CHAPTER

5

IND AS 113 – FAIR VALUE MEASUREMENT

CONCEPTS COVERED

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2. OBJECTIVE
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4. DEFINITIONS
5. ASSET OR LIABILITY SPECIFIC FAIR VALUE
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12. APPLYING FAIR VALUE RULES TO FINANCIAL ASSET & FINANCIAL LIABILITY WITH OFFSETTING POSITION IN MARKET RISK OR COUNTERPARTY RISK

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1. WHAT IS FAIR VALUE :

Normally assets and liabilities are being exchanged between parties at their agreed terms and conditions based on the prices which might be related to the entity or event based or in other words which is not at arm's length prices. To define Fair Values one has to ensure that the values reflect all assumptions/ adjustments to change from transaction specific/ entity specific to normal transaction which is common for all interested parties.

In other words, it is a market based value rather than an entity specific prices and this price should be received to sell an asset or paid to transfer a liability in a normal transaction (e.g. other than any stressed sale etc). Fair Value is an exit price and not a price at which an Asset/ liability sells/ purchases otherwise.

2. OBJECTIVE :

- Defines fair value
- Sets out in a single Ind AS a framework for measuring fair value; and
- Requires disclosures about fair value measurements

Fair value is a market-based measurement, not an entity-specific measurement.

3. SCOPE :

There are many Ind AS which require measuring assets/ liabilities at fair value and whenever it is required to be fair valued, one looks at Ind AS 113. It means that this Standard will cover all such requirements of another standard where fair value measurement and disclosure is needed. However, there are some specific scope exclusions. It applies to initial measurement and subsequent measurement as required by respective Accounting Standard.

Example :

- Fair value less cost to sell as required under Ind AS 105 for assets held for sale.
- Fair value through Profit & Loss as required under Ind AS 109 for Financial Instruments.
- Property, plant & equipment measured using revaluation modal as required under Ind AS 16.
- Biological assets measure at fair value under Ind AS 41 for biological assets.

<u>What is not covered ?</u>

Measurement and Disclosure exclusion

(a) share-based payment transactions within the scope of Ind AS 102, Share based Payment;

(b) leasing transactions within the scope of Ind AS 17, Leases; and

(c) measurements that have some similarities to fair value but are not fair value, such as net realisable value in Ind AS 2, Inventories, or value in use in Ind AS 36, Impairment of Assets.

Disclosure exclusion :

(a) plan assets measured at fair value in accordance with Ind AS 19, Employee Benefits;

(b) assets for which recoverable amount is fair value less costs of disposal in accordance with Ind AS 36.

4. DEFINITIONS :

This Ind AS defines fair value as 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.

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

5. ASSET OR LIABILITY SPECIFIC FAIR VALUE :

The standard emphasis that in order to get a fair value of an asset/ liability, the restrictions or conditions that might be related to a particular entity should not be taken into account because a fair value will be based on market participant assumptions rather to an entity specific conditions or restriction which usually will not affect fair valuation of an asset/ liability.

Question 1 – Entity Specific restrictions

An entity is having a land which has a restriction to develop into a commercial house because of restricted business objective in which currently it operates. The entity wants to sell the land and there would not be any restriction for a buyer of the land to develop a commercial house. Since this restriction is entity specific, hence it will not be considered while calculating fair value of the land.

