PROPERTY, PLANT AND EQUIPMENT (IAS – 16)

OBJECTIVE

The objective of this standard is to prescribe the accounting treatment for property, plant and equipment. The principal issues in accounting for property plant and equipment are: -

(i) The time of recognition of the assets;

(ii) The determination of their carrying amounts; and

(iii) The depreciation charges and impairment losses to be recognized in relation to them

SCOPE

a) This standard should be applied in accounting for property, plant and equipment except when another IAS requires or permits otherwise.

b) This standard does not apply to: -

(i) Property, plant and equipment classified as held for sale in accordance with the IFRS –5;

(ii) The recognition and measurement of exploration and evaluation assets (IFRS – 6)

(iii) Biological assets related to agricultural activity (IAS 41); and

DEFINITIONS

1- Carrying amount

Carrying amount is the amount at which an asset is recognized after deducting any accumulated depreciation and accumulated impairment losses.

2- Cost

Cost is the amount of cash or cash equivalents paid or the fair values of the other consideration given to acquire an asset at the time of its acquisition or construction.

3- Depreciable amount

Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value.

4- Depreciation

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life.

5- Entity specific value

Entity specific value is the present value of the cash flows an entity expects to arise from the continuing use of an asset and from its disposal at the end of its useful life or expects to incur when settling a liability.

6- Impairment loss

Impairment loss is the amount by which the carrying amount of an asset exceeds its recoverable amount.

7- Property, plant and equipment are tangible items that:

(a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and

(b) are expected to be used during more than one period

8- Recoverable amount

Recoverable amount is the higher of an asset's net selling price and its value in use

9- Residual value

Residual value of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

10- Useful life is:

(a) the period over which an asset is expected to be available for use by an entity; or

(b) the number of production or similar units expected to be obtained from the assets by an entity

RECOGNITION

The recognition of the property, plant and equipment depends on two criteria.

a) The item meet the definition of property, plant and equipment;

b) It is probable that future economic benefits associated with the asset will flow to the enterprise; and

c) The cost of the item can be measured reliably

Application of Recognition

- ***Spare parts and servicing equipments: -*** are usually carried as inventory and recognized in the profit and loss when consumed.
  However, major spare parts and standby equipments qualify as property, plant and equipment, when: -
  a) the entity expects to use them for more than one year;
  b) they can be used only with an item of property, plant and equipment; and
  c) they are material in terms of cost
- ***Safety equipments***: - Property, plant and equipment acquired for safety or environmental reasons qualify for recognition, as assets when they enable the enterprise to obtain future economic benefits from the related assets in excess of those it would obtain otherwise.
- ***Aggregation and segmenting*** This IAS does not provide what constitute an item of property, plant and equipment and judgment is required in applying the recognition criteria to specific circumstances or types of enterprise. That is: -
  (i) It may be appropriate to aggregate individually insignificant items, such as moulds, tools dies, etc.
  (ii) It may be appropriate to allocate total expenditure on an asset to its component parts and account for each component separately e.g. an aircraft and its engines.

Initial measurement

If any item meets the recognition criteria that will be initially recognized at cost.

Subsequent cost

- ❖ Day to day servicing / repair and maintenance expenses should be charged to profit and loss account.
- ❖ When some parts / interiors are replaced regularly or replaced several times during the useful life of the property, plant and equipment then these can be recognized as part of carrying cost when they meet recognition criteria and should be de-recognized according to the provisions of this standard when replaced (aircrafts, furnaces).
- ❖ When the condition of property, plant and equipment is regularly inspected for faults regardless of the parts replacement, the cost of inspection can be recognized as cost if the

recognition criteria are satisfied. The carrying amount of inspection cost should be de-recognized when the new inspection takes place.

Elements of cost

Following are the elements of cost of property, plant and equipment

- Purchase price, less any trade discount or rebate
- Import duties and non-refundable purchase taxes
- The estimated cost of dismantling and removing the assets and restoring the site on which it is located, to the extent that it is recognized as a provision under IAS-37
- Directly attributable cost of bringing the assets to the location and condition necessary for the intended performance, e.g.
  - Costs of employees benefits arising directly from the construction or acquisition of property, plant and equipment
  - The cost of site preparation
  - Initial delivery and handling costs
  - Installation costs
  - Cost of testing whether the asset is functioning properly after the net proceeds from the sale of any trial production (samples produced while testing equipment)
  - Professional fees (architects, engineers)

Examples of costs that are not part of cost of an item of property, plant and equipment

- Cost of opening a new facility
- Cost of introducing a new product or service (advertising, promotional)
- Cost of conducting business in new location or with a new class of business (staff training cost)
- Administration and other general expenses

Recognition of costs in the carrying amount ceases when the asset is in location and condition for its intended use by the management. The following are the examples: -

- Costs incurred while an item is ready for its intended use but yet to be brought in use or being operated at less than full capacity.
- Initial operating losses
- Costs of relocating or reorganizing part or all of an entity's operations
- Incidental incomes/expense

All of these will be recognized as an expense rather than an asset

Self constructed assets

In case of self-constructed assets, the same principles are applied as for as acquired assets. It the enterprise makes similar assets during the normal course for sale externally then the cost of the asset will be the cost of its production under IAS-2 (Inventories). The borrowing cost under IAS-23 and Government Grant under IAS -20 can further adjust the carrying value of assets.

Deferred Payments

When the payment of an asset is deferred beyond normal credit terms, its cost is the cash price equivalent; the difference is recognized as interest expense unless it is capitalized in accordance with IAS-23.

