,000}{1,00,000} = \text{Rs. } 661 \text{ share}
 \end{aligned}$$



**d) Intrinsic Values :**

Goodwill				3,50,000
Freehold property				5,00,000
Plant & Machinery				25,00,000
Investment				2,50,000
Stock (5,00,000 realisable)Debtors	-	4,00,000 +	50,000	1,50,000
				3,50,000
Bank & Cash				1,50,000
				42,50,000
Less Liabilities payable				
Bank Loan			10,00,000	
Current Liabilities			<u>1,50,000</u>	- 11,50,000
				31,00,000
Less : Preference Share Capital				<u>-5,00,000</u>
Net Assets available to Equity shareholders				<u>26,00,000</u>

$$\begin{aligned}
 \text{Intrinsic value} &= \frac{\text{Net Assets available to Equity Share holders}}{\text{No. of eq. shares}} \\
 &= \frac{26,00,000}{1,00,000} \\
 &= 26
 \end{aligned}$$

**Illustration : 8**

A) Final Accounts of New Ltd. as on 31<sup>st</sup> March, 2011 revealed following significant information:

i) Share Capital (Fully paid-up)

Equity – 1,00,000 shares of Rs. 10 each.

12% Preference – 20,000 shares of Rs. 50 each.

ii) Reserve & surplus – Rs. 1,50,000

iii) Preliminary Expenses – Rs. 30,000

iv) The valuation of assets revealed that assets as per accounts are undervalued by Rs. 2,50,000.

v) The average pre-tax profits of past three years was Rs. 5,00,000. Tax applicable to @ 50%.

vi) It is anticipated that due to favourable market conditions, pre-tax profit will increase by 20%.

vii) Equity shareholders expect a return at 15%.

**Find the Fair Value of Shares :**

A) Sem. Ltd. submits following information as on 31<sup>st</sup> March,2011

i) Fixed assets (Tangible)	Rs. 15,00,000
ii) Current assets	Rs. 6,00,000
iii) Patent Rights	Rs. 2,50,000
iv) Investment	Rs. 1,00,000
v) Capital issues expenses	Rs. 50,000
vi) Liabilities	Rs. 4,00,000

vii) Capital comprise of 12,500 shares of Rs. 100 each fully paid.

It is ascertained that Patent Rights are valueless. Find Intrinsic Value

**Solution :**

A) Fair value of Equity shares of New Ltd. as Intrinsic value

**Step – 1 :**

Equity shares	10,00,000
Preference shares	10,00,000
Reserves & surplus	1,50,000
Less : preliminary expenses	- 30,000
Add : Assets undervalued	2,50,000
	<hr/>
	23,70,000
Less : Preference shares	- 10,00,000
Net assets available for ESH	<hr/>
	13,70,000
	<hr/>

**Step – 2 :**

$$\begin{aligned} \text{Intrinsic Value} &= \frac{\text{Net Assets available for ESH}}{\text{No. of equity Shares}} \\ &= \frac{13,70,000}{1,00,000} \\ &= 13.7 \end{aligned}$$

b) Yield Value

**Step – 3 :**

$$\begin{aligned} & \text{Expected rate of dividend} \\ &= \frac{\text{Net Profit available for ESH}}{\text{Paid-up Equity Capital}} \times 100 \\ &= \frac{1,80,000}{10,00,000} \times 100 \\ &= 18 \end{aligned}$$

<b>Step. 1 :</b>	F. M. P. before tax	5,00,000
	Increase 20%	1,00,000
		6,00,000
	(-) Tax 50%	-3,00,000
		3,00,000
	F. M. P. after tax	3,00,000
	(-) Preference Dividend	-1,20,000
		1,80,000
	Net Profit are basic to Equity shareholder	1,80,000

**Step – 3 :**

$$\begin{aligned} \text{Yield value} &= \frac{\text{Expected rate of Dividend} \times \text{Paidup value / shares}}{\text{NRR}} \\ &= \frac{18 \times 10}{15} = 12 \\ \text{c) Fair Value} &= \frac{12 + 13.7}{2} = 12.85 \end{aligned}$$

**B) Net Assets value of Sem Ltd.**

Fixed Assets	15,00,000
Current Assets	6,00,000
Investments	1,00,000
	22,00,000
Less : O/s Liabilities	- 4,00,000
Net assets available for ESH	18,00,000

$$\begin{aligned} \text{Intrinsic Value} &= \frac{\text{Net Assest available for ESH}}{\text{No. of equity Shares}} \\ &= \frac{18,00,000}{12,500} \\ &= 144 \end{aligned}$$

**Illustration : 9**

A Ltd. & K Ltd. propose to sell their business to a new company being formed for that purposes.

The summarized Balance Sheet as on 31<sup>st</sup> December, 2011 & profits of the companies for the past three years are as follows :

Liabilities	A Ltd.	K Ltd.	Assets	A Ltd.	K Ltd.
Ordinary shares of Rs. 1 each	60,000	25,000	Freehold property	36,000	12,000
Capital Reserves	NIL	15,000	cost		
General Reserves	39,000	12,000	Plant & Machinery at cost less in dep.	32,000	18,000
Profit & Loss A/c	11,000	16,000	Investment at cost	NIL	10,000
Creditors	21,580	12,680	Stock in trade	11,100	8,950
			Debtors	8,800	6,400
			Balance at Bank	43,680	25,330
	1,31,580	80,680		1,31,580	80,680

	A Ltd.	K Ltd.
	Rs.	Rs.
Net profit for the years ended		
31 <sup>st</sup> December, 2009	17,450	10,760
31 <sup>st</sup> December, 2010	19,340	12,290
31 <sup>st</sup> December, 2011	21,470	14,450

**You are also given the following relevant information :**

a) It is agreed :

i) That the properties & Plant and Machinery to be re-valued as

ii) follows :

	A Ltd.	K Ltd.
	Rs.	Rs.
Freehold property	44,800	14,400
Plant & Machinery	30,750	17,095

iii) That the value of stock be reduced by 10% & provision of 12½% be made on debtors for bad & doubtful debts.

iv) That goodwill be valued at two years purchase of the average annual trading profits of the past 3 years, after deducting a standard profit of 10% on the net trading assets before revaluation or adjustment, on 31<sup>st</sup> December, 2010.

b) Profits of K Ltd. include Rs. 600 income from the investment in each of the three years. The market value of the investment as on 31<sup>st</sup> December, 2011 was Rs. 10,000.

You are required to prepare a statement how you would arrive at the intrinsic value per share to the nearest rupee of the ordinary share in (i) A Ltd. ii) K Ltd.

**Solutions : Valuation of Goodwill**

**Step – 1 :**

Capital Employed = Assets at realizable value – liabilities .

<b>Assets at real value</b>	A Ltd.	K Ltd
Freehold property	36,000	12,000
Plant & Machinery	32,000	18,000
Stock in trade	11,100	8,950
Debtors	8,800	6,400
Bank Balance	43,680	25,330
1,31,580	<u>70,680</u>	<u>70,680</u>
Less : Liabilities payable		
Creditors	<u>-21,580</u>	<u>- 12,680</u>
Capital Employed	<u>1,10,000</u>	<u>58,000</u>

**Step – 2 :**

Normal Rate of Return 10%

**Step – 3 :**

*Standard / Normal Profit = Capital Employed × NRR*

i) *A Ltd.*  $1,10,000 \times 10\% = 11,000$

ii) *K Ltd.*  $= 58,000 \times 5,800$

**Step – 4 : Average Past Profit**

i) *A Ltd.*  $= \frac{17,450 + 19,340 + 21,470}{3} = 19,420$

ii) *K Ltd.*  $= \frac{10,760 + 12,290 + 14,450 - 1,800}{3} = 11,900$

Less : interest on investment  $= \frac{(600)}{11,300}$

**Step – 5 :**

*F. M. P. =*

<i>Average Past Profit</i>	<i>A Ltd.</i>	<i>K Ltd.</i>
	19,420	11,300

**Step – 6 :**

*Super / Excess profit = F. M. P. – S tan dard Profit*

$$A Ltd. = 19,420 - 11,000 = 8,420$$

$$K Ltd. = 11,300 - 5,800 = 5,500$$

**Step – 7 :**

*Value of Goodwill = No. of years purchased × Super Profit*

$$A Ltd. = 2 \times 8,420 = 16,840$$

$$B Ltd. = 2 \times 5,500 = 11,000$$

**B) Valuation of Shares :**

**Step – 1 :**

<b>Intrinsic Value</b>	A Ltd.	K Ltd
Freehold property	44,800	14,400
Plant & Machinery	30,750	17,095
Stock in trade	9,990	8,055
Debtors	7,700	5,600
Bank Balance	43,680	25,330
Investments	NIL	10,000
Add : Goodwill	16,840	11,000
	1,53,760	91,480
Less : Liabilities payable		
Creditors	- 21,580	-12,680
Net Assets available for Equity shareholders	1,32,180	78,800

**Step – 2 :**

$$\text{Intrinsic Value} = \frac{\text{Net Assets available for ESH}}{\text{No. of Equity Shares}}$$

$$A Ltd. = \frac{1,32,180}{60,000}$$

$$= 2.203$$

$$K Ltd. = \frac{78,000}{25,000}$$

$$= 3.152$$

**Illustration : 10**

Vijay Ltd. furnishes the following information & request you to find out–

- i) Value of Goodwill – on the basis of capitalization of F. M. P. methods.

Liabilities	Rs.	Assets	Rs.
Shares capital 10,000 Shares of Rs. 100 each	10,00,000	Goodwill	2,50,000
General Reserves	3,00,000	Property	2,88,000
Profit & Loss A/c	3,00,000	Equipments	4,00,000
Workmen Fund for Compensation	1,40,000	Investment	2,00,000
Loans	2,00,000	Receivables	6,60,000
Current Liabilities	4,60,000	Inventory	4,00,000
		Bank & Cash	1,50,000
		Capital Issues Expenses	52,000
	24,00,000		24,00,000

**Further Information :**

- a) The investments are earn marked to provide funds for replacements as and when required.

- b) The provision already deducted from are :

Depreciation on property	Rs.	72,000
Depreciation on equipments	Rs.	80,000
Bad Doubtful Debts	Rs.	60,000

- c) The property is worth Rs. 6,00,000 and equipments are worth Rs. 3,60,000, other assets are valued property.

- d) The liability for workmen compensation is expected at Rs.1,00,000.

- e) The expected rate of return is @ 12%.

- f) The profit of past three years (before tax @ 50%) have been –

Year ended on 31-3-2000	Rs.	5,60,000
31-3-1999	Rs.	5,46,000
31-3-1998	Rs.	6,20,000

- g) The changes expected from ensuing year are : -
- 1) Increase rent for new office @ Rs. 18,000/- p.a.
  - 2) Increase in Directors Fees @ Rs. 24,000/- p.a.
  - 3) Reduction in publicity expenses @ Rs. 36,000/- p.a.
- h) For the purpose of valuation year end capital employed should be considered.

**Solution :**

**Step – 1 :**

Capital Employed = Assets at realisable value – O/s liabilities.

**Assets at real value**

Property	6,00,000
Equipments	3,60,000
Investment	2,00,000
Receivables	6,60,000
Inventory	4,00,000
Cash & Bank	<u>1,50,000</u>
	23,70,000
Less : Liabilities	
Workmen Compensation Fund	- 1,00,000
Loans	- 2,00,000
Current Liabilities	<u>- 4,60,000</u>
Capital Employed	<u><u>16,10,000</u></u>

**Step – 2 :**

*Normal Rate of Return = 12%*

**Step – 2 :**

$$\begin{aligned} \text{Average Past Profit} &= \frac{5,60,000 + 5,46,000 + 6,20,000}{3} \\ &= 5,75,333 \end{aligned}$$



**Step – 4 :**

**F. M. P.**

Average Past Profit	5,75,333
Less : Expenses to be incurred in future : Rent	- 18,000
Less : Expenses to be incurred in future : directors Fees	- 24,000
Add : Expenses no to incurred : Publicity / Expenses	36,000
F. M. P. before Tax	<u>5,69,333</u>
Less : Tax 50%	- 2,84,667
F. M. P. after tax	<u>2,84,666</u>

**Step – 5 :**

*Capitalized value of maintainable profit =*

$$= \frac{FMP \text{ after tax}}{NRR} \times 100$$

$$= \frac{2,84,666}{12} \times 100$$

$$= 23,72,217$$

**Step – 6 :**

*Value of Goodwill = Capitalised value – Average capital employed.*

$$= 23,72,217 - 16,10,000$$

$$= 7,62,217$$

**Illustration : 11**

A shareholder of M Private Ltd. requests you to advise him about the fair value of the Equity shares of the Company. the Company's financial position as on 31<sup>st</sup> December, 1997 is asunder :

Liabilities	Rs.	Assets	Rs.
Shares Capital :		Fixed Assets (at cost)	
20,000 6% Cum. Preference Shares of Rs. 10 each	2,00,000		
12,000 Equity Shares of Rs. 20 Each	2,40,000	Goodwill	1,20,000
Deb. Redemption Fund	40,000	Plant & Machinery	2,00,000
Profit & Loss A/c :		Investment (at cost)	1,20,000
Bal. As on 1-1-1987	45,000	Current Assets	
Profit for the year (before tax)	1,75,000	Stock	1,20,000
13,000			
5% Debentures	2,00,000	Debtors	1,40,000
Creditors	1,67,000	Cash at Bank	1,52,000
Depreciation Fund (Plant etc.)	30,000	Land & Building	2,00,000
	<u>10,52,000</u>		<u>10,52,000</u>

The following information is relevant :

- 1) Goodwill is revalued at Rs. 1,45,000/-.
- 2) Normal rate of return expected is 10%.
- 3) The share of the company are not freely transferable.
- 4) Investments are part of business assets.
- 5) Profit for the year as stated above are before annual transfer of Rs. 12,700 to Deb. Redemption Fund.
- 6) Income tax may be taken at 50% of the profit.
- 7) Dividend record of the company is not stable. Work out the fair value of Equity shares as requested.

Work out the fair value of Equity shares as requested.

**Solution :**

**A) Intrinsic Value :**

**B) Step – 1 :**

**Fixed Assets :**

Goodwill	1,45,000
Land & Building	2,00,000
Plant & Machinery	2,00,000
Investment	1,20,000
<b>Current Assets :</b>	
Stock	1,20,000
Debtors	1,40,000
Cash at bank	<u>1,52,000</u>
	10,77,000

Less : liabilities

Debentures	2,00,000
Creditors	1,67,000
Depreciation Fund	30,000
Provision for taxatior	65,000 - 4,62,000
	<u>6,15,000</u>
Less : Preference Share Capital	- 2,00,000
Net Assets available for ESH	<u>4,15,000</u>

**Step – 2 :**

$$\begin{aligned} \text{Intrinsic Value} &= \frac{\text{Net Assets available for ESH}}{\text{No. of Equity Shares}} \\ &= \frac{4,15,000}{1,20,000} \\ &= 34.58 / \text{Share} \end{aligned}$$

**C) Yield Value**

**Step – 1 :**

F. M. P. before tax	1,30,000
Less : Tax 50%	- 65,000
F. M. P. after tax	<u>65,000</u>
Less : Appropriations	
Dividend on Preference Shares	- 12,000
Deb. Redemption Fund	- 12,700
Net Profit available for ESH	<u>40,300</u>

**Step – 2 :**

$$\begin{aligned} \text{Expected rate of Dividend} &= \frac{\text{N.P. available for ESH}}{\text{Paidup Equity Capital}} \times 100 \\ &= \frac{40,000}{2,40,000} \times 100 \\ &= 16.77 \end{aligned}$$

**Step – 3 :**

$$\begin{aligned} \text{Yield Value} &= \frac{\text{Expected rate of Dividend} \times \text{Paidup Equity Capital}}{\text{NRR}} \\ &= \frac{16.79 \times 20}{12} \\ &= 27.98 \end{aligned}$$

$$\begin{aligned} \text{Fair value of Equity Shares} &= \frac{34.58 + 27.98}{2} \\ &= 31.28 \end{aligned}$$

**Illustration: 11**

A Ltd. presents the following Balance Sheet on 31<sup>st</sup>December, 2011.

Liabilities	Rs.	Assets	Rs.
Shares Capital (Rs. 10/- each)	3,00,000	Assets	4,50,000
Reserves	1,20,000	Current Assets	30,000
Loans	50,000		
Current Liabilities	10,000		
	4,80,000		4,80,000

It is observed that fixed assets are undervalued by Rs. 50,000.

The current assets are overvalued by Rs. 3,000. The assets are to be valued properly.

It is proposed to issue fully paid shares by capitalization of General Reserves in ratio of one share for three shares held. Find the value of shares.

- i) Before issue of bonus shares; and
- ii) After issue of Bonus shares.

**Solution :**

**A & Co. Ltd.**

Valuation of Equity Shares (Net Assets Method)

Gross Assets	Rs.	Rs.
Fixed Assets (4,50,000 + 50,000)		5,00,000
Current Assets (30,000 – 3,000)		27,000
		<u>5,27,000</u>
Less Loans	50,000	
Less Current Liabilities	10,000	(60,000)
Net Assets available to Equity Shareholders		<u>4,67,000</u>
Value Per Fully Paid Equity Share (before Bonus Issue)		

$$= \frac{\text{Net Assets for Equity Shareholders}}{\text{No. of Equity Shares}} = \frac{4,67,000}{30,000} = \text{Rs. } 15.57$$

Value Per Fully Paid Equity Share (after Bonus Issue)

$$= \frac{\text{Net Assets for Equity Shareholders}}{\text{No. of Equity Shares}} = \frac{4,67,000}{40,000} = \text{Rs. } 11.67$$

**Note :** No. of Bonus Shares Issued :  $\frac{1}{3}$  of 30,000 = 10,000

$\therefore$  Total No. of Shares = 30,000 + 10,000 = 40,000 Shares.

**Illustration : 12**

O. M. Limited submits the following information as on 31<sup>st</sup> March, 2010.

	Rs.
i) Fixed Assets (Tangibles)	15,00,000
ii) Current Assets	16,00,000
iii) Patent Rights	2,50,000
iv) Investments	1,00,000
v) Capital Issue Expenses	10,000
vi) Liabilities	4,00,000

Capital Comprises of 25,000 shares of Rs. 100/- each fully paid. It is ascertained that Patent Right are valueless. Ascertain the value of shares on Asset Backing method.