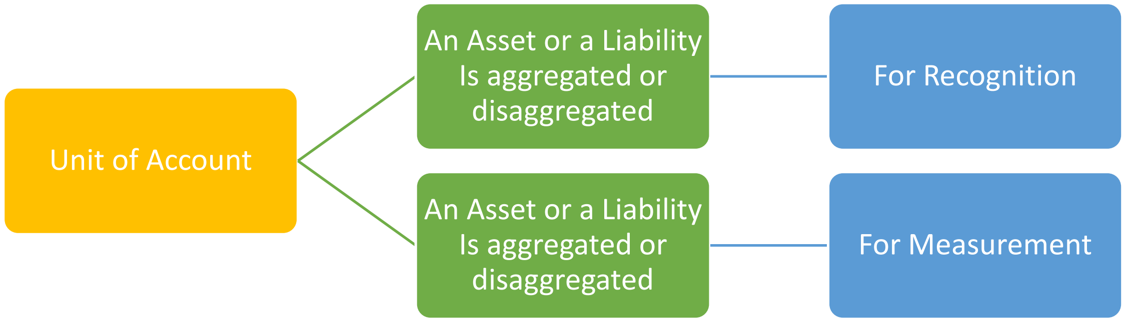
Question 2 – A manufacturing company

A manufacturing company is having certain securities which have been pledged with a bank and restricted to sell it for next 2 years. The restriction is entity specific and hence will not be considered while calculating fair value of the security as other market participant will not consider this restriction which is purely an entity specific.

Question 3 – Asset/ Liability specific restrictions

A car has been bought for private use and there is a restriction of not to use the car for any commercial purposes. Commercial vehicle is having more fair value than private vehicle. since the restriction to use the vehicle is asset specific and market participant will also consider the asset specific restrictions while calculating fair values for such asset and hence this condition will be considered while evaluating fair value of the car.

6. UNIT OF ACCOUNT :



Example :

An Entity having certain securities which are quoted at market and these are recognized at fair value in the Balance Sheet. Quoted prices at Individual level will be used in order to find Fair Values of these Investments.

Example :

In order to evaluate fair values of assets to identify impairment as per Ind-As 36- Impairment of Assets which requires to measure such Fair Value at Cash generating units, hence group of assets will be used in order to find fair Values for the requirement of such Standard.

7. THE TRANSACTION :

A fair value measurement assumes that the asset or liability is exchanged in an orderly transaction between market participants to sell the asset or transfer the liability at the measurement date under current market conditions.

A fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place either:

(a) in the principal market for the asset or liability; or

(b) in the absence of a principal market, in the most advantageous market for the asset or liability.

7.1 PRINCIPAL MARKET :

Market which is normally the place in which the assets/ liabilities are being transacted with highest volume with high level of activities comparing with any other market available for similar transactions.

Question 4 – Share of a company

Share of a company which is listed at BSE and NYSE has different closing prices at the year end. The price at BSE has greatest volume and activity whereas at NYSE it is less in terms of volume transacted in the period. Since BSE has got highest volume and significant level of activity comparing to other market although the closing price is higher at NYSE, the closing price at BSE would be taken.

7.2 MOST ADVANTAGEOUS MARKET :

- This is the market which either maximizes the amount that would be received when an entity sells an asset or minimize the amount that is to be paid while transferring the liability.
- In the absence of principal market, this market is used for Fair Valuation of the Assets/ Liabilities. In many cases Principal market & most advantageous market will be same.
- The market will be assessed based on net proceeds from the sale which will deduct expenses associated with such sale in most advantageous market.

Question 5 – Diamond (a commodity)

Diamond (a commodity) has got a domestic market where the prices are lesser comparing to the price available for export of similar diamonds. The Government has a policy to cap the export of Diamond, maximum upto 10% of total output by any such manufacturer. The normal activities of diamond are being done at domestic market only i.e. 90% and balance 10% only can be sold via export. The highest level of activities with highest volume is being done at domestic market. Hence, principal market for diamond would be domestic market. Export prices are more than the prices in the principal market and it would give highest return comparing to the domestic market. Therefore, the export market would be considered as most advantageous market. However, if principal market is available, then its prices would be used for fair valuation of assets/ liabilities.

8. MARKET PARTICIPANTS

An entity shall measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

What are market participants?

The parties which eventually transact the assets/ liabilities either in principal market or most advantageous market in their best economic interest i.e.

- They should be independent and not a related party. However, if related parties have done similar transaction on arm's length price, then it can be between related parties as well.
- The parties should not be under any stress or force to enter into these transactions
- All parties should have reasonable and sufficient information about the same.