Exchanges of assets

An asset may be acquired in exchange or part exchange for a non-monetary asset or assets or a combination of monetary and non-monetary assets.

The cost of such an item is the fair value unless the exchange transaction lacks commercial substance or the fair value of the asset given up / acquired is not reliably measurable. Then the cost of the asset acquired will be the carrying value of the asset given up.

The entity determines whether the exchange transaction has the commercial substance by considering the extent to which its cash flows differ as a result of the transaction. A transaction has the commercial substance if: -

- ❖ The risk, timing and amount of cash flows of the asset acquired differ from the asset transferred.
- ❖ The entity specific value of the portion of the entity's operations affected by the transaction changes as a result of the exchange (post tax cash flows).
- ❖ The difference in above two is significant relative to the fair value of the assets exchanged.

If the entity is able to measure the fair value of any of the asset given up/acquired then the cost of the new asset is the fair value of the asset given up unless the fair value of the asset acquired is more reliable.

Measurements after Recognition

The IAS offers two treatments after the subsequent recognition of property plant and equipment namely: -

(a) Cost Model

Carry the asset at its cost less any accumulated depreciation and any accumulated impairment losses

(b) Revaluation Model

After recognition an item of property, plant and equipment whose fair value can be determined reliably shall be carried at revalued amount, being its fair value at the date of revaluation less subsequent accumulated depreciation and subsequent accumulated impairment losses.

Revaluation should be made regularly enough so that the carrying amount approximates to the fair value at the statement of financial position date.

Points to be kept in mind when applying revaluation model

- ❖ The fair value of land and buildings is usually determined from market based evidence by appraisal undertaken by professionally qualified valuers usually carry out such valuations.
- ❖ In the case of plant and equipment, fair value can also be taken as market value. Where a market value is not available because of the specialized nature or an item is rarely sold, however, depreciated replacement cost may be used.

- ❖ The frequency of revaluations depends upon the volatility of the fair values of individual items of property, plant and equipment. The more volatile the fair value, the more frequently revaluations should be carried out.
- ❖ Most importantly, when an item of property, plant and equipment is revalued, the whole class of assets to which it belongs should be revalued.
- ❖ When an item of property, plant and equipment is revalued, the accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount of the asset.
- ❖ All the items within a class should be revalued at the same time.
- ❖ If the asset's carrying value is increased as a result of revaluation the debit will be the increase in value in the statement of financial position, the increase to be recognized in other comprehensive income and accumulated in equity under the revaluation surplus, unless the increase is reversing a previous decrease, which was recognized as an expense.

  To the extent that this offset is made, the increase is recognized as income; any excess is then taken to the revaluation reserves.
- ❖ **When there is upward revaluation, there is an increase in depreciation charge for the year; therefore, the difference between the depreciation charge for the year on revalued amount and on the original cost is realized. This can be transferred to retained earnings but not through the income statement. On retirement or disposal the whole amount of surplus will be transferred to retained earnings.**

DEPRECIATION

- ❖ Each part of an item of property, plant and equipment with a cost significant in relation to the total cost of the item should be depreciated separately (an aircraft and its engine)
- ❖ The depreciation charge of each year will be charged to profit and loss account unless included in the carrying amount of other assets (IAS –2, IAS –38 & IAS –40).
- ❖ ***Depreciable amount and depreciable period***
  - The useful life of an asset should be reviewed periodically and, if expectations are significantly different from previous estimates, the depreciation charge for the current and future periods should be adjusted (IAS –8).
  - If residual value is insignificant then cost can be taken as depreciable amount.
  - The depreciation charge starts when the asset is ready for its intended use and cease earlier of when asset is held for sale and when the asset is de-recognized.
  - The depreciation charge continues even the asset is idle or retired from active use unless fully depreciated.
  - Under usage method of depreciation the depreciation charge may be zero where there is no production.
- ❖ ***Determination of Useful Life*** Following factors should be considered in determining the useful life of an asset:

- Expected usage of the asset assessed with reference to the expected capacity or physical output;
- Expected physical wear and tear and the care and maintenance of the asset while it remains idle
- Technical obsolescence arising from changes or improvements in production or change in market demand etc
- Legal or similar limits on the use of the asset

The asset management policy involve disposal of assets after a specific time or after a specific proportion of economic benefits, therefore, the useful life can be less than the economic life of an asset. The estimation of useful life is a matter of judgment based on experience.

Land and buildings should be dealt separately because land normally has unlimited life and buildings have limited life. If the cost of land includes the dismantling / site restoration cost that portion of cost of land and building should be depreciated over the period of benefits.

❖ ***Depreciation method***

The depreciation method used should reflect the pattern in which the asset's economic benefits are consumed y the enterprise. The depreciation method applied to an asset should be reviewed periodically and, if there has been a significant change in the expected pattern of economic benefits from those assets, the method should be changed to reflect the changed pattern prospectively under IAS-8.

De-recognition

The asset should be derecognised when: -

a) Disposed off;

b) No future economic benefit is available from its use or disposal

The loss/gain (disposal proceeds – carrying amount) should be included in the profit or loss account when the item is derecognised and shall not be included in the revenue.

The disposal proceeds are of an item of property, plant and equipment is recognized at its fair value. If the disposal proceeds have been deferred beyond reasonable time the difference between the cash price equivalent and the disposal proceeds (interest) will be recognized over the period.