*Oct 97, adapted)*

**Solution :**

O. M. LIMITED (Y. E. 31-3-2010)

Valuation of Equity Shares (Net Assets Method)

<b>Gross Tangible Assets</b>	<b>Rs..</b>
Fixed Assets	15,00,000
Current Assets	16,00,000
Investment	1,00,000
	32,00,000
Less : Liabilities	4,00,000
Net Assets available to Equity Shareholders	28,00,000

$$\begin{aligned}
 \text{Value Per Fully Paid Equity Share} &= \frac{\text{Net Assets for Equity Shareholders}}{\text{No. of Equity Shares}} \\
 &= \frac{\text{Rs. } 28,00,000}{25,000} = \text{Rs. } 112
 \end{aligned}$$

**Note :** Patents being valueless and Capital Issue Expenses being an intangible asset are ignored while computing net assets value.

**Illustration : 13**

From the following figures calculate value of a share of Rs. 10 on (i) dividend basis, and the market expectation being 12% (N. R. R.)

Year ended 31 <sup>st</sup> March	Capital Employed Rs.	Profit Rs.	Dividend	Weights
2008	5,00,000	80,000	12	1
2009	8,00,000	1,60,000	15	2
2010	10,00,000	2,20,000	18	3
2011	15,00,000	3,75,000	20	4

50,000 Equity Shares of Rs. 100 each were from 1<sup>st</sup> January 2006

**Solution :**

**i) Value of share on dividend basis :**

The dividend rate on the simple average is 65/4 or 16<sup>1</sup>/<sub>4</sub>% . But since the dividend has been rising it would be better to take the weighted average

Year ended 31 <sup>st</sup> March	Rate	Weight	Product	Profit	Product (A x D)
2008	12	1	12	80,000	80,000
2009	15	2	30	1,60,000	3,20,000
2010	18	3	54	2,20,000	6,60,000
2011	20	<u>4</u>	<u>80</u>	3,75,000	<u>15,00,000</u>
		<u>10</u>	<u>176</u>		<u>25,60,000</u>

which come to 17.6% thus :

Dividing 176 by 10, we get 17.6%

The value of the share on the basis of dividend (weighted average)

$$\text{Face Value} \times \frac{\text{Average Rate of Dividend}}{\text{Expected Rate of Dividend}} = \frac{17.6}{12} \times 10 = 14.67$$

**ii) Weighted Average Profit (F.M.P)**

Weighted Average Profit (F.M.P)

$$\begin{aligned} &= \frac{\text{Total Product}}{\text{Total Weight}} \\ &= \frac{25,60,000}{10} = 2,56,000 \end{aligned}$$

$$\begin{aligned} \text{Capitalized value of F.M.P.} &= \frac{100}{N.R.R.} \\ &= 2,56,000 \times \frac{100}{N.R.R.} \end{aligned}$$

$$\begin{aligned} \text{Value of Equity Share} &= \frac{\text{Capitalized value of F.M.P.}}{\text{No. of Equity Share}} \\ &= \frac{21,33,333}{50,000} = \text{Rs.}42.67 \end{aligned}$$

**Illustration : 14**

Balance Sheet of Anand Ltd. as on 30-6-2010

<b>Liabilities</b>	<b>Rs.</b>
<b>Share Capital :</b>	
5,000 shares of Rs. 50 each	2,50,000
General reserve	1,40,000
Profit and Loss account	1,32,000
Sundry creditors	1,08,000
Income-tax Provision	<u>80,000</u>
	<u><u>7,10,000</u></u>
<b>Assets :</b>	
Land and buildings	1,90,000
Plant and Machinery	2,00,000
Patents and trade marks	25,000
Stock	50,000
Debtors	75,000
Bank balance	50,000
Preliminary expenses	<u>10,000</u>
	<u><u>7,10,000</u></u>

The expert valuer valued the land and buildings at Rs. 3,40,000; goodwill at Rs. 2,50,000; and plant and machinery at Rs. 1,80,000. out of the total debtors, it is found that debtors of Rs. 6,000 are bad. The profits of the company have been as follows :

	Rs.
31-3-2008	1,20,000
31-3-2009	1,75,000
31-3-2010	1,55,000

The company follows the practice of transferring 25% of profits to general reserve. Considered depreciation on Land / Building @ 5%, plant-Machinery @ 15%. Similar type of companies earn at 12.5% of the value of their shares. Ascertain the value of shares of the company under :

- i) Intrinsic value method;
- ii) Yield value method; and
- iii) Fair value method.
- iv) directors decided to issue right shares 1 share for every 5 shares of Rs 50 each at Rs. 100. find fair value after right issue.

v) Anand Ltd.

Valuation of shares

i) Intrinsic value method

Assets	Rs.	Rs.
Land and Buildings	3,40,000	
Goodwill	2,50,000	
Plant and machinery	1,80,000	
Patents and trade marks	25,000	
Stock	50,000	
Debtors less bad debts	69,000	
Bank balance		9,24,000
	<u>10,000</u>	
Less : liabilities Sundry creditors	1,08,000	
Provision for tax		<u>(1,96,000)</u>
	<u>88,000</u>	
Net Assets		7,28,000

$$\text{Intrinsic value of shares (each share)} = \frac{\text{Net assets}}{\text{No. of shares}} = \frac{7,28,000}{50,000} = \text{Rs. 145.60}$$

ii) Yield value method

	Rs.
Total profit of last three years	4,50,000
Less : Bad debts	<u>(6,000)</u>
	<u>4,44,000</u>
$\text{Average profit} = \frac{\text{Rs. } 4,44,000}{3} =$	1,48,000
Add. Decrease in depreciation on plant and Machinery say @ 15% on Rs. 20,000	3,000
Less : Increase in depreciation on land and building say @ 5% on Rs. 1,50,000	<u>7,500</u>
Average profit	
Less : Transfer to reserve	<u>1,43,500</u>
@ 25% of Rs. 1,43,500	<u>(33,875)</u>
Profit available for dividend	<u>1,07,625</u>



$$\text{Rate of F.M.P.} = \frac{1,07,625}{2,50,000} \times 100 = 43.05\%$$

*Yield value of each share*

$$\begin{aligned} &= \frac{\text{Rate of F.M.P.}}{\text{Normal rate of return}} \times \text{Paid up value of each share} \\ &= \frac{43.05}{12.50} \times 50 \\ &= 172.20 \end{aligned}$$

iii) *Fair value method*

$$\text{fair value of each share} = \frac{\text{Intrinsic value} + \text{Yield value}}{2}$$

$$\text{iv) } \frac{\text{Rs.}145.60 + 172.20}{2} = \frac{317.60}{2} = \text{Rs.}158.90$$

v) *Value of Equity share after Right Issue*

	No. of Shares	Equity Share Capital Rs.	Net Asset Rs.
Before Right Issue	5,000	2,50,000	7,28,000
Add : Right share, 1 share for every 5 shares of Rs. 50 each @ Rs. 100	1,000	50,000	1,00,000
After Right Issue	6,000	3,00,000	8,28,000

$$\begin{aligned} \text{Intrinsic value} &= \frac{\text{Net Asset available to Equity Shareholders}}{\text{No. of Equity Shares}} \\ &= \frac{8,28,000}{6,000} \\ &= \text{Rs.}138 \end{aligned}$$

*Yield Value*

$$\begin{aligned} \text{F.M.P.} &= \frac{\text{F.M.P.}}{\text{Paid up Equity Capital}} \times 100 \\ &= \frac{1,07,625}{3,00,000} \times 100 = 35.88\% \end{aligned}$$

*Yield Value*

$$= \frac{\text{Rate of F.M.P.}}{\text{N.R.R.}} \times \text{Paidup value of a Equity Share}$$

$$= \frac{35.88}{12.50} \times 50$$

$$= \text{Rs.}143.52$$

$$\text{Fair Value} = \frac{\text{Intrinsic Value} + \text{Yield Value}}{2}$$

$$= \frac{138 + 143.52}{2}$$

$$= \text{Rs.} 140.78$$

**Illustration : 15**

Balance Sheet of AB Ltd. as on 31<sup>st</sup> March 2010

<b>Liabilities</b>	<b>Rs.</b>	<b>Assets</b>	<b>Rs.</b>
8,000 Equity Shares of Rs. 100 each	8,00,000	Land and Building	5,00,000
4,000, 9% Preference shares of Rs. 100 each	4,00,000	Plant & Machinery	6,00,000
10% Debentures	2,00,000	Patents	2,00,000
Reserves	4,00,000	Sundry debtors	3,00,000
Sundry Creditors	4,00,000	W. I. P. and Stock	5,00,000
		Bank Bal.	1,00,000
	22,00,000		22,00,000

Land and buildings to be valued at Rs. 9,00,000. The company's earnings were as follows:

Year ended 31 <sup>st</sup> March	Profits before tax (Rs.)	Tax paid (Rs.)	
2006	3,00,000	80,000	
2007	4,00,000	1,60,000	
2008	1,00,000	Loss 40,000	(Strike)
2009	5,00,000	2,30,000	
2010	5,50,000	3,00,000	

The company paid managerial remuneration of Rs. 60,000 per annum but it will become Rs. 1,00,000 in future. There has been no change in capital employed. The company paid dividend of Rs. 9 per share and it will maintain the same in future. The company proposes to build up a plant rehabilitation reserve @ 15% of N. P. A. T. dividend rate in this type of

company is fluctuating and the asset backing of an Equity share is about 1-½ times. The Equity shares with an average dividend of 10% sell at par. (Tax rate is assumed to be 50%). Find yield value of Equity shares

**Solution :**

For calculating average maintainable profits in 2008-09 not considered because of low profits due to abnormal reason.

Year ended 31 <sup>st</sup> March	Profits before tax (Rs.)	Weight Rs.	Product
2006	3,00,000	1	3,00,000
2007	4,00,000	2	8,00,000
2008	-	-	-
2009	5,00,000	3	15,00,000
2010	5,50,000	4	22,00,000
		<u>10</u>	<u>48,00,000</u>

Weighted average : (48,00,000/10)	4,80,000
Adjustment :	
Less : Increase in managerial remuneration	40,000
	<u>4,40,000</u>
Less : Tax @ 50%	2,20,000
Profit available for distribution	<u>2,20,000</u>
Less : Rehabilitation Reserve (15% estimated)	33,000
	<u>1,87,000</u>
Less : dividend on Preference Shares	36,000
Profit available for distribution to Equity shareholders	<u>1,51,000</u>

$$Rs. 1,51,000 \text{ capitalised at } 10\% = \frac{Rs. 1,51,00 \times 100}{10} = Rs. 15,10,000$$

$$\text{The value of Equity share will be } \frac{15,10,000}{8,000} = 188.75$$

**Illustration : 16**

Balance Sheet of Kaka Ltd. as on 31.12.2010 was as under:

Liabilities	Rs.	Assets	Rs.
Equity share Capital (Rs. 10)		Building	12,00,000
Rs. 10 paid up per share	8,00,000	Plant & Machinery	14,00,000
Rs. 5 paid up per share	7,00,000	Sundry Debtors	10,10,000
9% preference share Capital (Rs. 100)	4,00,000	Stock	2,50,000
Reserve	13,00,000	Cash and Bank	40,000
Sundry Creditors	7,00,000		
	<u>39,00,000</u>		<u>39,00,000</u>

Profit and dividend in last three years were as under:

Year	Profit before tax Rs.	Equity Dividend	Weights
2010	10,20,000	20%	3
2009	9,50,000	16%	2
2008	7,20,000	15%	1

Land and buildings are worth Rs. 24,00,000. Managerial remuneration is likely to go up by Rs. 40,000 p.a. Income tax may be provided at 40%. Equity shares of companies in the same-industry with dividend rate of 10% are quoted at per. Kaka Ltd. is a going concern and it will call the unpaid part of share capital very shortly.

Find the most appropriate value of an Equity share assuming that

- Controlling interest is to be transferred.
- Only a few shares are to be transferred.

Ignore goodwill value, depreciation adjustment for revaluation and the need of transfer to General Reserve.

### Solution

Future Maintainable Profits

Year	Profit Before Tax	Weight	Product
2010	10,20,000	3	30,60,000
2009	9,50,000	2	19,00,000
2008	7,20,000	1	7,20,000
		6	56,80,000

$$\text{Weighted Average Profit} = \frac{56,80,000}{6} = 9,46,667$$

Less : Increase in Managerial Remunerations	(40,000)
Profit Before Tax	9,06,667
Less : Tax @ 40%	<u>(3,62,667)</u>
Profit After Tax	(5,44,000)
Less : Preference Dividend	<u>(36,000)</u>
Profit for Equity Shareholders	5,08,000

- Valuation of Controlling Interest

First Method Capitalisation of Maintainable Profit @ 10%

$$\text{Capitalised Value} = 5,08,000 \times \frac{100}{10} = \text{Rs. } 50,80,000$$

$$\begin{aligned} \text{Add : Notional call on partly paid shares } [1,40,000 \times 5] &= 70,000 \\ &= 57,80,000 \end{aligned}$$

$$\begin{aligned} \text{All Fully paid shares after Notional call} &= [80,000 + 1,40,000] \\ &= 2,20,000 \text{ shares.} \end{aligned}$$

$$\text{Value of Fully paid share} = \frac{57,80,000}{2,70,000} = \text{Rs. } 26.27$$

$$\text{Value of partly paid share} = 26.27 - 5 = \text{Rs. } 21.27$$

Net Assets (after revaluation) Second Method – Net Assets Basis  
(39,00,000 + Appropriation Building 12,000 = 51,00,000)

Add : National call on shares	7,00,000	7,00,000
Less : Creditors	7,00,000	58,00,000
Less : Preference Share Capital	4,00,000	11,00,000
Assets for Equity Shareholders		47,00,000

$$\text{Value of Fully paid shares} = \frac{47,00,000}{2,20,000} = \text{Rs. } 21.36$$

$$\text{Value of Partly paid share} = 21.36 - 5.00 = \text{Rs. } 16.36$$

$$\text{Fair value of fully paid share} = \frac{26.27 + 21.36}{2} = 23.82$$

$$\text{Fair Value of Partly paid share} = \frac{21.27 + 16.36}{2} = \text{Rs. } 18.82$$

b) Valuation of Few Share

$$\text{Average rate of dividend} = \frac{20 + 16 + 15}{3} = 17\%$$

$$\therefore \text{Value of Fully Paid Share} = \frac{17}{10} \times 10 = \text{Rs. } 17 \text{ per share}$$

$$\text{Value of Partly Paid Share} = \frac{17}{10} \times 5 = \text{Rs. } 8.50$$

**Illustration : 17**

The Final Accounts N Ltd. As on 31<sup>st</sup> March, 2010 revealed following significant information :

i) Share Capital (Fully paid up ) -

Equity – 2,00,000 Shares of Rs. 10 each, 10% Preference 30,000

Shares of Rs. 100 each

- ii) Reserve and Surplus – Rs. 7,50,000.
- iii) Preliminary Expenses – Rs. 30,000.
- iv) The valuation of assets revealed that assets as per accounts are undervalued by Rs. 6,50,000.
- v) The average pre-tax profits of past three years was Rs.10,00,000.  
Tax applicable to company is @ 40%.
- vi) It is anticipated that due to favourable market condition, pretax profit will increase by 20%.
- vii) Equity shareholders expect a return at 15%. Find the FAIR VALUE of Shares.

**Solution :**

1) Valuation of Shares

	Rs.	Rs.
<b>i) Capital Employed :</b>		
Equity Capital	20,00,000	
10% Preference	30,00,000	
Reserves and Surplus	7,50,000	57,20,000
Less : Preliminary expenses	<u>30,000</u>	6,50,000
Add : Appreciations		
Net Assets		<u>63,70,000</u>
<b>ii) Future Maintainable Profit :</b>		
Pre Tax Profit	10,00,000	
Add : Expected to Increase	2,00,000	
Less : Tax @ 40%	<u>12,00,000</u>	7,20,000
Less : Preference Dividend	4,80,000	3,20,000
□ Future Maintainable Profit		
		<u>4,20,000</u>

iii) a) Intrinsic Value of Equity Shares

$$\begin{aligned}
 &= \frac{\text{Net Assets for Equity Sharehold}}{\text{No. of Equity, shares}} \\
 &= \frac{63,70,000 - 30,00,000}{2,00,000} \\
 &= \frac{33,70,000}{2,00,000} = \text{Rs. } 16.85
 \end{aligned}$$

$$\begin{aligned}
 \text{b) i) Rate of FMP} &= \frac{\text{FMP}}{\text{Paidup equity capital}} \times 100 \\
 &= \frac{4,20,000}{20,00,000} \times 100 \\
 &= 21\%
 \end{aligned}$$

ii) Yield value per share

$$= \frac{\text{Rate of FMP}}{\text{NRR}} \times \text{Face Value of one Equity Share}$$

$$\therefore \text{Yield Value Per Share} = \frac{21}{15} \times 10 = \text{Rs.}14$$

$$\begin{aligned}
 \text{iii) Fair Value} &= \frac{\text{Intrinsic Value} + \text{Yield Value}}{2} \\
 &= \frac{16.85 + 14}{2} \\
 &= \text{Rs.}15.43
 \end{aligned}$$

b) Gem Ltd. submits following information as on 31<sup>st</sup> March,2011.

Fixed Asset (Tangible)	15,00,000	Investment	1,00,000
Current Assets	6,00,000	Capital issues	
Patent Right	2,50,000	Expenses	50,000
		Liabilities	4,00,000

Capital comprise of 12,500 shares of Rs. 100 each fully paid. It is ascertained that Patent Rights are valueless.

Ascertain the value of Shares on asset backing method.

**Solution :**

Valuation of Shares on Assets Backing Method :

a) Total Value of Assets :		Rs.	Rs.
Fixed Assets		15,00,000	
Current Assets		6,00,000	
Investments		1,00,000	22,00,000
b) Less : Liabilities :			(-) 4,00,000
Net Assets available to Equity Shareholders			<u>18,00,000</u>
c) Value Per Share :			

$$\begin{aligned} \text{Assets Backing Method} &= \frac{\text{Net Assets as above}}{\text{No. of Equity Shares}} \\ \text{Value} &= \frac{18,00,000}{12,500} \\ &= \text{Rs.144 / Equity Share} \end{aligned}$$

### Illustration : 18

Mrs. Tata intends to invest Rs. 10,35,000 in Equity shares of B Ltd. and seeks your advice as to the maximum numbers of shares she can purchased on fair value of the shares to be determined by you from following information is available :

1. Issued and paid up Capital
  - 10% Preference shares of Rs. 100 each 12,00,000
  - Equity shares of Rs. 5 each 60,00,000 /
  - Reserves and surplus 92,00,000
2. Average Net Profit of the company is Rs. 29,00,000, after tax @ 50%.
3. Expected normal yield is 12% in case of such Equity shares.
4. Net assets on revaluation are worth Rs. 5,20,000 more than the amounts at which they are stated in the books.
5. Goodwill is to be calculated @ 3 years purchase of super profits.
6. Revised tax rate likely to be 40%.
7. Compensation payable to workers not accounted Rs.50,000.