Question 6 – A land

A land has legal restriction to use it for commercial purposes in next 10 years irrespective of its holder. The fair value of the land will include this restriction about its usage because it is an asset related restriction and any buyer will need to take over with similar restriction to use the land for next 10 years. Now to evaluate its fair value, one has to consider the restriction based on the assumptions which normally would be taking into account by its market participants, mentioned as below

a) Whether the restriction is commonly imposed on each such type of land?

b) How useful it will be after the end of 10 years?

c) Whether there is any alternative use which may be considered normally by a participant for similar kind of deals?

d) How liquid the sale of land will be with such restrictions?

e) Comparing the price with similar kind of land without restrictions to arrive at its fair values.

9. THE PRICE :

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions (i.e. an exit price) regardless of whether that price is directly observable or estimated using another valuation technique.

9.1 TRANSACTION COST :

Principal (or most advantageous) market is where significant level of transactions and activities takes place and it eventually covers/ considers all such transaction costs. Hence, it would not be appropriate to consider any transaction cost further while assessing fair values from such principal markets.

9.2 TRANSPORT COST :

If location is a characteristic of the asset (as might be the case, for example, for a commodity), the price in the principal (or most advantageous) market shall be adjusted for the costs, if any, that would be incurred to transport the asset from its current location to that market.

It would be considered, if in case it is an inherent part of the Assets/ Liability so transacted e.g. commodity.

	Principal market	Most advantageous market
Transaction Cost	NO	YES
Transport cost	YES	YES

Question 7 – An entity

An entity sells certain commodity which are available actively at location A and which is considered to be its principal market (being significant volume of transactions and activities takes place). However, fair value of the commodity is required to be assessed for location B which is far from location A and requires a transport cost of Rs. 100. Since the transport cost is not a transaction cost and it is not specific to any transaction but it is inherent cost which requires to be incurred while bringing such commodity from location A to location B, it will be considered while evaluating fair value from the principal market.

10. APPLYING FAIR VALUE RULES ON NON-FINANCIAL ASSETS :

Fair valuation in case of non-financial assets especially buildings and other fixed assets often require to look for the best and highest use by its market participants and that will be the reference point to evaluate fair value of such non-financial assets.

10.1 HIGHEST AND BEST USE :

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

Analysis of Highest and best use for non-financial asset

- The highest and best use would determine an indicative price for a non-financial asset which usually do not have any frequently traded market unlike for other financial products.
- The concept emphasis that in order to find a fair value of such non-financial products, one has to define its best possible use which makes the non-financial

asset separate from any specific entity who would like to use such asset in their own specific purposes which may or may not be its best use.

- To find out the best possible use, one has to identify its market participants and then to find best legitimate use of this non- financial asset which one would normally do.
- All restrictions specific to any market participant would not be considered while finding out fair value of the non-financial asset.
- It is imperative to understand the best use while evaluating such fair values, as there is no need to exhaust all possible uses of such non-financial assets before concluding highest and best use,
- In the absence of potential best use which is not easily available, its current use would be considered as best use.

Example :

An entity bought some land which is intended to be used for business purposes. However, the entity now wants to sell this piece of land at its fair value. One has to evaluate all possible use of this land before concluding its fair value. The land could be used to make a commercial palace, which could be more in value comparing when it is used for business purposes. The commercial palace value would be considered its highest and best use if the same is allowed in its near location and conditions.