DISCLOSURES

The financial statement should disclose, in respect of each class of assets:

a) the measurement basis used for determining the gross carrying amount. When more than one basis has been used, the gross carrying amount for that basis in each category should be disclosed;

b) the depreciation method used;

c) the useful lives or depreciation sets used,

d) the gross carrying amount and the accumulated depreciation at the beginning and end of the period;

e) a reconciliation of the carrying amount at the beginning and end of the period showing;

   i) additions

   ii) assets classified as held for sale in accordance with IFRS 5 and other disposals

iii) acquisitions through business combinations

iv) increases or decreases resulting from revaluation/impairment

v) impairment losses reversed in the profit and loss account

vi) depreciation

vii) the net exchange differences arising on the translations of the financial statements of a foreign entity; and

viii) other movements

Examples: -

Ex-1

James & Co. exchanged one of its plots of land with fair market value of **Rs.** 1,500,000 (Cost **Rs.** 1,200,000) for an imported plant and paid cash of Rs. 500,000.

Required: the amount at which plant should be recorded?

EX-2

M/S Dildar Limited acquired a plant for Rs. 12 million. This plant has two major parts namely part-A costing Rs. 7 million and part-B costing Rs. 5 million. The part-A has life of 100,000 hours while part-B has life of 10 years. The directors proposed that the plant should be recognized as single asset and to be depreciated using machine hour rate method.

Required: Comment whether the depreciation method advised by the directors is right also give reasons in favor of your answer?

Ex-3

	Rs.
Carrying amount of offices given up	6,500,000
Fair value of offices acquired	4,500,000
Cash received	500,000

Required: How these transactions will be recorded?

Ex-4

Smith & Co. purchased a machine on 1st January 19X1 for Rs. 80,000. Its useful life is estimated at 8 years and depreciation is provided on a straight-line basis.

On 1st January 19X4 the machine was revalued at Rs. 70,000 and this is to be brought into the accounts, which are prepared to 31st December annually.

Required: Show how the revaluation would be affected, compute the depreciation charge for the year 19X4 and amount of any surplus to be transferred to Retained earnings?

Ex-5

Bright & Co. has an item of land carried in its books at Rs. 13 million. Two years ago a slump in land values led the company to reduce the carrying value from Rs. 15 million. This was taken as an expense in the income statement. There has been a surge in land prices in the current year, however, and the land is now worth Rs. 20 million.

Required: Account for the revaluation in the current year?

Ex-6

Nelson Ltd purchased a machine on 1st January 19X0 for Rs. 60,000. At that date its estimated useful life was ten years and it was expected to be sold, as scrape for Rs. 1000 at the end of that period. Depreciation is provided on a straight-line basis. Accounts are prepared for calendar year. On 1st

January 19X4 the company's engineer reported that they now estimate the remaining life of the machine at two years.

Required: Compute the depreciation charge for 19X4?

Ex-7

Determine the cost of an asset at which it should be recognized in the Financial Statements

	(Rupees)
Purchase price	100,000
Rebate on asset purchased	5,000
Site preparation	2,000
Architect fees	6,000
Own labour cost incurred on installation	2,000
Delivery and handling cost	1,000
Administrative overheads	2,000
Installation cost	5,000
Import duties (non-refundable)	6,000
Sales tax paid (Refundable)	5,000
Startup cost and initial operating losses	25,000
Dismantling and restoration cost	5,000
General overheads	4,000

Ex-8

A machine has been purchased from MN Enterprises and paid Rs. 50,000 in cash and transferred an existing asset with a book value of Rs. 50,000 having MV of Rs. 60,000.

Determine the cost of the new asset to be recognized, in the Financial Statements?

Ex-9

M/S AA Enterprises purchased on 1st January 2004 an asset with cash price of Rs. 200,000/- installation cost incurred of Rs. 5,000/-, which is payable in arrear in thirty monthly installments of Rs. 10,000/- each.

Calculate the value at which the asset to be recognized in the Financial Statements?

Ex-10

An asset having carrying value of Rs. 100,000 was sold for Rs. 150,000 to be receivable in ten quarterly installments of Rs. 15,000. The similar asset can be sold on normal credit terms for Rs. 120,000.

Required: Determine the gain on disposal of asset?

INTANGIBLE ASSETS (IAS – 38)

OBJECTIVE

The objective of this IAS is to prescribe the accounting treatment of intangible assets not dealt in any other IAS.

SCOPE

This IAS shall be applied in accounting for intangible assets, except: -

a) Intangible assets that are within the scope of another IAS
b) Financial assets, as defined in IAS 39; and
c) Mineral rights and expenditure on the exploration for, or development and extraction of, minerals, oil, natural gas and similar non-regenerative resources

DEFINITIONS

Amortization is the systematic allocation of the depreciable amount of an intangible asset over its useful life.

An ***asset*** is resource

(a) controlled by an entity as a result of past events; and

(b) from which future economic benefits are expected to flow to the entity.

Development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use.

An ***intangible asset*** is an identifiable non-monetary asset without physical substance.

Identifiable

An asset meets the identifiably criteria when: -

a) is separable, i.e. is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, wither individually or together with a related contract, asset or liability; or
b) arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

Monetary assets are money held and assets to be received in fixed or determinable amounts of money.

Research is original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding.