### Solution :

1. Goodwill = Super purchase  
= 9,09,000 x 3 = 27,28,800
  
2. F. M. P.      Average profit after Tax      29,00,000  
                   Add : Income Tax @ 50%      29,00,000  
   N. P. B. T.      48,00,000  
                   Less : Income Tax @ 40%      19,20,000  
   F. M. P.      28,80,000



3. Average Capital employed	72,00,000
Share capital at the end of the year	92,00,000
Reserved and Surplus	<u>5,20,000</u>
Add : revaluation Profit	1,69,20,000
Less : Compensation payable	<u>50,000</u>
	1,68,70,000
Less : ½ of the profit earned (9,00,00 ½ )	<u>(4,50,000)</u>
A. C. E. during the year	<u>1,64,20,000</u>

$$\text{Normal Profit} = A.C.E. \times \frac{N.R.R.}{100} = 1,64,20,000 \times \frac{12}{100}$$

$$= 19,70,400$$

$$\text{Super Profit} = F.M.P. - \text{Normal Profit}$$

$$= 28,80,000 - 19,70,400 = 9,09,600$$

ii) Valuation of Shares

a) Intrinsic Value

1. Amount available to Equity Shareholders

	Rs.
Net Assets at Market Value	1,68,70,000
Add : Goodwill	27,28,800
Net Assets available to shareholder	1,95,98,800
Less : Claims of Preference Shareholders (Preference Share Capital)	12,00,000
Amount available to Equity Shareholders	1,83,98,800

$$2. \text{Intrinsic Value} = \frac{\text{Amount available to Equity Shareholders}}{\text{No. of Equity Shares}}$$

$$= \frac{1,83,98,800}{12,00,000}$$

$$= \text{Rs. } 15.33$$

b) The Yield Value

	Rs.
1. <i>F.M.P.</i>	
<i>Average Profit</i>	28,80,000
<i>Less : Preference Dividend</i> $\left[ \frac{10}{100} \times 12,00,000 \right]$	(1,20,000)
<i>F.M.P.</i>	27,60,000

$$2. \text{Rate of } M.P. = \frac{F.M.P.}{\text{Paidup Equity Capital}} \times 100$$

$$= \frac{27,60,000}{60,00,000} \times 100 = 46\%$$

$$3. \text{Yield Value} = \frac{\text{Rate of } F.M.P.}{N.R.R.} \times \text{Amount paid per Equity Share}$$

$$= \frac{46}{12} \times 5$$

$$= 19.17$$

c) *Fair Value*

$$\frac{\text{Intrinsic Value} + \text{Yield value}}{2} = \frac{15.33 + 19.17}{2}$$

$$= 17.25$$

d) *No. of shares to be aquired :*

$$\frac{\text{Investment}}{\text{Fair Value}} = \frac{10,35,000}{17.25}$$

$$= 60,000$$

**Illustration : 19** (When Goodwill and Share Valuation asked)

The Balance Sheet of Ketan Ltd. as on 31-12-2010 was as under :

Liabilities	Rs.	Assets	Rs.
Equity Share Capital :		Goodwill	60,000
Share of Rs. 10 each	2,00,000	Fixed Assets	1,00,000
Shares of Rs. 5 each	1,00,000	Stock	1,20,000
General Reserve	40,000	Debtors	1,45,000
P L A/c	10,000	Cash	10,000
Gratuity Fund	15,000	Prepaid Expenses	2,000
Workmen's P.F.	5,000	Preliminary Expenses	3,000
Depreciation Fund	10,000		
Trade Creditors	25,000		
Liabilities for Expenses	5,000		
Bank Overdraft	30,000		
	4,40,000		4,40,000

A shareholder holding 500 shares of Rs. 10 and 300 shares of Rs. 5 wants to dispose of all the shares.

Dividends paid for last 3 years were 12%, 11%, & 12%. Normal expectation is 10%

Fixed assets are worth Rs. 80,000. goodwill is to be increased to the Average of book value and a calculation made at 4 years' purchase of average super profit for the last 3 years. Debtors are considered good except for Rs. 3,000. Liabilities for expenses are no longer required. On the other hand, there is a claim for bonus amounting to Rs. 10,000 and it is likely to be paid for. Profit for three years after taxation were Rs. 35,000, Rs. 48,000 and Rs. 46,000.

Find out the break up value, market value & fair value of the above 2 types of shares.

**Solution :**

Goodwill is equal to the average of B. V. of goodwill and goodwill at average super profit.

Rs.

I	35,000
II	48,000
III	46,000
	<u>129,000</u>

$$\text{Average Profit} = \frac{1,29,000}{3} = 43,000$$

		Rs.
Average Profit		43,000
Less : i) Bad Debts	3,000	
ii) Claim for Bonus	10,000	13,000
		30,000
Add : Liability for Expenses no longer required		+ 5,000
F. M. P.		<u>35,000</u>

$$\text{ii) Normal Profit} = A. C. E. \times \frac{M.R.R.}{100}$$

**A. C. E. :**

		Rs.
<u>Tangible Trading Assets at Market Value</u>		
Fixed Assets		80,000
Stock		1,20,000
Debtors	1,45,000	
Less : Bad Debts	- 3,000	1,42,000
Cash		10,000
Prepaid Expenses		2,000
Total Assets		3,54,000
Less : Liabilities		
Gratuity Fund	15,000	
Workmen's P. F.	5,000	
Creditors	25,000	
Bank Overdraft	30,000	
Bonus Payable	10,000	85,000
Net Tangible Assets		2,69,000

**Assumption :**

It is assumed that profit is withdrawn from business. Therefore tangible capital at the end of the year considered equal to average capital employed during the year.

Therefore  $A.C.E. = 2,69,000$

$$\begin{aligned} \text{Normal Profit} &= \frac{N.R.R.}{100} \times A.C.E. \\ &= \frac{10}{100} \times 2,69,000 = 26,900 \end{aligned}$$

$$\begin{aligned} \text{Super Profit} &= F.M.P. - \text{Normal Profit} \\ &= 35,000 - 26,900 = 8,100 \\ &= \text{Super Profit} \times 4 \\ &= 8,100 \times 4 = 32,400 \text{ (revised Goodwill)} \end{aligned}$$

*Goodwill for valuation of shares*

$$\begin{aligned} &= \frac{\text{Book value of goodwill} + \text{Revised Goodwill}}{2} \\ &= \frac{60,000 + 32,400}{2} \\ &= \frac{92,400}{2} \\ &= 46,200 \end{aligned}$$

1. Break Up Value (Intrinsic Value)

	Rs.
i) Amount available to Equity Shareholders	
Net Tangible Trading Asset	2,69,000
Add : Goodwill	46,200
Net Amount of Assets available to equity Shareholders	3,15,200

**Note :** The Net Assets available Rs. 3,15,200 should be distributed between the 2 types of Equity shareholders in the proportion of their paid up value.

*Proportion* : 2,00,000 : 1,00,000

= 2 : 1

$$\begin{aligned} \text{Amount available to Rs 10 Equity shareholders} &= \frac{2}{3} \times 3,15,200 \\ &= 2,10,133 \end{aligned}$$

$$\begin{aligned} \text{Amount available to Rs. 5 shareholders} &= \frac{1}{3} \times 3,15,200 \\ &= 1,05,067 \end{aligned}$$

$$\text{ii) Value of share} = \frac{\text{Amount available to Equity Shareholders}}{\text{No. of equity shares}}$$

$$\text{For Rs. 10} = \frac{2,10,133}{20,000} = 10.51$$

$$\text{For Rs. 5 share} = \frac{1,05,067}{20,000} = 5.25$$

2. Market Value (Yield Value)

i) *F. M. P.* (as per I) 35,000

$$\begin{aligned} \text{ii) Rate of F. M. P.} &= \frac{\text{F. M. P.}}{\text{Paidup Equity capital}} \times 100 \\ &= \frac{35,000}{3,00,000} \times 100 \\ &= 11.67\% \end{aligned}$$

$$\text{iii) Market value} = \frac{\text{Rate of F.M.P.}}{\text{N.R.R.}} \times \text{Amount paidup per share}$$

$$\text{For Rs. 10 Share} = \frac{11.67}{10} \times 10 = 11.67$$

$$\text{For Rs. 5 Share} = \frac{11.67}{10} \times 5 = 5.83$$

$$3. \text{ Fair Value} = \frac{\text{Break up value} + \text{Market value}}{2}$$

$$\text{For Rs.10 Share} = \frac{10.51 + 11.67}{2} = 11.04$$

$$\begin{aligned} \text{Rs. 5 share} &= \frac{5.25 + 5.83}{2} \\ &= 5.45 \end{aligned}$$

**Illustration : 20** (When Equity Shares of different paid up values are given)

From the Balance Sheet of Machine Tools Company Limited as at 31<sup>st</sup> March, 2011 the following figures have been extracted.

	Rs.
Share capital	
9% Preference Shares of Rs. 100 each	3,00,000
10,000 Equity Shares of Rs. 10 each Rs. 5.00 paid up	50,000
10,000 Equity Shares of Rs. 10 each Rs. 2.50 paid up	25,000
10,000 Equity Shares of Rs. 10 each fully paid up	1,00,000
	4,75,000
Reserves and Surplus	
General Reserve	2,00,000
Profit and A/c	50,000
	7,25,000

On a revaluation of assets on 31<sup>st</sup> March, 2011 it was found that they had appreciated by Rs. 75,000 over their value in the aggregate.

The articles of association of the company provide that in case of liquidation, Preference shareholders would have a further claim to 10% of the surplus assets if any.

You are required to determine the value each Equity share assuming that liquidation of the company has to take place on 31<sup>st</sup> March, 2011 and that the expenses of winding up are nil.

**Solution :**

1. Surplus Asset

<i>Book Value of Net Assets</i>	= <i>Paid up capital and Reserves</i>	Rs.
	= 7,25,000	8,00,000
<i>Revised Value of Net Assets</i>	= <i>Book Value + Appreciation</i>	(3,00,000)
	= 7,25,000 + 75,000	
	= 8,00,000	
Revised value of Net Assets Less :		
Preference Share Capital		
		5,00,000
Less : Equity Share Capital (50,000 + 25,000 + 1,00,000)		
		(1,75,000)
Surplus		
		3,25,000
Less : Preference Shareholders (10% of Surplus Assets)		
		32,500
Surplus available to Equity Shareholders		
		2,92,500
Amount payable to Equity Shareholders		
Towards Capital	Rs.	1,75,000
Towards Surplus	Rs.	2,92,500
Total amount available to Equity Shareholders	Rs.	4,67,500
Total Paid up Capital	Rs.	<u>1,75,000</u>

*i.e. Value of share of Different paid up value*

$$= \frac{\text{Amount available}}{\text{Total Capital}} \times \text{Amt. paidup per share}$$

$$\text{i.e. for Rs. 2.50} = \frac{4,67,500}{1,75,000} \times 2.50 \quad \text{Rs. 6.68}$$

$$\text{Rs. 5.00} = \frac{4,67,500}{1,75,000} \times 5.00 \quad \text{Rs. 13.36}$$

$$\text{Rs. 10.00} = \frac{4,67,500}{1,75,000} \times 10.00 \quad \text{Rs. 26.71}$$

Alternatively, share can also be valued as follows :

		Rs.
Called up Capital	1,75,000	
Un-Called Capital		
10,000 shares @ Rs. 5.00	50,000	
10,000 shares @ Rs. 7.50	75,000	
i.e. Total- 30,000 shares	3,00,000	
Add : Surplus	2,92,500	
Total Amount available to Equity shareholders	5,92,500	
Value per Share	5,92,500	= 19.75
	30,000	

		Rs.
Value of Fully Called – Up Rs. 10		<u>19.75</u>
Partly Called –Up (Rs.5)	19.75	
Less : Uncalled (Rs. 5.00)	(5.00)	= 14.75
Value of Fully Called Up (Rs. 2.50)	19.75.	
Less : Uncalled (Rs. 7.50)	7.50	12.25

**Illustration : 21**

Below is given the Balance Sheet of Anand Ltd. as at 31<sup>st</sup>December 2010

Liabilities	Rs.	Assets	Rs.
Equity shares of Rs. 10 each 2,00,000		Goodwill	20,000
Less : Calls in Arrear (Rs. 2 for final call) <u>5,000</u>	1,95,000	Machinery	1,10,000
6% Preference Shares of Rs. 10 each 1,00,000		Land and Building	1,20,000
Less : Calls in Arrear (Rs. 2 for final call) <u>1,000</u>	99,000	Furniture and Fixtures	60,000
General Reserve	80,000	Vehicles	80,000
P & L A/c	16,000	Investments	80,000
Bank Loan	60,000	Stock in Trade	55,000
Sundry Creditors	1,55,000	Sundry Debtors	90,000
Bills Payable	30,000	Cash at Bank	10,000
		Preliminary Expenses	10,000
	6,35,000		6,35,000



For the purpose of valuation of shares, Goodwill is to be considered on the basis of 2 years' purchase of the super profits based on average profit of last 4 years. Profits are as follows :

2007 : Rs. 80,000; 2008 Rs. 90,000; 2009 Rs. 1,05,000; 2010  
Rs. 1,10,000

In a similar business normal return on capital employed is 5%.

Fixed assets are worth 30% above their actual book value. Stock is over-valued by Rs. 5,000. Debtors are to be reduced by Rs. 1,000. All trade investments are to be valued at 10% below cost. Of the investments, 10% are trade and the balance non-trade investments were acquired on 1-1-2010 and the rest on 1-1-2008

A uniform rate of dividend of 10% is earned on all investments.

**The following further information is relevant :**

- i) In 2008 a new machinery costing Rs. 10,000 was purchased but wrongly charged to revenue. (No rectification has yet been made for above).
- ii) In 2009, some old furniture (Book Value Rs. 5,000) was disposed of for Rs. 3,000. You are required to value each fully paid and partly paid Equity share. (Depreciation is charged on machinery @ 10% on reducing balance system. Ignore Taxation and Dividend)

(M. U. Nov. 1995)

**Solution**

1.

<i>Rs.</i>	
<i>Investment as per B / S</i>	80,000
<i>Less : Trade Investment</i>	(8,000)
<i>(10% of 80,000)</i>	—
<i>Non Trade Investments</i>	72,000
<i>Loss on Valuation of Trade Investment</i> $\left[ \frac{10}{100} \times 8,000 \right]$	800
<i>Value of Trade Investment (8,000 – 800)</i>	7,200
<i>Non Trade Investment</i>	72,000
<i>Less : 5% of 72,000 acquired on 1-1-2009</i>	3,600
<i>Acquired on 1-1-2008</i>	68,400

2.

**Dr. Non – Trade Investment A/c**

Date	particulars	Rs.	Date	particulars	Rs.
2008 Jan. 1	To Bank	68,400	2008 Dec. 31	By Balance c/d	68,400
		68,400			68,400
2009 Jan. 1	To Balance c/d	68,400	2009 Dec. 31	By Balance c/d	72,000
Jan. 1	To Bank	3,600			--
		72,000			72,000
2010 Jan. 1	To Balance b/d	72,000	2010 Dec. 31	By Balance e/d	72,000
		72,000			72,000

Rate of Interest on non-trading investment is also 10% interest.

<i>Date</i>	<i>Interest</i>	<i>Rs.</i>
31-12-08	$\frac{10}{100} \times 68,400$	6,840
31-12-09	$\frac{10}{100} \times 72,000$	7,200
31-12-10	$\frac{10}{100} \times 7,200$	720

4. Machinery

- i) Rs. 10,000 should be added to profit of 2008
- ii) As machinery was charged to Profit and Loss Account i.e. to revenue, no depreciation on it was provided.
- iii) The profits reported in the problem are before providing for depreciation on machinery of Rs. 10,000. while calculating F.

M. P. the errors is to be rectified and depreciation is to be provided @ 10% p.a. on Reducing Balance Method.

### Depreciation of Machinery

		Rs.
2008	Cost of machinery	10,000
	Less : Depreciation (10% of 10,000)	1,000
		9,000
2009	Less : Depreciation (10% of 9,000)	900
		8,100
2010	Less : Depreciation (10% of 8,100)	810
	Written down Value to be considered	<u>7,290</u>

### 5. Loss on Sale of Furniture

$$(5,000 - 3,000 = 2,000)$$

Rs. 2,000 loss on sale of furniture is an abnormal loss which should be added to the Profit of 2000 for deciding F. M. P. Super Profit = F. M. P. – Normal Profit.