10.2 VALUATION PREMISE :

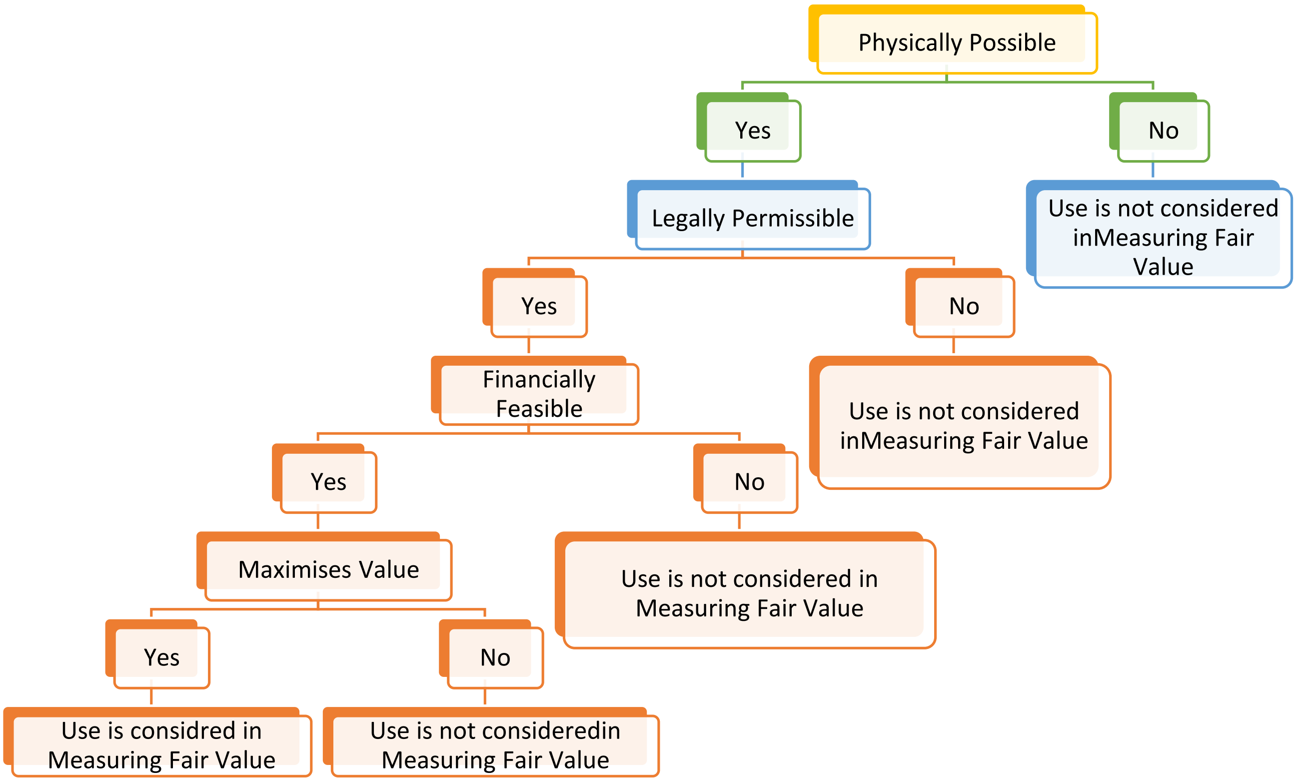
Fair value measurement of non-financial assets would be based on either

1) In combination with other assets, or
2) At stand alone basis,

Standard requires to use best used value if such non-financial asset is used in combination with some other assets and it is demonstrated that the such combination is widely used by other market participants also in order to find best use for the non-financial asset.

Example :

To find the Fair Value of a customer relations where a right to receive all future technological updates/ researches are being provided as complementary (which are in a way other intangible assets) to the customers. The customer relationship would be valued together with the research/ updates as it is likely to have less or no value for the customer relations without considering such technological updates/ researches which are being provided free to them.



11. APPLYING FAIR VALUE RULES TO LIABILITIES AND AN ENTITY'S OWN EQUITY INSTRUMENTS :

A fair value measurement assumes that a financial or non-financial liability or an entity's own equity instrument (e.g. equity interests issued as consideration in a business combination) is transferred to a market participant at the measurement date.

Often times a liability or an equity instrument of an entity is being transferred to some other market participant as part of a transaction e.g. a business combination etc., where certain liabilities or equity instruments are being issued in consideration of such acquisitions.

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.