RECOGNITION

The recognition of an intangible asset requires an entity to demonstrate that the item meets: -

a) the definition of an intangible asset
b) the recognition criterian that: - i.e. it can be identified separately from other items of entity and in the control of the entity as a result of past event.
    - it is probable that the expected economic benefits that are attributable to the asset will flow to the entity; and
    - the cost of the asset can be measured reliably

The examples of intangible assets are: -

- Brand name
- Mastheads and publishing titles
- Computer software
- Licences and franchises

- Copyrights, patents and other industrial property rights, service and operating rights
- Recipes, formulae, models, designs and prototypes; and
- Intangible assets under development

However, technical knowledge of staff, customer loyalty, long term training benefits, expected benefits from initial advertisement etc. will be difficult to recognize because of not having valid control on them.

MEASUREMENT

The conditions under which an asset is acquired determine the measurement of its cost.

Separate acquisition

The cost of a separately acquired intangible asset can be measured reliably when purchase consideration is in the form of cash or other monetary assets. The cost comprises: -

a) its purchase price, including import duties and non-refundable purchase taxes after deducting trade discounts and rebates; and
b) any directly attributable cost of preparing the asset for its intended use

Examples of directly attributable costs are: -

a) costs of employee benefits arising directly from bringing the asset to its working condition; and
b) professional fees arising directly from bringing the asset to its working condition; and
c) costs of testing whether the asset is functioning properly

Examples of expenditures that are not part of cost of an intangible asset are: -

a) costs of introducing a new product or service (advertising cost)
b) costs of conducting business in a new location or with a new class of customers (training cost of staff)
c) administration and other general overheads

The capitalization of expenses ceases when the asset is ready for its intended use therefore; the expenditures incurred afterwards are not capitalized. The examples are: -

a) cost incurred while an asset capable of operating in the manner intended by management has yet to be brought into use; and
b) initial operating losses, such as those incurred while demand for the asset's output build up

Exchanges of asset

An asset may be acquired in exchange or part exchange for a non-monetary asset or assets or a combination of monetary and non-monetary assets.

The cost of such an item is the fair value unless the exchange transaction lacks commercial substance or the fair value of the asset given up / acquired is not reliably measurable. Then the cost of the asset acquired will be the carrying value of the asset given up.

If the entity is able to measure the fair value of any of the asset given up/acquired then the cost of the new asset is the fair value of the asset given up unless the fair value of the asset acquired is more reliable.

Deferred payments

If the payment for an intangible asset is deferred beyond normal credit terms, its cost will be the cash price equivalent. The difference between this amount and the total payments will be recognized as interest expense or will be capitalized if meets the requirements of IAS –23.

Acquisition by way of Government Grant then the related asset and government grant will be recognized as per the requirements of IAS-20.

Acquisition as part of business combination

An acquirer recognizes at the acquisition date separately from goodwill an intangible asset of the acquiree if the asset's fair value can be measured reliably, irrespective of whether the asset had been recognized by the acquiree before the business combination.

Internally generated goodwill will not be recognized as an asset because it is not separable nor does it arises from contractual or other legal rights.

Internally Generated Intangible Assets

It is sometimes difficult to assess whether an internally generated intangible asset qualifies for recognition. It is often difficult to:

(a) identify whether, and the point of time when, there is an identifiable asset that will generate probable future economic benefits; and

(b) determine the cost of the asset reliably. In some cases, the cost of generating an intangible asset internally cannot be distinguished from the cost of maintaining or enhancing the enterprise's internally generated goodwill or of running day-to-day operations.

Therefore, in addition to complying with the general requirements for the recognition and initial measurement of an intangible asset an enterprise applies the requirements and guidance in paragraphs below to all internally generated intangible assets.

To assess whether an internally generated intangible assets meets the criteria for recognition, an enterprise classifies the generation of the asset into:

(a) a research phase; and

(b) a development phase.

If an enterprise cannot distinguish the research phase from the development phase of an internal project to create an intangible asset, the enterprise treats the expenditure on that project as if it were incurred in the research phase only.

Research Phase

No intangible asset arising from research shall be recognized. Expenditure on research should be recognized as an expense when it is incurred.

Examples of research activities are:

(a) activities aimed at obtaining new knowledge.

(b) the search for, evaluation and final selection of, applications of research findings or other knowledge.

(c) the search for alternatives for materials, devices, products, processes, systems or services; and

(d) the formulation, design, evaluation and final selection of possible alternatives for new or improved materials, devices, products, procedures, systems or services.

Development Phase

An intangible asset arising from development should be recognized if, and only if, an enterprise can demonstrate all of the following:

(a) the technical feasibility of completing the intangible asset so that it will be available for use or sale;

(b) its intention to complete the intangible asset and use or sell it;

(c) its ability to use or sell the intangible asset;

(d) how the intangible asset will generate probable future economic benefits. Among other things, the enterprise should demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset;

(e) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and

(f) its ability to measure the expenditure attributable to the intangible asset during its development reliably.

Examples of development activities are:

(a) the design, construction and testing of pre-production or pre-use prototypes and models;

(b) the design of tools, jigs, moulds and dies involving new technology;

(c) the design, construction and operation of a pilot plant that is not of a scale economically feasible for commercial production; and

(d) the design, construction and testing of a chosen alternative for new or improved materials, devices, products, processes, systems or services.

Cost of an internally generated intangible asset

The cost comprises all directly attributable costs necessary to create, produce and prepare the asset to be capable of operating in the manner intended by the management.

a) costs of materials and services used or consumed in generating the intangible asset;

b) costs of employee benefits arising from the generation of intangible assets

c) fees to register a legal right; and

d) amortization of patents and licenses that are used to generate the intangible asset

The following are not components of the cost of an internally generated intangible asset:

(a) selling, administrative and other general overhead expenditure unless this expenditure can be directly attributed to preparing the asset for use;

(b) clearly identified inefficiencies and initial operating losses incurred before an asset achieves planned performance; an d

(c) expenditure on training staff to operate the asset.