#### iii) F. M. P.

	2007 Rs.	2008 Rs.	2009 Rs.	2010 Rs.
Reported Profits	80,000	90,000	1,05,000	1,10,000
i) Over Valuation of Stock				-5,000
ii) Reduction in Debtors				-1000
iii) Loss on Revaluation of Trade Investment				-800
iv) Interest on Non-trade Investment		-6,840	-7,200	-7,200
v) Machinery charged to Revenue		+10,000		
vi) Depreciation on Machinery		-1,000	-900	-810
vii) Loss on Sale of Furniture		-	+2,000	-
Trading Profits	80,000	92,160	98,900	95,190

$$\begin{aligned} \text{Average Trading Profit} &= \frac{80,000 + 92,160 + 98,900 + 95,190}{4} \\ &= \frac{3,66,250}{4} \\ &= 91,563 \end{aligned}$$

$$ii) \text{ Normal Profit} = \frac{N.R.R.}{100} \times ACE$$

**Average Capital Employed**

		Rs.
Tangible Trading Assets		
Machinery		1,10,000
Add: W.D.V. of Machine charged as Expense		7,290
		1,17,290
Land & Building		1,20,000
Furniture & Fixtures		60,000
Vehicles		80,000
Book Value of All Fixed Assets	3,77,290	
Add : 30% of Book Value	1,13,187	
Revised Value		4,90,477
Trade Investment		7,200
Stock in Trade	55,000	

Less : Over	-5,000	50,000
Valuation Debtors	90,000	
Less : Reduction	-1,000	89,000
Bank Balance		10,000
Less : Liabilities		6,46,677
Bank Loan		
Sundry	60,000	
Creditors		
B/P	1,55,000	
Tangible Trading Capital at the end of the year	30,000	2,45,000
		4,01,677

$$\therefore A.C.E. = 4,01,677$$

$$\begin{aligned} \text{Normal Profit} &= \frac{NRR}{100} \times A.C.E. \\ &= \frac{5}{100} \times 4,01,677 = 20,083.85 = 20,084 \end{aligned}$$

$$\begin{aligned} \text{Super Profit} &= F.M.P. - \text{Normal Profit} \\ &= 91,563 - 20,084 = 71,479 \end{aligned}$$

$$\begin{aligned} \text{Goodwill} &= \text{Super Profit} \times \text{No. of years purchase} \\ &= 71,479 \times 2 = 1,42,958 \end{aligned}$$

### Net Assets Value (Intrinsic Value)

#### Amount available to Equity Shareholders

		Rs.
Net Tangible Trading Assets		4,01,677
Add: Goodwill		1,42,958
Non Trading Investments		72,000
Calls in Arrears : Equity	5,000	
Preference	1,000	6,000
		6,22,635
Less : Preference Share Capital		1,00,000
Amount available to Equity Shareholders		5,22,635

$$\begin{aligned} \text{Net Assets Value of share} &= \frac{\text{Amount available to Equity Shareholders}}{\text{No. of Equity Shares}} \\ &= \frac{5,22,635}{20,000} = 26.13 \end{aligned}$$

$$\begin{aligned} \text{Value of partly paid share} &= \text{value of fully paid} - \text{calls unpaid per share} \\ &= 26.13 - 2.00 \\ &= 24.13 \end{aligned}$$

**Illustration 22 :**

Find out fair value of each share of Ekar Ltd. from the following information :

a) Balance sheet as on 31<sup>st</sup> December, 2007

Liabilities	Rs.	Assets	Rs.
5,000 Equity shares of Rs. 100 each fully paid up	5,00,000	Fixed Assets	11,99,000
Reserves	8,00,000	Cash	70,000
Loans	4,00,000	Other current assets	6,00,100
Creditors	1,50,000	Preliminary Expenses	30,900
Workmen's saving Accounts	50,000		
	19,00,000		19,00,000

b) Goodwill to be valued at 3 years purchases of super profits calculated on the basis of weighted average profits of last 5 years.

c) In similar business, normal return on capital employed is 15%.

d) Profits for last 5 years, after tax are as follows;

Year	2009	2008	2007	2006	2005
(Rs.) Rs.N.P.A.T.	2,61,000	2,35,000	3,21,000	2,10,000	2,40,000

e) i) During 2005 a heavy repairs was done to machinery for Rs. 50,000, which was wrongly debited to Revenue. It is to be capitalized for the purpose of goodwill and shares, valuation taking depreciation @ 10% on W. D. V.

ii) In 2006, closing stock was overvalued by Rs. 2000.

iii) In 2008, there was fire which resulted in loss of Rs. 8,000, which was debited to profit & Loss A/c.

iv) In 2007, the company have sold some fixed Assets resulting into profit of Rs. 25,000, credited to P/L A/c.

- v) Additional Rent of Rs. 6,000 p.a. will be payable.
- vi) Directors fees paid upto now was Rs. 10,000 p.a. but hence forth it will be Rs. 13,000 p.a.
- f) Income Tax upto now was at the rate of 50%, but hence forth it will be 40%
- g) i) Fixed Assets are overvalued by 10%.  
ii) Other Current Assets are undervalued by 15%.
- h) N. R. R. for valuation of shares 10%.
- i) Company has practice of transferring Rs. 15,000 to General Reserves every year.

**Solution :**

**A) Valuation of Goodwill :**

**Statement Showing adjusted profit**

Particulars	2005	2006	2007	2008	2009
N. P. A. Tax	2,40,000	2,10,000	3,21,000	2,35,000	2,61,000
(A) IncomeTax	2,40,000	2,10,000	3,21,000	2,35,000	2,61,000
N. P. B. Tax	4,80,000	4,20,000	6,42,000	4,70,000	5,22,000
(+) Repairs calpitazed	50,000	--	--	--	--
(-) Depreciation	(5,000)	(4,500)	(4,050)	(3,645)	(3,281)
Over valuation of stock on 31/12/06	--	(2,000)	2,000	--	--
(+) loss due to fire in 2008	--	--	--	8,000	--
(-) abnormalgains	--	--	(25,000)	--	--
Adjusted profit B.T.	5,25,000	4,13,500	6,14,950	4,74,355	5,18,719
(x) weight	X 1	X 2	X 3	X 4	X 5
Product Rs.	5,25,000	8,27,000	18,44,850	18,97,420	25,93,595

**Working for depreciation :**

	Rs.
Repairs capitalized in 2005	50,000
(-) Dep <sup>n</sup> for 2005	(5,000)
WDV as on 31.12.05	45,000
(-) Dep <sup>n</sup> for 2006	(4,500)
WDV as on 31.12.06	40,500
(-) Dep <sup>n</sup> for 2007	(4,050)
WDV as on 31.12.07	36,450
(-) Dep <sup>n</sup> for the year 2008	(3,645)
WDV as on 31.12.08	32,805
(-) Dep <sup>n</sup> for the year 31.12.09	(3,281)
WDV as on 31.12.09	29,524

$$\text{weighted average profit before tax} = \frac{\text{Total of products}}{\text{Total weights}}$$

$$= \frac{76,87,865}{15} = 5,12,524$$

Weighted average profit	=	5,12,524
(-) increase in exp. in future		
Additional rent	(6,000)	
Add. Directors fee payable	(3,000)	
F.M.P. Before Tax	5,03,524	
(-) Increase Tax @ 40%	(2,01,410)	
F.M.P. after Tax	3,02,114	



**Net Tangible Trading Assets :**

<i>Particulars</i>		
<i>Fixed Assets</i> $\left(11,99,000 \times \frac{100}{110}\right)$	10,90,000	
<i>Re pairs (WDV value of repairs capatilised)</i>	29,524	
<i>Cash</i>	70,000	
<i>Others C.A.</i> $\left(6,00,000 \times \frac{100}{85}\right)$	7,06,000	
		18,95,524
<i>Less : liabilities payable</i>		
<i>Loan</i>	4,00,000	
<i>Creditors</i>	1,50,000	
<i>Workmen's sauing A/c</i>	50,000	(6,00,000)
<i>Net tan gible trading assets as on 31.12.2009</i>		12,95,524

$$\begin{aligned} \text{Normal Profit} &= \text{Avg. Capital equip.} \times \frac{\text{NRR}}{100} \\ &= 12,95,524 \times 15\% \\ &= 1,94,329 \end{aligned}$$

$$\begin{aligned} \text{Super Profit} &= \text{F.M.P.} - \text{Normal Profit} \\ &= 3,02,114 - 1,94,329 \\ &= 1,07,785 \end{aligned}$$

$$\begin{aligned} \text{Goodwill} &= \text{super profit} \times 3 \text{ years of purchase} \\ &= 1,07,785 \times 3 \\ &= 3,23,355 \end{aligned}$$

*B) Valuation of shares :*

$$\begin{aligned} \text{Fair Value} &= \frac{\text{Intrinsic value} + \text{yield value}}{2} \\ &= \frac{323.78 + 547.2}{2} \\ &= 448.99 \end{aligned}$$

$$\text{Fair value} = 449$$

WN :

$$\begin{aligned} \text{Intrinsic value of share} &= \frac{\text{Net assets available to equity share holders}}{\text{No. of equity shares}} \\ &= \frac{16,18,879}{5,000} \\ &= 323.78 \end{aligned}$$

Net asset available to Equity S. H.	Rs.
Net tangible trading asset as calculated	12,95,524
(+) Goodwill	<u>3,23,355</u>
Net assets available to Equity share holders	<u>16,18,879</u>

**Yield value :**

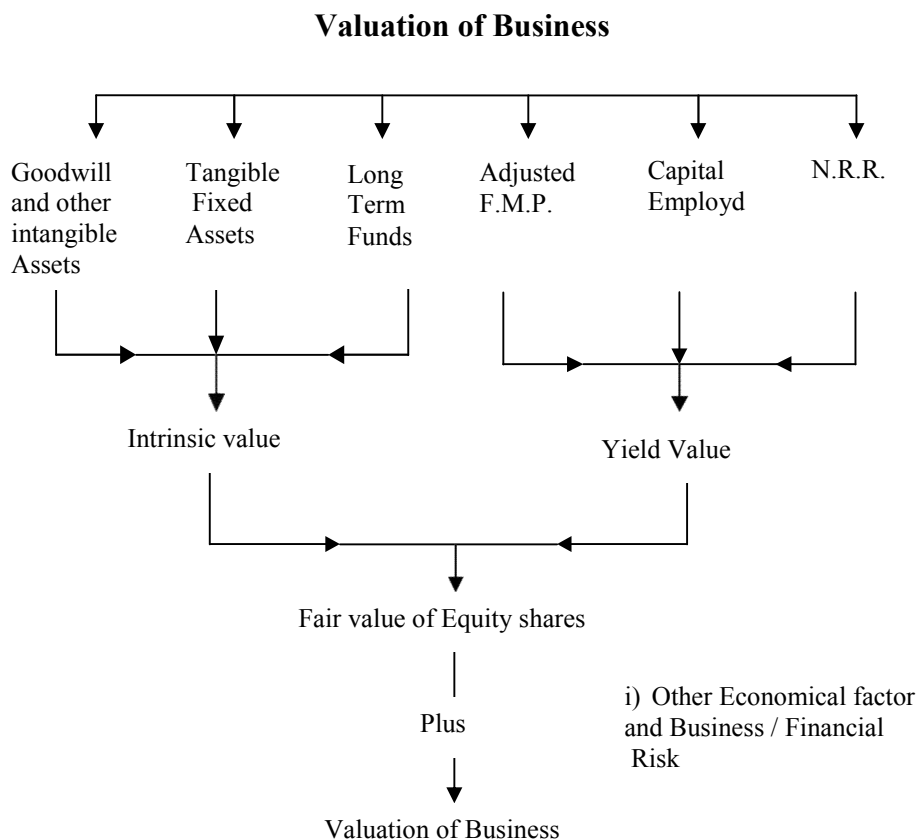
FMP = Adjusted avg. profit – pref. dividend – statutory Preference Reserves

$$\begin{aligned} FMP &= 3,02,114 - 15,000 \\ &= 2,87,114 \end{aligned}$$

$$\begin{aligned} \text{Rate of FMP} &= \frac{FMP}{\text{paid up equity cap}} \times 100 \\ &= \frac{2,87,114}{5,00,000} \times 100 \\ &= 57.42\% \end{aligned}$$

$$\begin{aligned} \text{Yield value} &= \frac{\text{Rate of FMP}}{NRR} \times \text{paid up value of a equity share} \\ &= \frac{57.42}{10} \times 100 \\ &= 574.2 \end{aligned}$$

## 4.13 VALUATION OF BUSINESS



Business valuation process involves multiple judgments. It uses to estimate the economic value of the owner's interest in the Business. It is the price vender of business willing to receive and purchaser of business willing to pay. It not only shares valuation butalso valuation of intangible assets, anticipation of future earnings, analysis of company's cash flows etc. It also guide share holders tohold shares or purchase addition share or sell part / all his shares. Valuation is used by financial market participant to determine the price, to buy or to sell the business.

**Some of the methods of business Valuation are as follows:**

### 1. EARNING PER SHARE METHOD (E.P.S)

Step I  $F.M.P. = \text{Pr ofit available for Equity Dividend}$   
 $= \text{Adj. Averege profit} - \text{Pr ef. Dividend} - \text{statutory transfer to reserves}$

Step II  $E.P.S. = \frac{FMP}{\text{No. of equity shares outs tan ding}}$

Step III  $\text{Value of total Equity share} = \text{No. of Equity shares} \times E.P.S.$

Step IV  $\text{Bu sin ess Value} = \text{Valuation of E.P.S. (Step III)} \times \frac{100}{N.R.R.}$

## 1. DIVIDEND CAPITALISATION METHOD

This method is based on dividend. Equity dividend paid /declared is capitalized by using N.R.R.

**Following steps should be followed :**

**Step 1** - Ascertain Equity Dividend per share

**Step 2** - Determine N.R.R. N.R.R. for dividend yield approach should be different than N.R.R. for goodwill valuation. It depends upon many factors e.g. promoters totalholding, whether shares are listed or unlisted. Higher the promotes holding N.R.R. can be less, similarly higher the unlisted co. shares N.R.R. should be higher, as high risk.

**a) Earning yield approach**

$$N.R.R. = \frac{E.P.S.}{Market\ price\ per\ share} \times 100$$

**b) Dividend yield approach**

$$N.R.R. = \frac{E.P.S.}{Market\ price\ per\ share} \times 100$$

$$Step\ 3 - Value\ per\ share = \frac{Dividend\ per\ share}{N.R.R.} \times 100$$

**Step 4 – Business Value**

= No. of Equity shares outstanding  $\times$  value on calculated on above.

## 3. PRICE EARNING MULTIPLE APPROACH

$$Price\ Earning\ Ratio = \frac{Market\ price\ per\ share}{E.P.S.}$$

Price Earning ratio shows price currently paid for each Rs. of currently reported E.P.S. It is market price based method. It is relationship between per share & E.P.S.

**Business valuation can be ascertain as follows:**

**Step I** - Determine P.E. multiple applicable for similar size companies in same type of indenty.

**Step II** - Compute E.P.S. of the company being underconsideration, As per As – 20

**Step III** - Value per share = P.E. ratios  $\times$  E.P.S.

**Step IV - Business Valuation**

$$= \text{No. of outstanding Equity shares} \times \text{Value determine in Step III above.}$$

**2. BOOK VALUE METHOD**

This is market based. Book value can be ascertained on the basis of company's book of accounts. Book value method represents relationship between market price of the share and bookvalue of the same.

**Step 1:**

$$\text{Book value per share} = \frac{\text{Net Assets available to Equity share holders}}{\text{No. of equity shares.}}$$

In such valuation net assets appearing books of accounts or i.e. equal to shareholders fund.

**Step 2:** Determine Book value multiple of the similar sized and type company.

$$= \frac{\text{Market value per share}}{\text{Book Value per share}}$$

**Step 3:** Value per share

$$= \text{Book Value per share} \times \text{Book Value per multiple.}$$

**Step 4:** Business Value

$$= \text{No. of Equity shares} \times \text{Value per shares (step 3)}$$

**5) DISCOUNTED CASH FLOW METHOD**

Cash flow is that cash flow through out during the year. Cash flow is defined as "Earnings before Interest on Long Term Loans, Depreciation, but after Taxes".

$$\text{Cash flows} = \text{N.B.I.} + \text{Tax} + \text{Depreciation} + \text{Amortization}$$

Free cash flow represents the cash flow which are available for :  
Expansion

1. Diversification
2. Withdrawal

Free cash flows represent the cash flow available from earning after adjusting for:

1. Additional cash required for incremental working capital needs.
2. Replacement of assets in normal circumstances.

Normally this method is preferred by investment Bankers to value business as the company's value can be estimated by forecasting future performance and measuring future surplus cash flow generated by the company. The cash flows and cash deficient cash flows are discounted back to present value and added together to get the valuation of business.

**As per this method to ascertain value of business following procedure should be followed:**

**Step 1** - Ascertain Future cash flow for which projections can be made with certainty.

**Step 2** - Discount above future cash flow at cost of capital.

**Step 3** - Take total of above discounted cash flow.

**Step 4** - Decide the Terminal value for last year of projections. The Terminal value is ascertained by capitalising the last year earning at N.R.R.

**Step 5** - Discount the terminal value @ rate of cost of capital.

**Step 6** - Add all these values to estimate the company's present value, assuming co. is debt free.

a) Discounted cash flows	X
b) Discounted Terminal value	X
Value of Business	

**Step 7** -  $Value\ per\ share = \frac{Value\ of\ Business}{No.\ of\ shares\ outstanding}$

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#### 4.14 SOLVED PROBLEMS ON VALUATION OF BUSINESS

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**Illustration 23:**

Following information is available from books of Ketan Ltd.

a) Free Cash Flows:

Year	Rs. in Lakhs
2006	100
2007	150
2008	250
2009	400
2010	500

b) The company uses 60% debt. And 40% Equity for long term financing. Debt. Is obtained at 12%. The tax rate is 40% cost of Equity is 25%

- c) Assets amounting 362 lakhs were not used in generation of the cash flow.
- d) The company expects a steady cash flow growth at 5%.

Using Discounted Cash flow technique, you are required to calculate the value of Business

**Solution :**

1) Weighted Average Cost

Sources of Capital	Cost of Capital	Tax Shield	Net Cost of Capital		Proportion of Capital		Weighted Cost	
Equity	25	--	25	X	40%	=	10.00	
Debt	12	0.40	7.20	X	60%	=	4.32	
W.A.C.C.								14.32

2) Present Value of cash flow :

Year	Cash flow Rs. Lakhs	D.F.@ 14.32%	P.V. of Cash flow Rs. in Lakhs
2006	100	0.8747	87.47
2007	150	0.7651	114.77
2008	250	0.6693	167.33
2009	400	0.5855	234.20
2010	500	0.5121	256.05
P.V. of Total Cash Flows			859.82

Discount factor is calculated by constant factor using calculate as

$$\frac{100}{114.32} \times = \text{for 2006 year}$$

$$= \text{for 2007 year}$$

$$= \text{for 2008 year}$$

$$= \text{for 2009 year}$$

$$= \text{for 2010 year}$$

$$3. \text{ Terminal value value} = \frac{500 \times 1.05}{0.11432 - 0.05} = \frac{525}{0.06432}$$

$$= 8162.31 \text{ Lakhs.}$$

$$4. P.V. \text{ of Terminal Value} = 8162.31 \times 0.5121 \\ = 4180; \text{ in lakhs.}$$

5)

Value of Ketan Ltd.	Rs. (in lakhs)
P.V. of cash flow	859.82
+ P.V. of Terminal cash flow	4180.00
+ Value of non-operating asset	362.00
Value of Business	5401.82

**Note :** As net present value concept not covered in syllabus, we are of opinion that discounted cash flow method should not be asked in

M. Com. Part I.

**Illustration 24:**

Following information from X Ltd. & Y Ltd., were available.