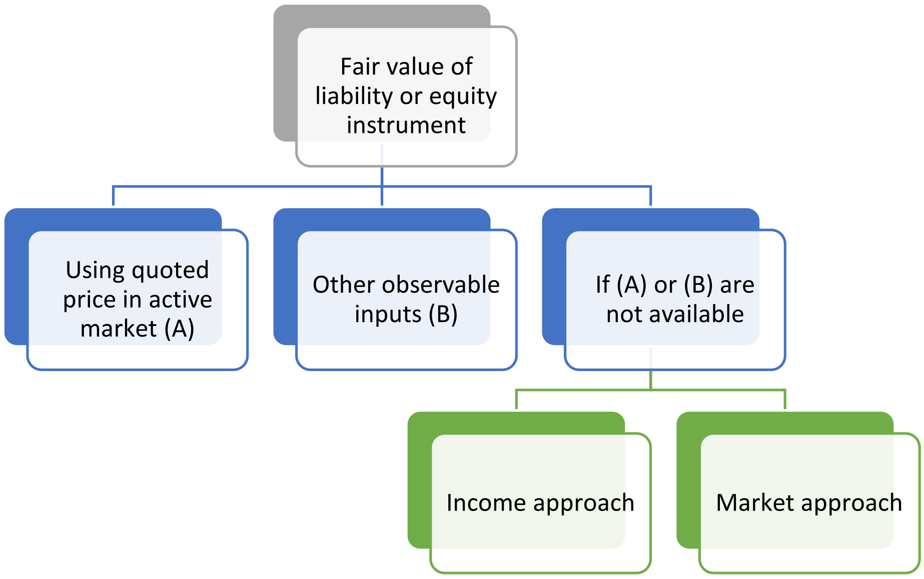
Unobservable Inputs : Inputs for which market data are not available and that are developed using the best information available about the assumptions that market participants would use when pricing the asset or liability.

11.1 When liability and equity Instruments are held by other parties as assets :

When direct quoted prices are not available for liabilities or equity instruments, then an entity should use an identical price of similar liabilities or equity instruments which is held by market participants as an asset. The quoted prices of such assets at the measurement date should be used. However, if quoted prices are not available then observable inputs can be used. In the absence of observable inputs, the valuation techniques such as income approach or market approach etc. may be used.

11.2 When liability and equity Instruments are not held by other parties as assets :

When these are not held by other parties then valuation techniques from the perspective of a market participant that owes the liability or has issued the claim on equity would be used to evaluate such fair values.



12. APPLYING FAIR VALUE RULES TO FINANCIAL ASSET & FINANCIAL LIABILITY WITH OFFSETTING POSITION IN MARKET RISK OR COUNTERPARTY RISK :

Assets and liabilities that are being managed by an entity would be affected by its market risk i.e. interest rate risk, currency risk etc. and credit risk relating to its respective counterparties. There are many situations where a group of assets and liabilities are being managed on net basis rather on individual basis by an Entity.

Analysis of applying offsetting position in market or credit risk

- This exception is allowed only in case the other market participants also manage the similar risk on net basis.
- There should ideally be same information and market practice available for making these assets/ liabilities on net basis.

  Example : All open position for derivatives are being normally evaluated on net exposure basis from each counterparty.
- Once the exception to fair value certain assets/ liabilities on net basis is being used, then unit of account to measure fair value would be considered as net.
- Market risk should be same while combining certain asset/ liability.

  Example : An interest rate risk can not be netted with a commodity price risk.
- Duration of a market risk should be identical to use the exception for valuing assets/ liabilities on net basis.

  Example : An interest rate swap of longer period will only be allowed to value at net basis upto the duration of financial instrument of the same duration.

Example :
Certain Interest rate risk from counterparty Z is being managed on net basis considering the changes in interest rate amount receivable and amounts payable to counterparty Z from normal sale/ purchase basis. Hence such net exposure would be used to evaluate fair values as required by this standard. The netting should normally be followed by other market participants as well and should not be an entity specific.

13. FAIR VALUE AT INITIAL RECOGNITION :

When determining whether fair value at initial recognition equals the transaction price, an entity shall take into account factors specific to the transaction and to the asset or liability. For example, the transaction price might not represent the fair value of an asset or a liability at initial recognition if any of the following conditions exist:

(a) The transaction is between related parties, although the price in a related party transaction may be used as an input into a fair value measurement if the entity has evidence that the transaction was entered into at market terms.

(b) The transaction takes place under duress or the seller is forced to accept the price in the transaction. For example, that might be the case if the seller is experiencing financial difficulty.