Past expense not be recognized as an asset

Expenditure on an intangible asset that was initially recognized as an expense shall not be recognized as part of the cost of an intangible asset.

Subsequent expenses

Normally there are no additions to intangible assets and subsequent expenditures are incurred to maintain the economic benefits embodied in an intangible asset therefore, they are rarely capitalized. However, when subsequent expenditures are incurred on an acquired in process research and development project can be recognized if meets the recognition criteria.

Measurement after recognition

(i) Cost model

After initial recognition, an intangible asset shall be carried at its cost less any accumulated amortization and any accumulated impairment loss.

(ii) Revaluation model

After initial recognition an intangible asset whose fair value can be determined with reference to the active market shall be carried at revalued amount, less subsequent accumulated amortization and subsequent accumulated impairment losses.

Useful life

In entity shall access whether the useful life of an intangible asset is finite or indefinite and, if finite, the length of, or number of production or similar units constituting, that useful life. An intangible asset shall be regarded by the entity as having an indefinite useful life when, based on an analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the entity.

Many factors are considered in determining the useful life of an intangible asset, including:

a) The expected usage of the asset by the entity and whether the asset could be managed efficiently by another management team;

b) Typical product life cycles for the asset and public information on estimates of useful lives of similar assets that are used in a similar way;

c) Technical, technological, commercial or other types of obsolescence;

d) The stability of the industry in which the asset operates and changes in the market demand for the products or services output for the asset;

e) Expected actions by competitors or potential competitors;

f) The level of maintenance expenditure required to obtain the expected future economic benefits from the asset and the entity's ability and intention to reach such as level;

g) The period of control over the asset and legal or similar limits on the use of the asset, such as the expiry dates of related leases; and

h) Whether the useful life of the asset is dependent on the useful life of other assets of the entity.

The useful life of an intangible asset that arises from contractual or other legal rights shall not exceed the period of the contractual or other legal rights, but may be shorter depending on the period over which the entity expects to use the asset. If the contractual or other legal rights are conveyed for a limited term that can be renewed, the useful life of the intangible asset shall include the renewal period(s) only if there is evidence to support renewal by the entity without significant cost.

INTANGIBLE ASSETS WITH FINITE USEFUL LIVES

Amortisation Period and Amortisation Method

The depreciable amount of an intangible asset with a finite useful life shall be allocated on a systematic basis over its useful life. Amortisation shall begin when the asset is available for use. Amortisation shall cease at the earlier of the date that the asset is classified as held for sale in accordance with IFRS 5 and the date that the asset is derecognised.

The amortisation method used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity. If that pattern cannot be determined reliably, the straight-line method shall be used.

Residual Value

The residual value of an intangible asset with a finite useful life shall be assumed to be zero unless:

a) there is a commitment by a third party to purchase the asset at the end of its useful life; or

b) there is an active market for the asset and;

   i) residual value can be determined by reference to that market; and

   ii) it is probable that such a market will exist at the end of the asset's useful life.

Review of Amortisation Period and Amortisation Method

The amortisation period and the amortisation method for an intangible asset with a finite useful life shall be reviewed at least at each financial year-end. Such changes shall be accounted for as changes in accounting estimates in accordance with IAS 8.

INTANGIBLE ASSETS WITH INDEFINITE USEFUL LIVES

An intangible asset with an indefinite useful life shall not be amortised.

Review of Useful Life Assessment

The useful life of an intangible asset that is not being amortised shall be reviewed each period to determine whether events and circumstances continue to support an indefinite useful life assessment for that asset. If they do not, the change in the useful life assessment from indefinite of finite shall be accounted for as a change in an accounting estimate in accordance with IAS 8.

Retirements and Disposals

An intangible asset shall be derecognised:

a) on disposal; or

b) when no future economic benefits are expected from its use or disposal.

The gain or loss arising from de-recognition of an intangible asset shall be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the asset.

Disclosure

An entity shall disclose the following for each class of intangible assets, distinguishing between internally generated intangible assets and other intangible assets:

a) whether the useful lives are indefinite or finite and, if finite, the useful lives or the amortization rates used;

b) the amortization methods used for intangible assets with finite useful lives;

(c) the gross carrying amount and the accumulated amortization (aggregated with accumulated impairment losses) at the beginning and end of the period;

(d) the line item(s) of the income statement in which the amortization of intangible assets is included;

(e) a reconciliation of the carrying amount at the beginning and end of the period showing:

   (i) additions, indicating separately those from internal development and through business combination;

   (ii) retirements and disposals;

(iii) increases or decreases during the period resulting from revaluations and from impairment losses recognized or reversed directly in equity Impairment of Assets (if any);

(i) impairment losses recognized in the income statement during the period. (if any);

(ii) impairment losses reversed in the income statement during the period (if any);

(iii) amortization recognized during the period;

(iv) net exchange differences arising on the translation of the financial statements of a foreign entity; and

(v) other changes in the carrying amount during the period.

EXAMPLES

EX-1

Entity A is involved in the distribution of electricity in California. Its distribution network covers 100,000 hectares. The entity is particularly concerned about its contribution to bushfires, as heat generated from the system has been identified as a major cause of these fires.

Entity A's research and technology division is in the process of developing an infrared camera that may be attached to a helicopter. The camera is capable of identifying hot-spots in the system, and will enable management to take preventative action.