	X Ltd.	Y Ltd.
Earning after Tax	Rs. 2,50,00,000	Rs. 12,00,000
No. of Equity Share	5,00,000	2,00,000
P.E. Ratio C Times	12	7

You are required if Y Ltd. is taken over by X Ltd.

- Calculate market price of shares of X Ltd. & Y Ltd.
- Find out swap ratio based on market price.
- What would be E.P.S. of X Ltd. after take over Y Ltd.
- What would be the market value of the merged of Company?

**Solution :**

	X Ltd.	Y Ltd.
$E.P.S. = \frac{N.P.A.T. - \text{Preference Dividend}}{\text{No. of Equity Share}}$	$= \frac{25,00,000}{5,00,000}$	$\frac{12,00,000}{2,00,000}$
$E.P.S.$	$= \text{Rs. } 50$	$\text{Rs. } 6$
$P.E. \text{ Ratio} = \frac{\text{Market Price}}{E.P.S.}$		
$\therefore \text{Market Price}$	$= 12 \times 50$	$7 \times 6$
$= P.E. \text{ Ratio} \times E.P.S.$	$= \text{Rs. } 600$	$\text{Rs. } 42$



ii) Swap price based on market price

$$= \frac{\text{market price of Y Ltd.}}{\text{Market price of X Ltd.}} = \frac{42}{600} = 0.07$$

∴ 7 Shares of X Ltd. for every 100 shares of Y Ltd.

iii) E. P. S. of X Ltd. after takes over Y Ltd.

$$\therefore \text{No. of shares issued to Y Ltd.} = 2,00,000 \times \frac{7}{100} = 14,000 \text{ shares.}$$

Total No. of shares of X Ltd. after takes over = 5,00,000 + 14,000 = 5,14,000.

Total Earning after takes over = 2,50,00,000 + 12,00,000 = 2,62,00,000.

$$\text{E.P.S. After Take over} = \frac{2,62,00,000}{5,14,000} = \text{Rs. } 50.97$$

∴ Expected Market Price

$$\begin{aligned} \text{After take over} &= 12 \times 50.97 \\ &= 611.64 \end{aligned}$$

Market value of X Ltd. = No. of share × market price per share

$$= 5,14,000 \times 611.64$$

$$= 31,43,82,960$$

### Illustration : 25

Anand Ltd. is intending to acquire Raj Ltd. by waerger and following information is available.

	Anand Ltd.	Raj Ltd.
No. of Equity shares	5,00,000	1,00,000
No. of 10% Pref. shares of Rs. 100 each	1,00,000	50,000
Earning after Tax	60,00,000	22,00,000
M. V. per Equity Share	45	67.50

**You are required :**

i) Calculate E. P. S. for Anand Ltd. and Raj Ltd.

ii) Calculate E. P. S. after mager

**Solution :**

$$i) E.P.S. = \frac{N.P.A.T. - \text{preference Dividend}}{\text{No. of Equity shares}}$$

$$\begin{aligned} \text{Anand Ltd. E.P.S.} &= \frac{60,00,000 - 10,00,000}{5,00,000} \\ &= \frac{50,00,000}{5,00,000} = \text{Rs.10 per share} \end{aligned}$$

$$\text{Raj Ltd. E.P.S.} = \frac{22,00,000 - 5,00,000}{1,00,000} = \text{Rs.15 per share}$$

ii) No. of shares issued to Raj Ltd. by Anand Ltd..

$$\frac{67.50}{45} \times 1,00,000 = 1,50,000$$

$$\therefore \text{Total share of Anand Ltd.} = 5,00,000 + 1,50,000 + 1,50,000 = 6,50,000$$

$$\therefore \text{Earnings after takeover} = 50,00,000 + 15,00,000 = 65,00,000$$

$$\text{E.P.S. after merger} = \frac{65,00,000}{6,50,000} = \text{Rs.10 per share}$$

**Illustration 26 :**

Z Ltd. Furnished to following information, Assets (including goodwill 17,50,000)

	<b>Rs.</b>
Net Assets [including goodwill]	1,75,000
10% Preference Capital Rs. 10 each	4,00,000
Equity share capital Rs. 5 each	6,00,000
Avg. Net profit after tax	12,50,000
Normal rate of return 12%	

**Information :**

- 1) Intrinsic value
- 2) Fair Value
- 3) Director decided to allow one fully paid equity share at bonus for every 3 shares held.
- 4) After bonus issued offer was made for right share issue @ 1 share Rs. 25 per share for every 4 shares price was fully subscribed fair value before right and after right.

**5) Solution :**

Particulars	Nos.	Rs.
Net Asset		17,50,000
(Less) Preference Capital		4,00,000
Net Asset available to Equity share holder	1,20,000	13,50,000
Add + : Bonus (1,20,000 × 1/3)	40,000	--
Net Asset	1,60,000	13,50,000
Add +: Right issue (1,60,000 × 1/4) (40,000 × 25)	40,000	10,00,000
Net Assets	2,00,000	23,50,000

Yield Value	
FMP Given	12,50,000
(Less) Preference dividend (4,00,000 x 10%)	40,000
FMP	12,10,000

$$1) \text{ Fair Value} = \frac{\text{Intrinsic Value} + \text{Yeild Value}}{2}$$

$$= \frac{11.25 + 84.03}{2}$$

$$= 47.64 / -$$

$$\text{iii) Yeild Value} = \frac{\text{Rate of NNR}}{\text{NNR}} \times \text{Paidup value per share}$$

$$= \frac{151.25}{12} \times 2$$

$$= 63.02\%$$

3) Fair value before right and after right (but after bonus)

a) Before Rights

$$\text{Fair value} = 35.73$$

b)After Rights

$$\text{i) Fair Value} = \frac{\text{Intrinsic value} + \text{yeild value}}{2}$$

$$= \frac{11.75 + 50.42}{2}$$

$$= 31.085$$

$$\begin{aligned} \text{ii) Intrinsic Value} &= \frac{\text{Net asset available to equity share holder}}{\text{No. of equity shares}} \\ &= \frac{23,50,000}{1,50,000} \\ &= 11.75 \end{aligned}$$

iii) Yeild Value

$$\text{i) FMP} = 12,10,000$$

$$\begin{aligned} \text{ii) Rate of FMP} &= \frac{\text{FMP}}{\text{Paid up equity capital}} \times 100 \\ &= \frac{12,10,000}{10,00,000} \times 100 \\ &= 121\% \end{aligned}$$

$$\begin{aligned} \text{iii) Yeild Value} &= \frac{\text{Rate of FMP}}{\text{NRR}} \times \text{paid up value per share} \\ &= \frac{121}{12} \times 5 \\ &= 50.42 \end{aligned}$$

$$\begin{aligned} \text{a) Intrinsic Value} &= \frac{\text{Net Asset available to equity shareholder}}{\text{No. of equity shares}} \\ &= \frac{13,50,000}{1,20,000} \\ &= 11.25 \end{aligned}$$

b) Yeild Value

$$\text{i) FMP} = 12,10,000$$

$$\begin{aligned} \text{ii) Rate of FMP} &= \frac{\text{FMP}}{\text{Paid - up equity share capital}} \times 100 \\ &= \frac{12,10,000}{6,00,000} \times 100 \\ &= 201.67\% \end{aligned}$$

$$\begin{aligned} \text{iii) Yeild Value} &= \frac{\text{Rate of FMP}}{\text{NRR}} \times \text{paid up Amount per share} \\ &= \frac{201.67}{12} \times 5 \\ &= 84.03 \end{aligned}$$

2) Valuation of shares before bonus and after bonus

a) Fair value before bonus = 47.64

$$\begin{aligned} \text{b) Fair value after bonus} &= \frac{\text{Intrinsic value} + \text{yeild value}}{2} \\ &= \frac{8.44 + 63.02}{2} \\ &= 35.73 \end{aligned}$$

$$\begin{aligned} \text{i) Intrinsic value} &= \frac{\text{net asset available to equity shareholder}}{\text{No. equity share (After bonus)}} \\ &= \frac{13,50,000}{1,60,000} \\ &= 8.44 \end{aligned}$$

ii) Yeild Value

i) FMP = 12,10,000

$$\begin{aligned} \text{ii) Rate of FMP} &= \frac{\text{FMP}}{\text{paid up equity capital}} \times 100 \\ &= \frac{12,10,000}{8,00,000} \times 100 \\ &= 151.25 \end{aligned}$$

**Illustration 27:**

Following Information were made available from Y Ltd.

Equity share capital (Rs. 25 each)	50,00,000
10% Preference share capital (Rs. 100 each)	10,00,000
Net Asset	94,00,000
Net Profit after Tax	21,00,000

**Information :**

1. Preferencial were converted into Equity shares @ rate of 2 shares for every 5 shares.NRR 15%
2. You are required to ascertain fair value before conversion andafter conversion.

**Solution :**

1. On Convrson no. of Equity share issue =  $10,000 \times \frac{2}{5} = 4,000$
2. Net asset available to Equity shareholder.

	Particular	No.	Rs.
	Before Conversion		94,00,000
	(Less) Preference capital		10,00,000
	Net Asset Before Conversion	2,00,000	84,00,000
3)	After Conversion (2,00,000 + 4,000)	2,04,000	94,00,000
4)	FMP Before Conversion		21,00,000
	(Less) Preference dividend		1,00,000
	FMP (Before Conversion)	2,00,000	20,00,000
5)	After Conversion	2,04,000	21,00,000

a) fair value before conversion of Preference shares

$$= \frac{\text{Intrinsic Value} + \text{yeild value}}{2}$$

$$= \frac{42 + 66.67}{2}$$

$$= 54.335$$

i)  $\text{Intrinsic Value} = \frac{\text{Net Asset available equity shareholder}}{\text{No. of equity shares}}$

$$= \frac{84,00,000}{2,00,000}$$

$$= 42$$

2) Yeild Value

i) FMP = 20,00,000

ii) Rate of FMP

$$= \frac{\text{FMP}}{\text{paidup equity capital}} \times \text{Face Value of preference shares}$$

$$= \frac{20,00,000}{50,00,000} \times 100$$

$$= 40\%$$

iii)  $\text{Yeild value} = \frac{\text{Rate of FMP}}{\text{NRR}} \times \text{Paidup Value per equity share}$

$$= \frac{40}{15} \times 25$$

$$= 66.67$$

B) After Conversion

$$\begin{aligned} \text{Fair Value} &= \frac{\text{Intrinsic value} + \text{yeild value}}{2} \\ &= \frac{46.08 + 68.03}{2} \\ &= 57.35 \end{aligned}$$

$$\begin{aligned} \text{i) Intrinsic Value} &= \frac{\text{Net asset available to equity share holder}}{2} \\ &= \frac{94,00,000}{2,04,000} \\ &= 46.08 \end{aligned}$$

2) Yeild Value

$$\text{i) FMP} = 21,00,000$$

$$\begin{aligned} \text{ii) Rate of FMP} &= \frac{\text{FMP}}{\text{paidup equity share}} \times 100 \\ &= \frac{21,00,000}{51,00,000} \times 100 \\ &= 41.18\% \end{aligned}$$

$$\begin{aligned} \text{iii) Yeild Value} &= \frac{\text{Rate of FMP}}{\text{NRR}} \times \text{paidup value per equity share} \\ &= \frac{41.18}{15} \times 25 \\ &= 68.63 \end{aligned}$$

**Illustration : 28**

Equity share capital (Rs. 25 each)	50,00,000
10% Debentures (Rs. 100 each)	10,00,000
Net Assets	94,00,000
N.P.A.T. @ 40%	24,00,000
N.R.R. @ 12.50%	

**Information :**

Debentures are convertible into Equity shares @ rate of 3 forevery 5 debentures.

You are required to ascertain after conversion of debentures.

**Solution :**

1) No. of Equity shares issued to debentures holders =

$$= 10,000 \times \frac{3}{5}$$

$$= 6,000 \text{ Equity shares}$$

2)	Net Asset after conversion	94,00,000
	Add + Debenture (as converted to Equity no liability)	
		<u>10400000</u>
	Net Asset after conversion	10400000
3)	FMP	
	N.P.A.T.	2400000
	Add + Income Tax $\left( 2400000 \times \frac{40}{60} \right)$	<u>1600000</u>
		<u>4000000</u>
	FMP Before Tax	
	Add + Debenture Interest	<u>100000</u>
	N.P.B.T.	4100000
	(Less-) Tax @ 40%	<u>(1640000)</u>
	FMP	<u>2460000</u>

Intrinsic Value after conversion

$$1) \text{ Intrinsic Value} = \frac{\text{Net asset available to equity shareholder}}{\text{No. of equity shares}}$$

$$= \frac{10400000}{206000}$$

$$= 50.49$$

2) Yeild value

i) FMP = 2460000

$$ii) \text{ Rate of FMP} = \frac{\text{FMP}}{\text{paidup equity share capital}} \times 100$$

$$= \frac{2460000}{5150000} \times 100$$

$$= 47.77\%$$



$$\begin{aligned}\text{iii) Yield Value} &= \frac{\text{Rate of / FMP}}{\text{NRR}} \times \text{paidup value per share} \\ &= \frac{47.77}{12.50} \times 25 \\ &= 95.54\end{aligned}$$

$$\begin{aligned}\text{iv) Fair value} &= \frac{\text{int rinsic Value} + \text{yield Value}}{2} \\ &= \frac{50.49 + 95.54}{2} \\ &= 73.015\end{aligned}$$

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#### **4.15 KEY POINTS ON VALUATION OF GOODWILL, SHARES AND BUSINESS**

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Goodwill : It is intangible fixed Asset, which can be brought and / or sold along with business.

F.M.P. : It is Future maintainable Trading profit after income tax, duty adjusted for possibilities of increases / decreases in profit due to the certain changes.

Capital Employed : It is net tangible trading assets. It is excess of market value of trading assets over external liabilities payable.

N.R.R. : It is normal rate of return excepted in same type of industry.

Super Profit : It is excess of F. M. P. over normal profit earned.

Weighted Average Profit : When profit earned over no. of years shows increasing or decreasing tendency, weighted average profit should be preferred for ascertaining F.M.P.

Share : Share means share in share capital in a public or private Ltd. Company.

Preference Share : Preference shares are those shares enjoys preferential rights over Equity shareholders in respect of dividend and repayment of capital.

Intrinsic Value of Shares : It is amount available to one share in liquidation of company, after payment of external liabilities and Preference share capital.

Yield Value of Share: It is value of Equity share based on profit available to Equity share holder, by way of dividend.

Fair value : It is average of intrinsic value and yield value.

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## 4.16 EXERCISE ON VALUATION OF GOODWILL, SHARES AND BUSINESS

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### Objective Questions :

I. Answer in Brief :

1. Define Goodwill
2. Explain F.M.P.
3. Capital Employed
4. N.R.R.
5. Capitalisation of F.M.P.
6. Capitalisation of Super profit
7. Intrinsic value of Equity share
8. Yield value of Equity share
9. Fair value of equity share.
10. Participating Preference share.
11. When to consider weighted average profits.
12. Explain valuation of Business.

II. Multiple choice Question :

- 1) Money value of the reputation of business concern.
  - a) patenad
  - b) working capital
  - c) Goodwill
  - d) know-how
- 2) Goodwill is
  - a) Current Assets
  - b) intangible assets
  - c) Fictitious Assets
  - d) Net Assets
- 3) While calculating capital employed following assets are included :
  - a) Fixed Assets
  - b) Current Assets
  - c) Trade Investment
  - d) All the above
- 4) While calculating super profit; following income included.
  - a) Operating Net Profit
  - b) Income from trade investment
  - c) Normal profit
  - d) All the above

- 5) Normal profit depends on
- a) Average capital employed
  - b) N.R.R.
  - c) F. M. P.
  - d) both a & b
- 6) Super profit is :
- a) Excess of F.M.P. over normal profit
  - b) F. M. P.
  - c) Excess of normal profit over F.M.P.
  - d) none of the above
- 7) Intrinsic value of share is also known as,
- a) Assets Backing value
  - b) Yield value
  - c) Liquidation value
  - d) both a and c
- 8) While calculating capital employed for valuation of share, following assets are included.
- a) Goodwill
  - b) Fictitious Assets
  - c) Unrecorded Assets
  - d) both a and b
- 9) Shares are to be valued on
- a) wealth tax
  - b) purchased of major shares
  - c) amalgamation
  - d) All the above
- 10) Quoted share means
- a) Reported in new paper
  - b) Quoted by seller
  - c) held by promoters
  - d) Listed on the stock exchange
- 11) Super profit is 13,20,000 N.R.R. 33 $\frac{1}{3}$ % Goodwill is valued by capitalization of super profit is
- a) 3,96,00
  - b) 39,60,000
  - c) 39,59,553
  - d) 60,39,000
- 12) Fair value of share is equal to
- a) Net Assets
  - b) Intrinsic value
  - c) Yield value
  - d) None of the above
- 13) Calculate intrinsic value of share, if 10,000 Equity shares of Rs. 10 each are fully paid up and Net Asset of the companies valued of Rs. 12,40,000
- a) Rs. 124
  - b) 2400
  - c) 214
  - d) None of the abobe



## CONSOLIDATED FINANCIAL STATEMENTS

### Unit Structure :

- 5.1 Meaning
- 5.2 Consolidated Financial Statements
- 5.3 Difference between Standalone and Consolidated Financial Statements
- 5.4 Advantages
- 5.5 Disadvantages
- 5.6 Steps to Prepare Financial Statements
- 5.7 Need to Prepare A Consolidated Financial Statement
- 5.8 AS. 21 – Consolidation of Financial Statement
- 5.9 Consolidation of Balance Sheet
- 5.10 Consolidated Profit And Loss Account
- 5.11 Foreign Subsidiaries

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### 5.1 MEANING

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Consolidated financial statements are the financial statements of a group of entities that are presented as being those of a single economic entity. These statements are useful for reviewing the financial position and results of an entire group of commonly-owned businesses. Otherwise, reviewing the results of individual businesses within the group does not give an indication of the financial health of the group as a whole. The key entities used in the construction of consolidated statements are:

- A group is a parent entity and all of its subsidiaries
- A subsidiary is an entity that is controlled by a parent company

Thus, consolidated financial statements are the combined financials for a parent company and its subsidiaries. It is also possible to have consolidated financial statements for a portion of a group of companies, such as for a subsidiary and those other entities owned by the subsidiary.