(c) The unit of account represented by the transaction price is different from the unit of account for the asset or liability measured at fair value. For example, that might be the case if the asset or liability measured at fair value is only one of the elements in the transaction (eg in a business combination), the transaction includes unstated rights and privileges that are measured separately in accordance with another Ind AS, or the transaction price includes transaction costs.

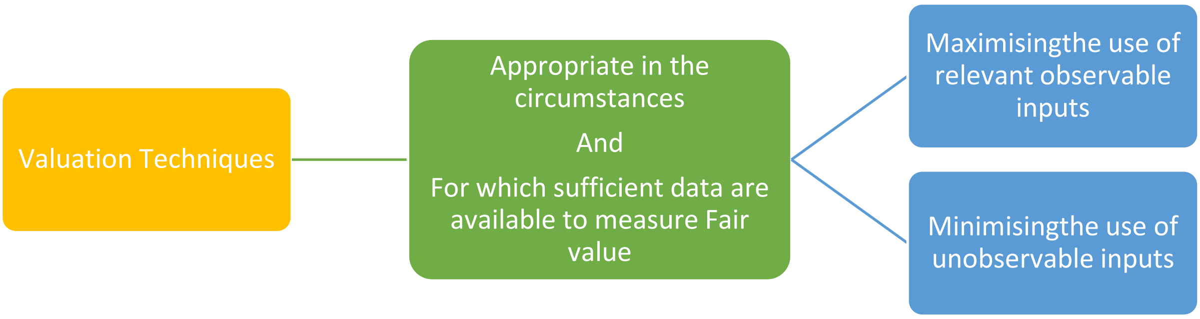
(d) The market in which the transaction takes place is different from the principal market (or most advantageous market). For example, those markets might be different if the entity is a dealer that enters into transactions with customers in the retail market, but the principal (or most advantageous) market for the exit transaction is with other dealers in the dealer market.

If another Ind AS requires or permits an entity to measure an asset or a liability initially at fair value and the transaction price differs from fair value, the entity shall recognise the resulting gain or loss in profit or loss unless that Ind AS specifies otherwise.

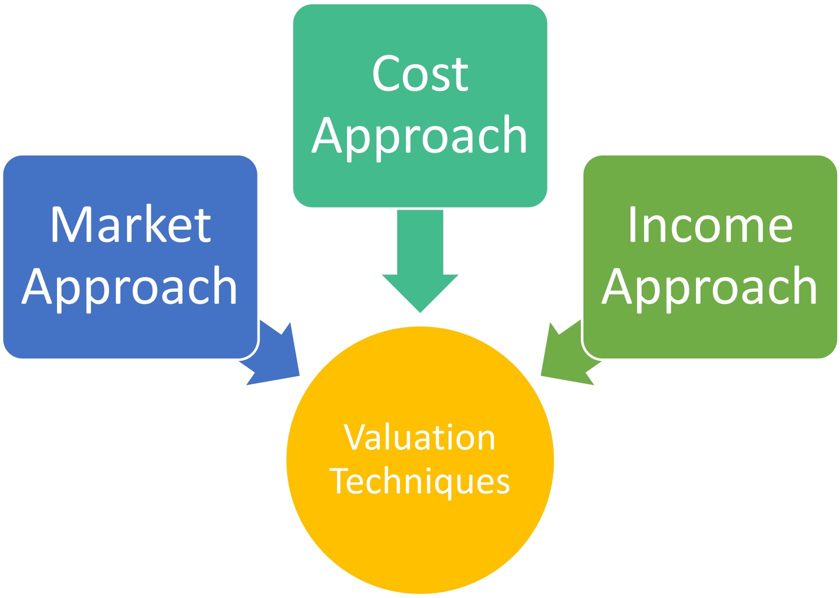
14. VALUATION TECHNIQUE :

An entity shall use valuation techniques that are 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.

It is pertinent to note that the overall objective to use any valuation approach or technique is in accordance with all relevant data available related to the Asset/ liability which could utilize all directly observable inputs.



Ind AS 113 specifies following three approaches to measure fair values:



1. **MARKET APPROACH :** The market approach 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.