Management has spent 100,000 to date and expects to spend a further 300,000 to complete the project. The board has approved expenditure of a further 50,000, but some members remain unconvinced by the project.

Required: - Can management recognize an intangible asset arising from a development project when further expenditure is subject to board approval?

EX-2

The broadcasting license is renewable every 10 years if the entity provides at least an average level of service to its customers and complies with the relevant legislative requirements. The license may be renewed indefinitely at little cost and has been renewed twice before the most recent acquisition. The acquiring entity intends to renew the license indefinitely and evidence supports its ability to do so. Historically, there has bee no compelling challenge to the license renewal. The technology used in broadcasting is not expected to be replaced by another technology at any time in the foreseeable future. Therefore, the license is expected to contribute to the entity's net cash inflows indefinitely.

Required: - Can management recognize the license as an indefinite life asset?

EX-3

Stauffer is a public listed company reporting under IFRS. It has asked for your opinion on the accounting treatment of the following items:

(a) The Stauffer brand has become well known and has developed a lot of customer loyalty since the company was set up 8 years ago. Recently, valuation consultants valued the brand for sale purposes at Rs.14.6m. Stauffer's directors are delighted and plan to recognize the brand as an intangible asset in the financial statements. They plan to report the gain in the revaluation surplus as they feel that crediting it to the income statement would be imprudent.

(b) On 1 October 20X5 the company was awarded one of 6 licenses issued by the government to operate a production facility for 5 years. A 'nominal' sum of Rs.1m was paid for the license, but its fair value is actually Rs.3m.

(c) The company undertook an expensive, but successful advertising campaign during the year to promote a new product. The campaign cost Rs.1m, but the directors believe that the extra sales generated by the campaign will be well in excess of that over its 4 year expected useful life.

(d) Stauffer owns a 30 year patent which it acquired 2 years ago for Rs.8m which is being amortized over its remaining useful life of 16 years from acquisition. The product sold is performing much better than expected. Stauffer's valuation consultants have valued its current market price at Rs.14m.

(e) On 1 August 20X6, Stauffer acquired a smaller company in the same line of business. Included in the company's balance sheet was an in-process research and development project, which showed promising results (and was the main reason why Stauffer purchased the other company), but was awaiting government approval. The project was included in the company's own books at Rs.3m at the acquisition date, while the company's net assets were valued at a fair value of Rs.12m (excluding the project). Stauffer paid Rs.18m for 100% of the company and the research and development project was valued at Rs.5m by Stauffer's valuation consultants at that date. Government approval has now been received, making the project worth Rs.8m at Stauffer's year end.

Required: - Explain how the directors should treat the above items in the financial statements for the year ended 30 September 20X6?

Ex-4

A and B are both development projects. Both projects are anticipated to be successful. They have clearly defined parameters. The project expenditure is carefully controlled. The prototypes proved successful. The budgets show sales will in excess of total costs. Finance is readily available. Project A has commenced production and the revenues have started to flow in.

	A	B
	Rs. (000)	**Rs. (000)**
Cost accumulated to 1.1.x5 (meeting recognition criteria)	400	350
Costs incurred during the year	600	250
Total anticipated net revenue	30,000	15,000
Net revenue during the year	6,000	--

The company has also invested Rs. 340,000 in development project F but the tests are at present inconclusive.

Required: - Describe with reasons the accounting treatment for the above issues?

FAIR VALUE MEASUREMENT (IFRS 13)

Objective

Objective of this IFRS is to: -

a) Define fair value
b) Sets out in a single IFRS a framework for measuring fair value
c) Requires disclosures about fair value measurements

SCOPE

The measurement and disclosure requirements of this IFRS do not apply to the following: -

a) Share based payment transaction within the scope of IFRS 2 share based payment;
b) Leasing transactions within the scope of IAS 17 Leases; and
c) Measurements that have the similarities to fair value by are not fair value, such as net realizable value in IAS 2 inventories or value in use in IAS 36 impairment of assets

The disclosures required by this IFRS are not required for the following: -

a) Plan assets in IAS 19 employee benefits
b) Retirement benefit plan investments in IAS 26 accounting and reporting by retirement benefit plans; and
c) Assets for which recoverable amount is fair value less cost of disposal in IAS 36 impairment of assets.

DEFINITIONS

Fair value

The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date

Active market

A market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis

Cost approach

A valuation technique that reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost).

Entry price

The price paid to acquire an asset or received to assume a liability in an exchange transaction.

Exit price

The price that would be received to sell an asset or paid to transfer a liability

Exit price

The price that would be received to sell an asset or paid to transfer a liability

Expected cash flow

The probability-weighted average (i.e. mean of the distribution) of possible future cash flows

Income approach

Valuation techniques that convert future amounts (e.g. cash flows or income and expenses) to a single current (i.e. discounted) amount The fair value measurement is determined on the basis of the value indicated by current market expectations about those future amounts.

Inputs

The assumptions that market participants would use when pricing the asset or liability, including assumptions about risk, such as the following:

(a) the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model); and

(b) the risk inherent in the inputs to the valuation technique.

Inputs may be observable or unobservable.

Level 1 inputs

Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date

Level 2 inputs

Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3 inputs

Unobservable inputs for the asset or liability

Market approach

A valuation technique that uses prices and other relevant information generated by market transactions involving identical or comparable (i.e. similar) assets, liabilities or a group of assets and liabilities, such as a business

Market-corroborated inputs

Buyers and sellers in the principal (or most advantageous) market for the asset or liability that have all of the following characteristics:

(a) They are independent of each other, i.e. they are not related parties as defined in IAS 24, although the price in a related party transaction may be used as an input to a fair value measurement if the entity has evidence that the transaction was entered into at market terms.