A parent company may have investments in many other entities, not all of which will be included in its consolidated statements. The main

decision point when deciding whether to include a subsidiary's financial statements is whether the parent has more than a 50% ownership interest in the subsidiary. If so, then its results are included in the consolidated statements. Also, if the parent company has decision-making influence over another business, despite owning a smaller share of the business, then it may also choose to consolidate. When a parent has no decision-making influence and owns less than a 50% interest in another business, then it will not consolidate; instead, it will use either the cost method or the equity method to record its ownership interest.

#### Standalone Financials statement

Standalone financial statements are the financial statements of a single company. These statements reflect the position of assets and liabilities of the holding company in isolation without considering the impact of the assets and liabilities of its subsidiary companies. Standalone financial statements reflect the financial performance of the holding company irrespective of the financial performance of its subsidiaries. The reporting of details of subsidiaries are not completely absent in the standalone financial statements. The interest of the holding company in its subsidiaries is reflected as investments in its standalone financial statements. The receivables and payables from subsidiaries are also reflected as assets and liabilities in the standalone balance sheet.

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## 5.2 CONSOLIDATED FINANCIAL STATEMENTS

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Consolidated financial statements are drawn up when the individual financial statements of all subsidiary companies are combined with the standalone financial statements of the holding company. Consolidated financial statements reflect the financial performance and position of assets and liabilities of the entire group as a whole. Preparation of consolidated financial statements require adherence to consolidation rules. Consolidation rules provide for elimination of all inter-company transactions. For e.g.: a receivable from the subsidiary in the books of the holding company will be reflected as a payable in the books of the subsidiary and both will be eliminated on consolidation. In order for a company's financial statement to qualify as a subsidiary for consolidation, the holding company must hold more than 50% shareholding. Any lower shareholding in any company will not qualify for consolidation and will continue to reflect as an investment even in the consolidated financial statements of the holding company. In cases where a holding company holds less than 100% of its subsidiary, it will still incorporate 100% of the subsidiary's balances and will compute an amount of minority interest which represents its liability towards the minority shareholders of its subsidiary.

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## 5.3 DIFFERENCE BETWEEN STANDALONE AND CONSOLIDATED FINANCIAL STATEMENTS

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The difference between standalone and consolidated financial statements has been detailed below:

### 1. Meaning

- Standalone financial statements are the financial statements of one company – in the case of a group, that of the holding company without considering the financial statements of its subsidiary companies.
- Consolidated financial statements are the combined financial statements of the holding company with all its subsidiary companies.

### 2. Financial position reflected

- Standalone financial statements do not reflect the financial condition of the entire group but only of the single company whose financial statements are prepared.
- Consolidated financial statements of a company by incorporating financial statements of its subsidiaries reflect a more comprehensive financial condition of the entire group of companies.

### 3. Reporting of subsidiary balances

- In standalone financial statements, all subsidiary transactions and balances are reported such as inter-company sales and purchases and inter-company receivable and payables, investment in subsidiaries etc.
- In consolidated financial statements, subsidiary transactions and balances are not separately reported as they are knocked off against each other on consolidation of inter-company transactions.

### 4. Reported by

- Standalone financial statements are prepared by all companies.
- Consolidated financial statements are only prepared by holding companies that have one or more subsidiaries.

### 5. Balances pertaining to individual companies

- In standalone financial statements, the incomes and expenses and asset and liability balances of each individual can be identified.
- In consolidated financial statements, the transactions and balances of individual companies cannot be identified as they are all combined and reported as a whole for the group.

## 6. Reporting of equity

- Standalone financial statements only report its shareholders' interest in its balance sheet.
- Consolidated financial statements report both its shareholders' interests and the minority interest of its subsidiaries, where applicable.

## 7. Complexity

- Standalone financial statements are less complex to prepare.
- Consolidated financial statements involve adherence to prescribed consolidation rules and passing of several complex elimination entries to eliminate inter-company transactions which makes its preparation more complex.

## 8. Relevance to investors of a group

- Standalone financial statements do not reflect the financial condition of the entire group. In reality, for investors of companies especially those dependent on group transactions and group support, the financial position of its group companies are also relevant and hence standalone financial statements are less relevant in such cases.
- Consolidated financial statements are more relevant to investors to gauge the financial condition of the group as a whole.

## 9. Relevance for tax compliances

- Standalone financial statements are more relevant from the perspective of tax compliances. Each company is a separate taxable entity and thus its standalone financial statements are considered while undertaking tax compliances.
- Consolidated financial statements are less relevant from a tax compliance perspective.

It should be noted that while this is true in most tax jurisdictions, several countries such as USA, Australia and France allow tax consolidation for which consolidated financial statements become relevant.

## 10. Order of preparation

- Standalone financial statements of all group companies are prepared first and form the basis of preparation of consolidated financial statements.
- Consolidated financial statements are prepared subsequent to preparation of standalone financial statements.



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## 5.4 ADVANTAGES

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Some of the advantages are:

- The financial health of the company can be judged with one glance. It portrays the entire asset and liability of a company, which helps in decision making by potential investors.
- It reduces burden of preparing separate financial statements for all subsidiaries and also reduces carbon emission. Preparing separate balance sheets and presenting hard copies of them require lot of papers
- It helps to promote transparency. In standalone financial statements, it gets difficult to judge the health of subsidiaries of a parent. In consolidated balance sheet it is all available in one statement.
- Cross sale effects are correctly accounted. It is a general mistake that subsidiary records profit on sales for sales made to parent companies. This is not correct.

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## 5.5 DISADVANTAGES

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Some of the disadvantages are:

- The poor performance of the parent company can be overshadowed by the excellent performance of the subsidiary. Hence the true picture is sugar coated and presented to fool the audience.
- If too much cross transactions have happened between parent and subsidiary and proper accounting is not followed, then it will present an elevated sales, which is actually not true.
- As everything is combined, so proper analysis based on ratios is tough. Ratios are helpful in comparison with peer companies. In consolidated statements, there are no sector specific financials. As everything is combined, sector specific analysis is difficult.

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## 5.6 STEPS TO PREPARE FINANCIAL STATEMENTS

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When generating a consolidated financial statement, related items such as assets, liabilities, income, and expenses total together line by line from the parent company's financial statements and its subsidiaries. The flow of the consolidation accounting procedure is as follows;

- **Loans Between Companies:** Recording intercompany loans from subsidiaries to the parent company, as if the parent business has to combine the cash balances of its subsidiaries into an investment account. In addition, allocate interest income collected on consolidated investments from the parent business to the subsidiaries.
- **Charge for Business Overhead:** Calculating and charging the amount of the allocation. Just to the various subsidiaries if the parent firm assigns its overhead costs to subsidiaries.

- **Accounts Payable:** Verify that all accounts payable recorded during the period have been appropriately charged to the various subsidiaries if the parent business has a consolidated payables operation.
- **Expenses for Payroll:** If the parent business is using a similar paymaster system to pay all employees across the board, make sure that payroll expense is properly assigned to all subsidiaries.
- **Adjusting Entries:** Record any adjustment entries required at the subsidiary and corporate levels to accurately record revenue and expense transactions in the correct timeframe.
- **Examine the balances of your asset, liability, and equity accounts:** Verify the accuracy of all asset, liability, and equity accounting for both the subsidiaries and the corporate parent. Also, make any necessary adjustments.
- **Examine the Financial Statements of Subsidiaries:** Print and study each subsidiary's financial accounts, and look into any things that appear to be strange or inaccurate. Make any necessary changes.
- **Intercompany transactions elimination:** If any intercompany transactions have occurred, reverse them at the parent company level to remove their impact from the consolidated financial statements.
- **Examine the financial statements of your parents:** Print and analyze the parent company's financial accounts, and look into any items that appear to be strange or inaccurate. Make any necessary changes.
- **Income Tax Liability:** Record an income tax liability if the company made a profit. It's possible that this will be necessary at the subsidiary level as well.
- **Subsidiary Books Closing:** Depending on the accounting software used, it may be essential to access each subsidiary's financial records and mark them as closed. This prohibits any further transactions from being recorded during the accounting period that is about to end.
- **Close the Books of the Parent Company:** Marking the parent's company's accounting period as 'closed', to prevent any further transactions from being reported in that period.
- **Publish Financial Reports:** The parent company's financial statements should be printed and distributed.

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## **5.7 NEED TO PREPARE A CONSOLIDATED FINANCIAL STATEMENT**

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The major goal of these statements is to display the company's financial information in a systematic manner for the benefit of financial statement users such as owners, creditors, and investors.

It contains extremely important information, which is as follows:

- The overall assets and liabilities under the parent's control
- As well as the results of this control.

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## **5.8 AS. 21 – CONSOLIDATION OF FINANCIAL STATEMENT**

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AS. 21 come into effect in respect of accounting periods commencing on or after 1<sup>st</sup> April i.e. for year ending 31<sup>st</sup> March 2002. The A.S. 21 is applicable to all the enterprises that prepare consolidated financial statement. It is mandatory for Listed companies and Banking companies.

As per AS 21, The Consolidated financial statements would include:

- i) Profit & Loss A/c
- ii) Balance sheet
- iii) Cash flow statement
- iv) Notes of Accounts except typical notes.
- v) Segment reporting

AS 21 also desire various import terms, as well as treatment and same while preparing consolidated financial statement. Consolidated financial statements should be prepared for both domestic as well as foreign subsidiaries.

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## **5.9 CONSOLIDATION OF BALANCE SHEET**

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A holding company is required to present to its shareholders consolidated balance sheet of holding company and its subsidiaries. Consolidated balance sheet is nothing but adding up or combining the balance sheet of holding and its subsidiary together. However assets and liabilities are straight forward, i.e. added line to line and combination of share capital, reserves, and accumulated losses are not directly added in consolidated balance sheet.

**Preparation of consolidated balance sheet.** The following points need special attention while preparing consolidated balance sheet.

- 1) Share of holding company and share of minority (outside shareholders).
- 2) Date of Balance sheet of holding company and that of various subsidiary companies must be same. If they are not so necessary adjustment must be made before consolidation.
- 3) Date of Acquisition of control in subsidiary companies.
- 4) Inter company owing.
- 5) Revaluation of fixed assets as on date of acquisition, depreciation, adjustment on revaluation amount etc. which are discussed here in after.

• **COST OF CONTROL / GOODWILL / CAPITAL RESERVE :**

The holding company acquires more than 50% of the shares of the subsidiary company. such shares may be acquired at a market price. Which may be at a premium or at discount. This amount is reflected in the balance sheet of holding company of the assets side as investment in the shares of subsidiary company. This is the price paid for shares in net assets of subsidiary company as on date of its acquisition. Net assets of the subsidiary

company consist of share capital, accumulated profits and reserve after adjustment, accumulated losses as on the date of acquisition. If the amount paid by the holding company for the shares of subsidiary company is more than its proportionate share in the net asset of the subsidiary company as on the date of acquisition, the difference is considered as goodwill.

If there is excess of proportionate share in net assets of subsidiary company intrinsic of shares acquired and cost of shares acquired by holding company there will be capital reserve in favour of holding company.

If goodwill already exists in the balance sheet of holding company or both the goodwill thus calculated, will be added up to the existing goodwill. Capital Reserve will be deducted from Goodwill.

In short, net amount resulting from goodwill and capital Reserve will be shown in the consolidated Balance sheet.

• **MINORITY INTEREST :**

The claim of outside shareholders in the subsidiary company has to be assessed and shown as liability in the consolidated balance sheet. Minority interest in the net assets of the company is nothing but the proportionate share of aggregation of share capital, reserve surpluses funds etc. proportionate share of all assets should be deducted from the minority interest.

Thus, minority interest is the share of outsider in the following.

- 1) Share in share capital in subsidiary.
- 2) Share in reserves (Both pre and post acquisition of subsidiary).
- 3) Share in accumulated losses should be deducted.
- 4) Proportionate share of profit or loss on revaluation of assets.
- 5) Preference share capital of subsidiary company held by outsiders and dividend due on such share capital, if there are profits.

Minority interest means outsiders interest. It is treated as liability and shown in consolidated. Balance sheet as current liability. This amount is basically intrinsic value of shares held by minority.

• **CAPITAL PROFITS AND REVENUE PROFITS :**

The holding company may acquire the shares in the subsidiary company either on the balance sheet date or any date earlier than balance sheet date. All the profit earned by the subsidiary company till the date of acquisition of shares by holding company have to be taken as capital profits for the holding company.

Such reserves lose their individual identity and considered as capital profits. In case, the holding company acquired shares on a date other than balance sheet date of subsidiary, the profits of subsidiary company will have to be apportioned between capital

profits and Revenue profits from the point of view of the holding company. Thus any profit earned by subsidiary company before the date of acquisition is the capital profit, while any profit earned by subsidiary company after the date of acquisition is Revenue profits. While preparing the consolidated balance sheet share in capital profits should be adjusted with the cost of control and Revenue profits / Reserves should be merged with the balances in the Reserve and surpluses of the holding company.

• **ELIMINATION OF INVESTMENTS IN SHARES OF SUBSIDIARY COMPANY :**

Investment in shares in subsidiary company represents the cost paid by the holding company to acquire the shares of the subsidiary company. The investment in shares of the subsidiary company entitles the holding company to share the net assets of the subsidiary company. While preparing consolidated balance sheet all the assets and liabilities of subsidiary company have to be merged with those of the holding company and therefore it is logical to eliminate investments of the holding company in the shares of the subsidiary company. Share in net assets of the outside shareholders should be treated as the minority interest it is shown in the balance sheet on the liability side of holding company.

**• MUTUAL OWING / INTER COMPANY TRANSACTIONS :**

The holding company and the subsidiary company may have number of inter company transactions in any one or more of the following matters.

1. Loan advanced by the holding company to the subsidiary company or vice versa.
2. Bill of Exchange drawn by holding company on subsidiary company or vice versa.
3. Sale or purchase of goods on credit by holding company from subsidiary company or vice versa.
4. Debentures issued by one company may be held by the other.

As a result of these inter company transactions, certain accounts appear in the balance sheet of the holding company as well as the subsidiary company. In the consolidated balance sheet all these common accounts should be eliminated. For e.g.

1. S Ltd. has taken loan of Rs. 20,000 from H Ltd. then S Ltd. balance sheet shows a liability of Rs. 20,000 while H Ltd. balance sheet shows on assets of Rs. 20,000.
2. H Ltd. draws a bill of Rs. 50,000 on S Ltd., then H Ltd. books it will show bills receivable Rs. 50,000 while S Ltd. books will show bills payable Rs. 50,000.
3. S Ltd. issued debentures of Rs. 1,00,000 which are held by H Ltd. then S Ltd. balance sheet will show a liability of Rs. 50,000 while H Ltd. books will show an assets of Rs. 50,000.

All the above inter company transactions have to be eliminated while preparing the consolidated balance sheet. These can be done by deducting inter company transactions from the respective items on both sides of balance sheet.

**• UNREALIZED PROFIT:**

The problem of unrealized profit arises in those cases where the companies of the same group have sold goods to each other at the profits and goods still remain unsold at the end of the year company to whom the goods are sold.

While preparing the consolidated balance sheet, unrealized profit has to be eliminated from the consolidated balance sheet in the following manner.

1. Unrealised profits should be deducted from the current revenue profits of the holding company.
2. The same should be deducted from the stock of the company consolidated balance sheet. Minority shareholders will not be affected in any way due to unrealized profits.

For e.g.

The stock in trade of S Ltd. includes Rs. 60,000 in respect of goods purchased from H Ltd. These goods have been sold by H Ltd. at a profit of 20% on invoice price.

Therefore, unrealized profit =  $60,000 \times \frac{20}{100} = 12,000$

Unrealized profit Rs. 12,000 should be deducted from closing stock in the consolidated balance sheet and from Revenue profits i.e. from profit and loss account.

- **CONTINGENT LIABILITIES :**

As 29 defines a contingent liabilities as:

A possible obligation that arises from past events and whose existence will be confirmed only by occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity or a present obligation that arises from the past events but not recognized / provided.

Such contingent liability may be of two types.

a) External contingent liability.

b) Internal contingent liability.

Internal contingent liability relates in respect of transactions between holding and subsidiary company and it will not be shown as foot note in the consolidated balance sheet, as they appear as actual liability in the consolidated balance sheet.

- **REVALUATION OF ASSETS AND LIABILITIES :**

The holding company may decide to revalue the assets and liabilities of the subsidiary company on the date of acquisition of share in the subsidiary company. Any profit or loss on such revaluation is a capital profit or loss.

Profit on revaluation of assets of the subsidiary company whether before or after date of acquisition of shares by the holding company, the same must be shared by the holding company, and the minority share holders in proportion to their respective holding. The minority share holders share should be added to the minority interest. But the holding company share should be treated as capital profits and considered in cost of control.

Further readjustment for depreciation on increase in the value of assets should be made in the profit and loss account in the subsidiary company. And same should be deducted from the Revenue profits of the subsidiary company.

- **PREFERENCE SHARES IN SUBSIDIARY COMPANY :**

In case the subsidiary company has also Preference share capital, its treatment on consolidation will be as follows:

- a) Nominal value of non participating Preference share capital of the subsidiary company is held by the holding company should be adjusted in cost of control against the cost of Preference shares.
- b) Preference shares held by outsiders. Paid up value of such Preference shares should be included in Minority interest.

- **BONUS SHARES:**

The issue of bonus shares by the subsidiary company will increase the number of shares held by the holding company as well as by the minority share holders without any additional cost. However ratio of holding will not change. Issue of bonus shares may or may not affect the cost of control depending upon whether such shares are issued out of capital profits or revenue profits.

**i) Issue of bonus shares out of pre acquisition profits (capital profits) :** In case the subsidiary company issues bonus shares out of capital profits the cost of control remains unaffected in the consolidated balance sheet on account of issue of bonus shares. As share capital increases by the amount of bonus and capital profits decreases by the same amount. Hence, there is not effect on cost of control when bonus shares are issued from pre acquisition profits.

**ii) Issue of bonus share of post acquisition profits (Revenue profits):** In this case, a part of revenue profits will get capitalised resulting decrease in cost of control or increase in capital reserve.

Issue of bonus shares whether out of capital profits or revenue profits will not affect on minority interest. Minority interest will remain unaffected.

- **TREATMENT OF DIVIDEND :**

**i) Dividend paid**

When subsidiary company pays dividend, the holding company will naturally receive its due share. On receipt the holding company will debit bank account. However account to be credited depends upon whether dividend received out of pre-acquisition profit or out of post acquisition profit. Dividend received by the holding company out of Pre-acquisition profit should be credited to investment account. Only the dividend out of post acquisition profit should be treated as Revenue income and credited to profit and loss account.

**ii) Proposed dividend :**

In case the subsidiary company has proposed dividend on its shares which is not accounted by the holding company for such dividend due on their investment in subsidiary company profits.



Profit may be then analysed between capital Revenue in the usual manner.

**iii) Dividend payable :**

In case subsidiary company has declared dividend and the holding company taken credits for such dividend in its account, following treatments should be given.

1. No adjustment in respect of such dividend should be done in the subsidiary company book.
2. In the holding company books dividend out of pre-acquisition profit should be credited investment account. Dividend out of post acquisition profit should be credited to profit and loss account.
3. In the consolidated Balance-sheet the amount of dividend payable by the subsidiary company will be cancelled against the amount of dividend receivable by the holding company. dividend payable to minorities may be either included in the minority interest or be shown separately as liability in the consolidated balance sheet.

**iv) Intension to propose dividend:**

In case subsidiary company as intension to propose dividend, such proposed dividend given in adjustment may be completely ignored while preparing the consolidated balance sheet.

Alternatively proposed dividend on share capital held by minority may be deducted from minorities interest and shown separately liability in the consolidated balance sheet.

• **PRELIMINARY EXPENSES :**

The preliminary expenses of subsidiary company may be taken as capital loss or the amount may be added with the amount of preliminary expenses of the holding company.

• **PROVISION FOR TAXATION :**

Any provision for taxation provided by the subsidiary company should be taken to the consolidated balance sheet and beshown on the liability side.

• **PURCHASE OF SHARES IN INSTALLMENT :**

A holding company may purchase shares of the subsidiary company in installments. In such circumstances division of profit between pre and post acquisition will depend upon the lots in which shares are purchased. However, if small purchases are made over the period of time then date of purchase of shares which results in acquiring in controlling interest may be taken as cut of line for division of profits between capital and Revenue.

- **SALE OF SHARES :**

When a holding company disposed off a part of its holding in the subsidiary company and the relationship of holding and subsidiary company continues as it holds majority of shares of subsidiary. Sale of shares by holding company may be treated as follows.

a) Profit or loss on sale of shares should be ascertained and it should be adjusted while ascertaining goodwill or capital reserve. In brief, such loss or gain on sale of share should be considered in cost of control.

b) The minority interest and cost of control should be ascertained on the basis of number of shares held by the holding company and the minority on the date of consolidated balance sheet.

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## **5.10 CONSOLIDATED PROFIT AND LOSS ACCOUNT**

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The consolidated profit and loss account of the holding company and its subsidiaries are prepared to show the operating activities of the companies comprising the groups. While preparing the consolidated profit and loss account of the holding company and its subsidiary, the items appearing in the profit and loss account of the holding company and the subsidiary companies have to be aggregated.

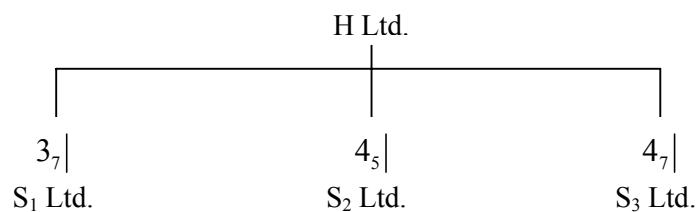
**But while doing so, the following adjustment have to be made.**

- 1) Prepare profit and loss account in columnar form Amounts relating to inter company transactions are entered in the adjustment column against the respective items and are subtracted while entering amounts in the total columns.
- 2) All inter company operating transactions are eliminated such as purchase and sale of goods, interest on loans among the group companies.
- 3) All inter company profits are adjusted.
- 4) Dividends received from the subsidiary company by the holding company should be eliminated from both the sides of consolidated profit and loss account.
- 5) Interest accrued and outstanding on Debenture of the subsidiary company held by the holding company should be accounted by holding and subsidiary company both and then its should be eliminated.
- 6) Readjustment of Depreciation on Revaluation on fixed Assets at the time of acquisition of shares by the holding company should be adjusted in consolidated balance sheet and respective fixed assets and in the consolidated profit and loss account.

- 7) The minority interest in the profit of subsidiary company should be transferred minority interest account, in the proportion of total profit after adjustment of revaluation of fixed Assets, but before adjusting unrealized profit on stock.
- 8) The share of holding company in pre-acquisition profit should be transferred to cost of control, in case shares are acquired during the year.
- 9) Share of holding company in the past acquisition profits shall be considered as revenue profits.
- 10) The balance in holding company columns will represents the total profit or loss made or suffered by the group as a whole.

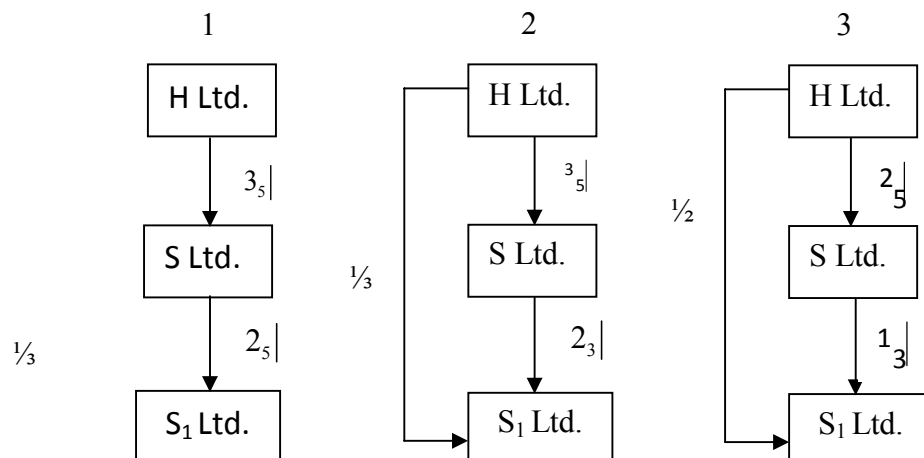
**9) Group Consisting more than one subsidiaries: There are three situations**

a) A holding company may have a number of subsidiaries without any mutual holding between the subsidies. The following chart will clearly show the position.



In this case, the holding company H Ltd. acquired shares of  $\frac{3}{7}$ ,  $\frac{4}{5}$ ,  $\frac{4}{7}$  of the S<sub>1</sub> ltd, S<sub>2</sub> ltd, S<sub>3</sub> ltd respectively. And as such the investment account of holding company will show investment in S<sub>1</sub> ltd, S<sub>2</sub> ltd, and S<sub>3</sub> ltd. The calculation of cost of control, minority interest etc. of each company should be done following the usual principles.

b) There may be change holding i.e. the holding company may hold shares in a subsidiary company which is also holding company of its subsidiary company, there may be different combinations which are shown by the following chart.



There may be cross holding i.e. subsidiary company may have shares in the holding company as well. However, according to company's Act, subsidiary company cannot acquire shares in its holding company after becoming subsidiary company, but it can continue to hold those shares in the holding company, which were acquired before it became subsidiary company.

Note: possibilities discussed, 2 and 3 above are at advanced level and therefore not discussed in study material assuming such type of problem should not be asked in M.com level.

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## 5.11 FOREIGN SUBSIDIARIES

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Foreign subsidiaries companies final A/c should be consolidated along with other subsidiary companies in the usual manner. The trial balance of the subsidiary or balance sheet and profit and loss A/c of the foreign subsidiary is the first converted into home currency.

**The rules of conversion are the same as for foreign branches which can be summarized as under.**

- a) Fixed Assets and fixed liabilities should be converted at the rate of exchange prevailing as on date when such assets were purchased or such liabilities are incurred or the payment was made if they are acquired or raised after acquisitions of shares.
- b) Floating assets and liabilities should be converted at the rate of exchange prevailing on the last day of the accounting year.
- c) Revenue items or net profit for the year should be converted at the average rate of exchange ruling during the period under review.
- d) Opening stock should be converted at the rate of exchange at the beginning of the year.
- e) Share capital and Reserves of subsidiary company as on date of acquisition, should be converted at the rate of exchange prevailing on date of acquisition.
- f) Any remittances for purchases of goods by subsidiary company from holding company or vice-versa should be converted at the actual rates prevailing on the date of purchase or date of receipt of remittances.
- g) Fixed assets / Fixed liabilities as on date of acquisition which are carried forward should be converted at the rate of exchange prevailing on date of acquisition of shares; if rate on date of acquisition on fixed assets not given.

After converting the various items of trial balance a new trial balance can be prepared, difference if any in the new trial balance should be transferred to exchange fluctuation account. Such difference may be carried and shown in the Balance sheet either as an asset or as a liability depending on whether balance debit or credit, alternatively difference in exchange can be transferred to profits & loss account.

### Illustration 1:

From the following Summary Balance Sheets of H. Ltd. and its subsidiary S. Ltd. as at 31<sup>st</sup> march 2012 and the additional information provided thereafter, prepare a Consolidated Balance Sheet of the two companies as that date.

Liabilities	H Ltd. ₹	S Ltd. ₹	Assets	H Ltd. ₹	S Ltd. ₹
Share Capital :			Tangible Fixed Assets	11,62,000	1,80,000
Shares of ₹ 10 each			70% Shares of S. Ltd.		
fully paid	10,00,000	2,00,000	at cost	1,42,000	-
General Reserve	3,10,000	-	Bank	3,86,000	1,24,000
Profit and Loss A/c	1,50,000	40,000	Preliminary Expenses	-	5,000
Creditors	2,30,000	69,000			
	<u>16,90,000</u>	<u>3,09,000</u>		<u>16,90,000</u>	<u>3,09,000</u>

H Ltd. acquired the shares of 31<sup>st</sup> December 2011.

On 1<sup>st</sup> April 2011 S Ltd.'s Profit and Loss Account showed a debit balance of ₹ 8,000.

On 31<sup>st</sup> March 2012 S Ltd. decided to revalue its Fixed Assets at ₹ 2,00,000.

(Oct. 2009. Adapted)

### Solution :

Consolidated Balance Sheet of H. Ltd. and Its Subsidiary S Ltd. as on 31-03-2012

Particulars	Note	₹	₹
<b>I. EQUITY AND LIABILITIES</b>			
<b>1. Shareholder's Funds</b>			
a. Share Capital (1,00,000 Equity Shares of ₹ 10 each)		10,00,000	
b. Reserves and Surplus	1	4,96,500	14,96,500
<b>2. Minority Interest</b>			76,500
<b>3. Current Liabilities</b>			
Trade Payable	2		2,99,000
<b>Total</b>			<b>18,72,000</b>
<b>II. ASSETS</b>			
<b>1. Non-current Assets</b>			
Fixed Assets			
- Tangible Assets	3		13,62,000
<b>2. Current Assets</b>			
Cash and Cash Equivalents	4		5,10,000
<b>Total</b>			<b>18,72,000</b>

Notes to Accounts	H	S	Total
<b>1. Reserves and Surplus</b> .....			
a. Capital Reserve (on Consolidation) .....			28,100
b. General Reserve .....			3,10,000
c. Surplus (1,50,000 + 8,400) .....			1,58,400
<b>Total</b> .....			<b>4,96,500</b>
<b>2. Trade Payables</b>			
Creditors for Goods .....	2,30,000	69,000	<b>2,99,000</b>
<b>3. Fixed Assets</b>			
Tangible Assets .....	11,62,000	2,00,000	<b>13,62,000</b>
<b>4. Cash and Cash Equivalents</b>			
Bank .....	3,86,000	1,24,000	<b>5,10,000</b>

**Working Notes :**

**1. Revenue Profit**

**Profit and Loss A/c**

Particulars	₹	Particulars	₹
To balance b/d	8,000	By N. P. for the year	48,000
To Balance c/d	40,000		
	<u>48,000</u>		<u>48,000</u>

$$\text{Profit upto 31-12-11} = 48,000 \times \frac{9}{12} = 36,000$$

$$\text{Profit for next 3 months} = 48,000 \times \frac{3}{12} = 12,000$$

$$\text{Revenue profit} = ₹ 12,000$$

$$\text{H Ltd.'s Shares} = 12,000 \times 70\% = ₹ 8,400$$

$$\text{Minority Shares} = 12,000 \times 30\% = ₹ 3,600$$

2.

<b>Capital Profit</b>	<b>₹</b>
Appreciation in the value of Fixed Assets (2,00,000 – 1,80,000)	20,000
Current Year's Profit till 31-12-11	<u>36,000</u>
	56,000
Less : Preliminary Expenses	5,000
Less : P/L A/c (Dr.) on 1-4-11	<u>8,000</u>
	<u>43,000</u>

H Ltd.'s Share = 43,000 x 70% = ₹ 30,100

Minority Share = 43,000 x 30% = ₹ 12,900

### 3. Cost of Control

Particulars	₹
Paid up value of 70% shares	1,40,000
Add : H Ltd. Share of Capital Profit	30,100
	1,70,100
Less : Amount Paid for Acquiring Shares	1,42,000
Capital Reserve	(28,100)

### 4. minority Interest

Particulars	₹
Paid up value of 20% Shares	60,000
30% of Reserve Profit	3,600
30% of Capital Profits	12,500
Total	76,500

### Illustration 2 :

A Ltd. acquired 16,000 equity shares of ₹ 10 each in B. Ltd. on 1<sup>st</sup> July, 2012. The summary balance sheets of the two companies as on 31<sup>st</sup> December, 2012 were as follows :

Liabilities	A Ltd.	B Ltd.	Assets	A Ltd.	B Ltd.
Share Capital (₹ 10)	5,00,000	2,00,000	Land and Buildings	1,80,000	1,90,000
Reserves	24,000	1,00,000	Plant and Machinery	2,40,000	1,35,000
Profit and Loss A/c	57,200	82,000	Investment in B Ltd.	3,30,000	-
Bank Overdraft	1,00,000	-	(at cost)		
Bills payable	2,16,000	13,000	Stock	1,44,000	42,000
Sundry Creditors	69,800	20,000	Sundry Debtors	44,000	40,000
			Bills Receivable	14,800	-
			Cash	14,200	8,000
	<u>9,67,000</u>	<u>4,15,000</u>		<u>9,67,000</u>	<u>4,15,000</u>

- (i) The Profit and Loss Account of B Ltd. showed a balance of ₹ 30,000 on 1<sup>st</sup> January, 2012 out of which a dividend of 10 percent was paid on 1<sup>st</sup> August. The dividend was credited by A Ltd. to its profit and loss account. Profit may be assumed to have accrued evenly throughout the year.
- (ii) The Plant machinery of B.Ltd which stood at ₹ 1,50,000 on 1<sup>st</sup> January, 2012 was considered as worth ₹ 1,80,000 on the date of acquisition by A Ltd. Plant and Machinery is depreciated at 10 percent.

Prepare the consolidated balance sheet of A Ltd. and its subsidiary as at 31<sup>st</sup> December, 2012.

**Solution :**

**(Mar. 07, adapted)**

**Consolidated balance Sheet of A and its Subsidiary B as on 31<sup>st</sup> December 2012**

Particulars	Note	₹	₹
<b>I. EQUITY AND LIABILITIES</b>			
<b>1. Shareholder's Funds</b>			
a. Share Capital (50,000 Equity Shares of ₹ 10 each) .....		5,00,000	
b. Reserves and Surplus .....	1	92,500	5,92,500
			83,525
<b>2. Minority Interest</b> .....			
<b>3. Non-current Liabilities</b>			
Long term Borrowings (Secured) .....			1,00,000
<b>4. Current Liabilities</b>			
Trade Payables .....	2		3,18,800
<b>Total</b> .....			<b>10,94,825</b>
<b>II. ASSETS</b>			
<b>1. Non-current Assets</b>			
<b>Fixed Assets</b>			
- Tangible Assets .....	3	7,80,625	
- Intangible Assets (Goodwill on Consolidation) .....		7,200	7,87,825
			7,87,825
<b>2. Current Assets</b>			
a. Inventories .....	4	1,86,000	
b. Trade Receivables .....	5	98,800	
c. Cash and Cash Equivalents .....	6	22,200	3,07,000
<b>Total</b> .....			<b>10,94,825</b>



Notes to Accounts	H	S	Total
<b>1. Reserve and Surplus</b>			
a. General Reserve			24,000
b. Surplus			68,500
Total			92,500
<b>2. Trade Paybles</b>			
a. Creditors for Goods	69,800	20,000	89,800
b. Bills Payble	2,16,000	13,000	2,29,000
Total			3,18,800
<b>Fixed Assets – Tangible</b>			
Buildings	1,80,000	1,90,000	3,70,000
Plant and Equipment	2,40,000	1,70,625	4,10,625
Total			7,80,625
Inventories	1,44,000	42,000	1,86,000
Trade Receivables			
Sundry Debtors	44,000	40,000	84,000
Bills Receivable	14,800		14,800
Total			98,800
Cash and Cash Equivalents			
Cash	14,200	8,000	22,200

### Working Notes :

Proportion of Ownership on Consolidation	No. of Shares	Proportion
Equity Shares held by H	16,000	[4/5]
Equity Shares held by Minority	4,000	[1/5]
Total Share CAPITAL OF s [VIDE B/S]	20,000	[1]
Ratio of Periods : Before & After Acquisition	Pre-acquisition	Post-acquisition
Period (Months)	[6]	[6]
Ratio	[1/2]	[1/2]
Analysis of Profits/ Movement in Equity	Capital Profits [CP]	Revenue Profits [RP]
Reserves (Opng.)	1,00,000	
Profit and Loss A/c	30,000	
Less : Divided out of CP	(20,000)	
Undistributed Profits (Opng.)	1,10,000	
Profit during the year		
[82,000-Dividend 10,000]	72,000	36,000
Basic CP/ RP	1,46,000	36,000
Add : Increase in Fixed Assets on Revaluation	37,500	
Less : Increase in Depreciation on Revaluation		(1,875)
Final CP/ RP divided in Ratio [vide WN 1]	1,83,500	34,125
Minority Interest [divided in Ratio vide WN 1]	36,700	6,825
Holding Co. [divided in Ration vide WN 1]	1,46,000	27,300
Cost of Control (COC)		
Cost of Investment	3,30,000	
Less : Dividend (Declared out of CP)	(16,000)	
Carrying Amount of Investment on Consolidation	-	3,14,000
Paid up Value of Shares	1,60,000	
Share of Capital Profits (WN 3)	1,46,800	
Share of Carrying Amount of Equity of S		(3,06,800)
Goodwill		7,200
Minority Interest on Consolidation		

Paid-up Share Capital [Equity]	40,000
Share of Capital Profits [WN 3]	36,700
Share of Revenue Profits [WN 3]	6,825
Total	<u>83,525</u>
Consolidated P & L A/c [CPL]	
P & L A/c of H	57,200
Add : Share of RP of S [WN 3]	27,300
	<u>84,500</u>
Less : Dividend out of CP	(16,000)
Consolidated P & L A/c	<u>68,500</u>

## Consolidated Financial Statements

### Illustration 3

The following are the summarized Balance Sheet of H Ltd. as at 31<sup>st</sup> March, 2013.