(b) They are knowledgeable, having a reasonable understanding about the asset or liability and the transaction using all available information, including information that might be obtained through due diligence efforts that are usual and customary.

(c) They are able to enter into a transaction for the asset or liability.

(d) They are willing to enter into a transaction for the asset or liability, i.e. they are motivated but not forced or otherwise compelled to do so.

Highest and best use

The use of a non-financial asset by market participants that would maximize the value of the asset or the group of assets and liabilities (e.g. a business) within which the asset would be used

Most advantageous market

The market that maximizes the amount that would be received to sell the asset or minimizes the amount that would be paid to transfer the liability, after taking into account transaction costs and transport costs

Principal market

The market with the greatest volume and level of activity for the asset or liability

Non-performance risk

The risk that an entity will not fulfill an obligation. Non-performance risk includes, but may not be limited to, the entity's own credit risk.

Observable inputs
Inputs that are developed using market data, such as publicly available information about actual events or transactions, and that reflect the assumptions that market participants would use when pricing the asset or liability.
Orderly transaction
A transaction that assumes exposure to the market for a period before the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities; it is not a forced transaction (eg a forced liquidation or distress sale).
Risk premium
Compensation sought by risk-averse market participants for bearing the uncertainty inherent in the cash flows of an asset or a liability. Also referred to as a 'risk adjustment'
Transaction costs
The costs to sell an asset or transfer a liability in the principal (or most advantageous) market for the asset or liability that are directly attributable to the disposal of the asset or the transfer of the liability and meet both of the following criteria:
(a) They result directly from and are essential to that transaction.
(b) They would not have been incurred by the entity had the decision to sell the asset or transfer the liability not been made (similar to costs to sell, as defined in IFRS 5).
Transport costs
The costs that would be incurred to transport an asset from its current location to its principal (or most advantageous) market
Unit of account
The level at which an asset or a liability is aggregated or disaggregated in an IFRS for recognition purposes.
Unobservable inputs
Inputs for which market data are not available and that are developed using the best information available about the assumptions that market participants would use when pricing the asset or liability.
Fair value hierarchy
IFRS 13 seeks to increase consistency and comparability in fair value measurements and related disclosures through a 'fair value hierarchy'. The hierarchy categorizes the inputs used in valuation techniques into three levels. The hierarchy gives the highest priority to (unadjusted) quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs.
If the inputs used to measure fair value are categorized into different levels of the fair value hierarchy, the fair value measurement is categorized in its entirety in the level of the lowest level input that is significant to the entire measurement (based on the application of judgment).
Level 1 inputs
Level 1 inputs are quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date.
A quoted market price in an active market provides the most reliable evidence of fair value and is used without adjustment to measure fair value whenever available, with limited exceptions.
If an entity holds a position in a single asset or liability and the asset or liability is traded in an active market, the fair value of the asset or liability is measured within Level 1 as the

product of the quoted price for the individual asset or liability and the quantity held by the entity, even if the market's normal daily trading volume is not sufficient to absorb the quantity held and placing orders to sell the position in a single transaction might affect the quoted price.

Level 2 inputs

Level 2 inputs are inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 2 inputs include:

- quoted prices for similar assets or liabilities in active markets
- quoted prices for identical or similar assets or liabilities in markets that are not active
- inputs other than quoted prices that are observable for the asset or liability, for example
  - interest rates and yield curves observable at commonly quoted intervals
  - implied volatilities
  - credit spreads
- inputs that are derived principally from or corroborated by observable market data by correlation or other means ('market-corroborated inputs').

Level 3 inputs

Level 3 inputs are unobservable inputs for the asset or liability.

Unobservable inputs are used to measure fair value to the extent that relevant observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. An entity develops unobservable inputs using the best information available in the circumstances, which might include the entity's own data, taking into account all information about market participant assumptions that is reasonably available.

Measurement of fair value

Overview of fair value measurement approach

The objective of a fair value measurement is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. A fair value measurement requires an entity to determine all of the following:

- the particular asset or liability that is the subject of the measurement (consistently with its unit of account)
- for a non-financial asset, the valuation premise that is appropriate for the measurement (consistently with its highest and best use)
- the principal (or most advantageous) market for the asset or liability
- the valuation technique(s) appropriate for the measurement, considering the availability of data with which to develop inputs that represent the assumptions that market participants would use when pricing the asset or liability and the level of the fair value hierarchy within which the inputs are categorized.

Guidance on measurement

IFRS 13 provides the guidance on the measurement of fair value, including the following:

- An entity takes into account the characteristics of the asset or liability being measured that a market participant would take into account when pricing

the asset or liability at measurement date (e.g. the condition and location of the asset and any restrictions on the sale and use of the asset)

- Fair value measurement assumes an orderly transaction between market participants at the measurement date under current market conditions
- Fair value measurement assumes a transaction taking place in the principal market for the asset or liability, or in the absence of a principal market, the most advantageous market for the asset or liability
- A fair value measurement of a non-financial asset takes into account its highest and best use
- A fair value measurement of a financial or non-financial liability or an entity's own equity instruments assumes it is transferred to a market participant at the measurement date, without settlement, extinguishment, or cancellation at the measurement date
- The fair value of a liability reflects non-performance risk (the risk the entity will not fulfill an obligation), including an entity's own credit risk and assuming the same non-performance risk before and after the transfer of the liability
- An optional exception applies for certain financial assets and financial liabilities with offsetting positions in market risks or counterparty credit risk, provided conditions are met (additional disclosure is required).