Liabilities	H Ltd. ₹	S Ltd. ₹	Assets	H. Ltd. ₹	S. Ltd. ₹
Share Capital	2,00,000	50,000	Sundry Assets	1,80,000	1,20,000
Reserves	30,000	10,000	Shares in S Ltd.	2,30,000	
Balance of Profit and Loss A/c on 1-4-2012	60,000	30,000		20,000	10,000
Profit for the year	40,000	30,000			
Creditors	1,00,000	30,000			
	<u>4,30,000</u>	<u>1,30,000</u>		<u>4,30,000</u>	<u>1,30,000</u>

H. Ltd acquired 80% of the shares in S. Ltd. on 1-10-2012. Included in the assets of H Ltd. there is ₹ 30,000 loan to S Ltd. shown as creditors in S Ltd.

Prepare consolidated balance sheet of H Ltd. as at 31<sup>st</sup> March, 2013.

(April 2014, adapted)

### Solution :

Consolidated balance Sheet of H Ltd. with its Subsidiary S Ltd. as on 31<sup>st</sup> March, 2013.

Particulars	Note	₹	₹
<b>I. EQUITY AND LIABILITIES</b>			
<b>1. Shareholder's Funds</b>			
a. Share Capital	.....	2,00,000	
b. Reserves and Surplus	..... 1	1,34,000	3,34,000
<b>2. Minority Interest</b>	.....		20,000
<b>3. Current Liabilities</b>			
Trade Payables	..... 2		1,00,000
<b>Total</b>	.....		<b>4,54,000</b>
<b>II. ASSETS</b>			

<b>1. Non-current Assets</b>				
Fixed Assets				
-	Intangible Asstes (Goodwill on Consolidation)			1,54,000
<b>2. Current Assets</b>				
a.	Cash and Cash Equivalents	.....	3	30,000
b.	Sundry Assets	.....	4	2,70,000
<b>Total</b>				<b>4,54,000</b>

Assets to Accounts	H	S	Total
<b>Reserves and Surplus</b>			
General Reserves	.....		30,000
Surplus/ (Deficit)			
Profit and Loss Balance b/d	.....	60,000	60,000
Profit for the year	.....	40,000	4,000
<b>Total</b>	.....		<b>1,34,000</b>
<b>Trade Payables</b>	.....	1,00,000	30,000
Less : Mutual Dues	.....		(30,000)
<b>Total</b>	.....		<b>1,00,000</b>
<b>Cash and Cash Equivalents</b>			
Bank	.....	20,000	10,000
<b>Sundry Assets</b>	.....	<b>1,80,000</b>	<b>1,20,000</b>
Less : Mutual Dues	.....	(30,000)	(30,000)
<b>Total</b>	.....		<b>2,70,000</b>

**Notes :**

**Post Acquisition Ratio = Equal**

Holding Company Ltd. acquired shares of S Ltd. on 1-4-12

Pre-acquisition period is 1-4-2012 to 1-10-2012 = 6 months

Post-acquisition period is 1-10-2012 to 31-12-2013 = 6 months

**Share Acquisition Ratio = 80% = 4:1**

Ltd. Share Value = ₹ 50,000

Acquired by H Ltd. ₹ 40,000

Minority = ₹ 10,000

## Analysis of Reserves of S Ltd.

## Consolidated Financial Statements

	Pre-Acquisition 10,000	Post-Acquisition
General Reserve (Opening Year)	30,000	
Profit and Loss A/c (1-4-2012)	5,000	5,000
Profit and Loss A/c for year	45,000	4,000
<b>Total</b>	<b>36,000</b>	<b>4,000</b>
<b>Ltd. (4/5)</b>	<b>9,000</b>	<b>1,000</b>
<b>Miliority (1/5)</b>		<b>₹</b>
<b>Miliority Interest</b>		<b>10,000</b>
Share Capital		1,000
Capital Profit		20,000
Revenue Profit		1,000
<b>Total</b>		<b>20,000</b>
<b>Cost of Control/ Goodwill</b>		
Value of Acquisition		2,30,000
Less : face value of shres acquired		(40,000)
Capital Profit		(36,000)
<b>Goodwill</b>		<b>1,54,000</b>

### Illustration 4 (Revaluation of Assets)

The Summary balance sheet of A Ltd. and B Ltd. as on 31-12-2012 were as follos :

Liabilities	A Ltd. (₹ lakhs)	B Ltd. (₹ lakhs)	Assets	A Ltd. (₹ lakhs)	B Ltd. (₹ lakhs)
Equity Share Capital	24.00	12.00	Plant and Machinery	9.60	8.50
Share Premium	3.60		Furniture	2.60	0.80
Capital Reserve (on 1-1-12)	-	0.80	Stock	2.00	1.50
General Reserve	1.50	1.00	Debtors	8.20	4.10
Profit and Loss A/c	6.00	1.00	Bank balance	2.00	0.50
Creditors	2.96	2.19	Trade Investment	-	0.30
Current Account of B Ltd.	0.34	-	Investment in B Ltd.	10.80	-
Profit for the year	1.80	0.60	Goodwill	5.00	1.50
			Current Account of A Ltd.	-	0.39
<b>Total</b>	<b>40.20</b>	<b>17.59</b>	<b>Total</b>	<b>40.20</b>	<b>17.59</b>

- a) A Ltd. acquired on 1-1-2012, from the Shareholders of 'B' Ltd., 'B' Ltd., 96,000 shares and allotted in consideration 72,000 of its own shares at a Premium of ₹ 5 per share.
- b) The consideration for the share of 'B' Ltd. was arrived at by
- Valuing the plant and machinery at ₹ 10,44,444
  - Valuing the furniture at ₹ 83,211
  - Placing no value for Trading Investment and Goodwill.
- c) The depreciated figures for Plant and Machinery and Furniture on 31-12-2012 were after providing depreciation for 2012 @ 10% and 5% respectively on the book values as at 1<sup>st</sup> January 2012.
- d) The Stock of 'B' ltd. included ₹ 50,000 in respect of goods received from A Ltd. invoiced at cost plus 25%.

Prepare consolidated balance Sheet.

(Oct.07,adapted)

**Solution :**

**Consolidated Balance Sheet of M Ltd. and its Subsidiary S Ltd. as on 31<sup>st</sup> December, 2012.**

Particulars	Note	₹	₹
<b>EQUITY AND LIABILITIES</b>			
Shareholders' Funds			
Share Capital (2,40,000 Equity Shares of ₹10 each)		24,00,000	
Reserve and Surplus	1	13,59,240	37,59,240
<b>Minority interests</b>			<b>2,89,810</b>
<b>Current Liabilities</b>			
Trade Payables			
<b>Total</b>	<b>2</b>		<b>5,15,000</b>
<b>Assets</b>			<b>45,64,050</b>
<b>Non-current Assets</b>			
<b>Fixed Assets</b>			
- Tangible Assets			
- Intangible Assets (Goodwill)	3	22,39,050	
<b>Current Assets</b>		5,00,000	27,39,050
Inventories			
Trade Receivables	4	3,40,000	
Cash and Cash Equivalents	5	12,30,000	Total
<b>Total</b>			<b>45,64,050</b>

Assets to Accounts	H	S	Total
<b>Reserves and Surplus</b>			
Capital Reserve (on Consolidation) .....			39,200
Security Premium .....			3,60,000
General Reserves .....			1,50,000
Surplus .....			8,10,040
<b>Total</b> .....			<b>13,59,240</b>
<b>Trade payables</b>			
Creditors for Goods .....	2,96,000	2,19,000	5,15,000
<b>Fixed Assets – Tangible Assets</b>			
Plant and Equipment .....	9,60,000	9,40,000	19,00,000
(S : 8,50,000 + 1,00,000 – 10,000)			
Furniture and Fixtures (S : 80,000 + 50 – 1,000) .....	2,60,000	79,050	3,39,050
<b>Total</b> .....			<b>22,39,050</b>
<b>Inventories</b> .....	<b>2,00,000</b>	<b>1,50,000</b>	<b>3,50,000</b>
Less : Unrealized Profits .....			(10,000)
<b>Total</b> .....			<b>3,40,000</b>
<b>Trade Receivable</b> .....	8,20,000	4,10,000	<b>12,30,000</b>
<b>Cash and cash Equivalents</b>			
Remittances in Transit (39,000 – 34,000) .....			5,000
Bank .....	2,00,000	50,000	2,50,000
<b>Total</b> .....			<b>2,55,000</b>

### Working Notes :

Proportion of Ownership on Consolidation	No. of Shares	Proportion
Equity Shares held by H	96,000	[4/5]
Equity Shares held by Minority	24,000	[1/5]
Total Shares Capital of S [vide B/S]	<u>1,20,000</u>	<u>[1]</u>

Ratio of Periods : Before & After Acquisition

Acquisition on last day of F.Y.

(So, all profits capital profits)

3. Analysis of Profits/ Movement in Equity	Capital Profits [CP]	Revenue profits [RP]
a. Reserves (Opng.)		
Capital Reserve	80,000	
General Reserve	1,00,000	
b. Profit and Loss Account	1,00,000	

Revaluation Profit (Plant)	1,00,000	
$\left[ 10,44,444 - \left( 8,50,000 \times \frac{100}{90} \right) \right]$		
Less : Revaluation Loss		
Goodwill	(1,50,000)	
Fixtures	(1,000)	
$\left[ \left( 80,000 \times \frac{100}{95} \right) - 83,211 \right]$		
Trade Investments	(30,000)	
c. Undistributed Profits (Opng.)	1,99,000	
d. Profit during the year		60,000
e. Basic CP/ RP	1,99,000	60,000
f. Add : Over-Depreciation on Fixtures $[1,000 \times 5\%]$		50
g. Less : Under-Depreciation on Plant $[1,00,000 \times 10\%]$		(10,000)
Final CP/ RP divided in Ratio vide WN1	1,99,000	50,050
Minority Interest [divided in Ratio vide WN1]	39,800	10,010
Holding Co. [divided Ratio vide WN 1]	1,59,200	40,040
<b>4. Cost of Control [COC]</b>		
a. Cost of Investment of H		10,80,000
b. Paid up Value of Shares	9,60,000	
c. Share of Capital Profits [WN 3]	1,59,200	
d. Share of Carrying Amount of Equity of S		11,19,200
e. Capital Reserve		(39,200)
<b>5. Minority Interest on Consolidation</b>		
a. Paid-up Share Capital		2,40,000
b. Share of Capital Profits [WN 3]		39,800
c. Share of Revenue Profits [WN 3]		10,010
d. Total		2,89,810
<b>6. Consolidated P &amp; L A/c [CPL]</b>		
a. P & L A/c of H		7,80,000
b. Add : Share of RP of S [WN 3]		40,040
		8,20,040
c. Less : Unrealised Profit in Stock $[50,000 \times 25 / 125]$		(10,000)
d. Consolidated P & L A/c		8,10,040

7. A Ltd. has already passed entries for 72,000 shares issued for acquiring control in B.Ltd because the cost of B Ltd. shares has been shown at 72,000 x ₹ 15 = ₹ 10,80,000. Hence, no adjustment for this is required.

8. Since 'Profit for the year' is shown separately in the Balance Sheet, balance of General Reserve and P and L A/c are on 1-1-2012 and are treated as Capital Profits.

**Illustration 5: Proposed Dividend)**

The summary balance sheets of Albert Limited asw on 31<sup>st</sup> March, 2012 were as follows :

Liabilities	Albert Ltd. ₹	Ballavi Ltd. ₹	Assets	Albert Ltd. ₹	Ballavi Ltd. ₹
Share Capital (Equity)			Goodwill	1,00,000	50,000
Shares of ₹10/- each)	10,00,000	2,50,000	Buildings	2,00,000	1,00,000
General Reserves			Machinery	5,00,000	2,00,000
On 1-4-2011	2,00,000	80,000	Stock	2,00,000	1,00,000
Sundry Creditors	2,00,000	1,00,000	Sundry debtors	3,40,000	70,000
Bills Payable	50,000	30,000	Trade Investments	2,40,000	-
Profit and Loss Account	60,000	60,000	Bills Receivable	30,000	30,000
On 1-4-2011			Cash and Bank Balance	50,000	20,000
Profit for the year ended 31-3-2012	1,50,000	50,000			
	<b>16,60,000</b>	<b>5,70,000</b>		<b>16,60,000</b>	<b>5,70,000</b>

The following information is given :

- Albert Ltd. axquired 15,000 equity shares of Ballavi Ltd. for ₹ 1,90,000 on 1-4-2011.
- Sundry Debtors of Albert Ltd. include ₹ 30,000 due from Ballavi Ltd.
- Bills Receivable of Ballavi Ltd. include ₹ 10,000 due from Albert Ltd.
- The stock of Ballavi Ltd. includes Goods Purchased from Albert Ltd. at ₹10,000 which includes profit charged by Albert Ltd. @ 25% on cost.
- Albert Ltd. and Ballavi Ltd. have proposed 10% dividend for 2011-12 but effect has not been given in accounts.

Prepare a consolidated balance sheet of Albert Ltd. and Ballavi Ltd. as 31<sup>st</sup> March, 2012 with working of minority interest and cost of control.

**(Mar. 2000, April 2012, adapted)**



**Solution :**

Consolidated Balance Sheet of Albert Ltd. and its Subsidiary  
ballavi Ltd. as on 31<sup>st</sup> March 2012

Perticulars		Note	₹	₹
<b>I. EQUITY AND LIABILITIES</b>				
<b>1. Shareholders' Funds</b>				
a. Share Capital (1,00,000 Equity Shares of ₹10 each)	.....		10,00,000	
b. Reserves and Surplus	.....	1	3,81,500	13,81,500
<b>2. Minority Interest</b>	.....			1,66,000
<b>3. Current Liabilities</b>				
a. Trade Payables	.....	2	3,40,000	
b. Short Term Provision	.....	3	1,10,000	4,50,000
<b>Total</b>	.....			<b>19,97,500</b>
<b>Assets</b>				
<b>Non-current Assets</b>				
<b>Fixed Assets</b>				
- Tangible Assets				
- Intangible Assets (Goodwill)	.....	4	10,00,000	
Non-current Investments	.....		50,000	12,00,000
(2,40,000 -1,90,000)				
<b>Current Assets</b>				
Reventories	.....	5	2,97,500	
Trade Receivables	.....	6	4,30,000	
Cash and Cash Equivalents	.....	7	70,000	7,97,500
<b>Total</b>				<b>19,97,500</b>

Assets to Accounts	H	S	Total	
Reserves and Surplus				
Capital Reserve (on Consolidation)	.....		44,000	
General Reserve	.....		2,00,000	
Surplus	.....		1,37,500	
<b>Total</b>	.....		<b>3,81,500</b>	
Trade Payable				
Creditors for Goods	.....	2,00,000	1,00,000	3,00,000
Less : Mutual Dues	.....			(30,000)
Bills Payable	.....	50,000	30,000	80,000
Less : Mutual Dues	.....			(10,000)

				(70,000)	Consolidated Financial Statements
Total (a+b)				3,40,000	
Short Term Provisions					
Proposed Dividends	1,00,000	10,000		1,10,000	
Fixed Assets – Tangible Assets					
Buildings					
Plant and Equipment	2,00,000	1,00,000		3,00,000	
Total				10,00,000	
Inventories	2,00,000	1,00,000		3,00,000	
Less : Unrealized profit				(2,500)	
Total				2,97,500	
Trade Receivables					
Sundry Debtors	3,40,000	70,000		4,10,000	
Less : Mutual Dues				(30,000)	
				3,80,000	
Bills Receivable	30,000	30,000		60,000	
Less : Mutual Dues				(10,000)	
				50,000	
Total (a+b)				4,30,000	
Cash and Cash Equivalents					
Bank	50,000	20,000		70,000	

### Working Notes :

Proportion of Ownership on Consolidation	No. of Shares	Proportion
Equity Shares held by h	15,000	[3/5]
Equity Shares held by Minority	10,000	[2/5]
Total Share Capital of S [vide B/S]	25,000	[1]

Ratio of periods : Before & After Acquisition

Acquisition on 1<sup>st</sup> Day of Financial Year; Profits for Financial Year are revenue profits.

3. Analysis of Profits/ Movement in Equity	Capital Profits [CP]	Revenue Profits [RP]
a. Reserves (Opng.)	80,000	
b. Profit and Loss A/c (Opng.)	60,000	
c. Undistributed Profits (Opng.)	1,40,000	
d. Profit during the year [WN] divided in Ratio [vide WN 2]		50,000
e. CP/ RP	1,40,000	50,000

	Minority Interest [divided in Ratio vide WN 1]	56,000	20,000
	Holding Co. [divided in Ratio vide WN 1]	84,000	30,000
<b>4.</b>	<b>Cost of Control [COC]</b>		
a.	Cost of Investment of h		1,90,000
b.	Paid up Value of Shares	1,50,000	
c.	Share of Capital Profits [WN 3]	84,000	
d.	Share of Carrying Amount of Equity of S		<u>2,34,000</u>
e.	<b>Capital Reserve</b>		<u>(44,000)</u>
<b>5.</b>	<b>Minority Interest on Consolidation</b>		
a.	Paid-ip Share Capital [Equity]		1,00,000
b.	Share of Capital Profits [WN 3]		56,000
c.	Share of Revenue Profits [WN 3]	20,000	
	Less : Share of Dividend Due	(10,000)	10,000
d.	Total		<u>1,66,000</u>
<b>6.</b>	<b>Consolidated P &amp; L A/c [CPL]</b>		
a.	P & L A/c of H		2,10,000
b.	Add : Share of RP of S [WN 3]		30,000
c.	Less : Proposed Dividend out of RP [H]	(1,00,000)	
	Unrealised Profit in Stock [10,000 x 25%]	(2,500)	(1,02,500)
d.	Consolidated P & L A/c		<u>1,37,500</u>