An entity uses valuation techniques appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

The objective of using a valuation technique is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants and the measurement date under current market conditions. Three widely used valuation techniques are:

- market approach – uses prices and other relevant information generated by market transactions involving identical or comparable (similar) assets, liabilities, or a group of assets and liabilities (e.g. a business)
- cost approach – reflects the amount that would be required currently to replace the service capacity of an asset (current replacement cost)
- income approach – converts future amounts (cash flows or income and expenses) to a single current (discounted) amount, reflecting current market expectations about those future amounts.

In some cases, a single valuation technique will be appropriate, whereas in others multiple valuation techniques will be appropriate.

Disclosure

Disclosure objective

IFRS 13 requires an entity to disclose information that helps users of its financial statements assess both of the following:

- for assets and liabilities that are measured at fair value on a recurring or non-recurring basis in the statement of financial position after initial recognition, the valuation techniques and inputs used to develop those measurements
- for fair value measurements using significant unobservable inputs (Level 3), the effect of the measurements on profit or loss or other comprehensive income for the period.

Disclosure exemptions

The disclosure requirements are not required for:

- plan assets measured at fair value in accordance with IAS 19 Employee Benefits
- retirement benefit plan investments measured at fair value in accordance with IAS 26Accounting and Reporting by Retirement Benefit Plans
- assets for which recoverable amount is fair value less costs of disposal in accordance with IAS 36 Impairment of Assets.

Identification of classes

Where disclosures are required to be provided for each class of asset or liability, an entity determines appropriate classes on the basis of the nature, characteristics and risks of the asset or liability, and the level of the fair value hierarchy within which the fair value measurement is categorized.

Determining appropriate classes of assets and liabilities for which disclosures about fair value measurements should be provided requires judgment. A class of assets and liabilities will often require greater disaggregation than the line items presented in the statement of financial position. The number of classes may need to be greater for fair value measurements categorized within Level 3.

Some disclosures are differentiated on whether the measurements are:

- Recurring fair value measurements – fair value measurements required or permitted by other IFRSs to be recognized in the statement of financial position at the end of each reporting period
- Non-recurring fair value measurements are fair value measurements that are required or permitted by other IFRSs to be measured in the statement of financial position in particular circumstances.

Specific disclosures required

To meet the disclosure objective, the following minimum disclosures are required for each class of assets and liabilities measured at fair value (including measurements based on fair value within the scope of this IFRS) in the statement of financial position after initial recognition (note these are requirements have been summarized and additional disclosure is required where necessary):

- the fair value measurement at the end of the reporting period
- for non-recurring fair value measurements, the reasons for the measurement
- the level of the fair value hierarchy within which the fair value measurements are categorized in their entirety (Level 1, 2 or 3)
- for assets and liabilities held at the reporting date that are measured at fair value on a recurring basis, the amounts of any transfers between Level 1 and Level 2 of the fair value hierarchy, the reasons for those transfers and the entity's policy for determining when transfers between levels are deemed to have occurred, separately disclosing and discussing transfers into and out of each level
- for fair value measurements categorized within Level 2 and Level 3 of the fair value hierarchy, a description of the valuation technique(s) and the inputs used in the fair value measurement, any change in the valuation techniques and the reason(s) for making such change (with some exceptions)*
- for fair value measurements categorized within Level 3 of the fair value hierarchy, quantitative information about the significant unobservable inputs used in the fair value measurement (with some exceptions)
- for recurring fair value measurements categorized within Level 3 of the fair value hierarchy, a reconciliation from the opening balances to the closing

balances, disclosing separately changes during the period attributable to the following:

- total gains or losses for the period recognized in profit or loss, and the line item(s) in profit or loss in which those gains or losses are recognized – separately disclosing the amount included in profit or loss that is attributable to the change in unrealized gains or losses relating to those assets and liabilities held at the end of the reporting period, and the line item(s) in profit or loss in which those unrealized gains or losses are recognized
- total gains or losses for the period recognized in other comprehensive income, and the line item(s) in other comprehensive income in which those gains or losses are recognized
- purchases, sales, issues and settlements (each of those types of changes disclosed separately)
- the amounts of any transfers into or out of Level 3 of the fair value hierarchy, the reasons for those transfers and the entity's policy for determining when transfers between levels are deemed to have occurred. Transfers into Level 3 shall be disclosed and discussed separately from transfers out of Level 3
- for fair value measurements categorized within Level 3 of the fair value hierarchy, a description of the valuation processes used by the entity
- for recurring fair value measurements categorized within Level 3 of the fair value hierarchy:
- a narrative description of the sensitivity of the fair value measurement to changes in unobservable inputs if a change in those inputs to a different amount might result in a significantly higher or lower fair value measurement. If there are interrelationships between those inputs and other unobservable inputs used in the fair value measurement, the entity also provides a description of those interrelationships and of how they might magnify or mitigate the effect of changes in the unobservable inputs on the fair value measurement
- for financial assets and financial liabilities, if changing one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly, an entity shall state that fact and disclose the effect of those changes. The entity shall disclose how the effect of a change to reflect a reasonably possible alternative assumption was calculated
- if the highest and best use of a non-financial asset differs from its current use, an entity shall disclose that fact and why the non-financial asset is being used in a manner that differs from its highest and best use*.