   Quoted prices are indicative values of any business if it exchanges in an active market. However, in the absence of such quoted prices, it is relevant to value the business based on market values and do some adjustment relevant to the assets/ liabilities. Standard specifies a valuation technique called "Matrix pricing" which is normally used to value debt securities. This technique relates the securities with some similar benchmarked securities including coupons, credit ratings etc. to derive at fair value of the debt.

   Example :
   An entity does not have any security which is quoted in an active market, however its price to earnings ratio is being used to corroborate its enterprise value with certain adjustments relevant to the business e.g. there are some specific restrictions to use certain assets for some specific period being in a specialized industry.

2. **INCOME APPROACH :** The income approach converts future amounts (e.g. cash flows or income and expenses) to a single current (i.e. discounted) amount. When the income

approach is used, the fair value measurement reflects current market expectations about those future amounts.

It is a present value of all future earnings from an entity whose fair values are being evaluated or in other words all future cash flows to be discounted at current date to get fair value of the asset / liability.

Assumption to the future cash flows and an appropriate discount rate would be based on the other market participant's views. Related risks and uncertainty would require to be considered and would be taken into either in cash flow or discount rate.

Standard defines the below techniques which may be considered while using Income approach

a) Present value techniques
b) Option pricing modals e.g. Black-scholes Merton modal or Binomial modal,
c) The multi period excess earning method.

3. **COST APPROACH :** This method describes how much cost is required to replace existing asset/ liability in order to make it in a working condition. All related costs will be its fair value. It actually considers replacement cost of the asset/ liability for which we need to find fair value.

Question 8 – An entity

Discount Rate assessment to measure present value:

Investment 1 is a contractual right to receive Rs. 800 in 1 year. There is an established market for comparable assets, and information about those assets, including price information, is available. Of those comparable assets:

a. Investment 2 is a contractual right to receive Rs. 1,200 in 1 year and has a market price of Rs. 1,083.
b. Investment 3 is a contractual right to receive Rs. 700 in 2 years and has a market price of Rs. 566.

All three assets are comparable with respect to risk (that is, dispersion of possible payoffs and credit).

You are required to measure the fair value of Asset 1 basis above information.

15. INPUTS TO VALUATION TECHNIQUES :

Valuation techniques used to measure fair value shall maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

It has widely been mentioned that observable inputs should be used to evaluate fair value of an asset/ liability and we should minimize using any unobservable inputs.

Standard describes the below instances where observable inputs are being used in case of certain Financial Instruments :

Market (by Nature)	Prices (Observable)	Rationale	IND AS 113 Compliant
Exchange Markets	Closing prices	Readily available	Yes
Dealer Market	Bid & Ask prices	Readily available than closing prices	Yes
Brokered Market	Buy & Sell order matching, commercial and residential markets	Broker knows better prices from both buy & Sell side	Yes
Principal to principal Markets	Negotiated prices with no intermediary	Little information available in market	Yes

16. FAIR VALUE HIERARCHY

The hierarchy has been categorized in 3 levels which are based on the level of inputs that are being used to find out such fair values.

Level 1 Inputs :

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

A quoted price in an active market provides the most reliable evidence of fair value and shall be used without adjustment to measure fair value whenever available.

A Level 1 input will be available for many financial assets and financial liabilities, some of which might be exchanged in multiple active markets (e.g. on different exchanges). Therefore, the emphasis within Level 1 is on determining both of the following:

- The principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the assetorliability
- Whether the entity can enter into a transaction for the asset or liability at the price in that market at the measurement date

Example :

An entity is holding investment which is quoted in BSE, India and NYSE, USA. However, significant activities are being done at BSE only. The fair value of the investment would be referenced to the quoted price at BSE India (which is Level 1 fair value- Direct quoted price with no adjustments).

<u>Level 2 Inputs :</u>

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

If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset or liability. Level 2 inputs include the following:

(a) quoted prices for similar assets or liabilities in active markets.

(b) quoted prices for identical or similar assets or liabilities in markets that are not active.

(c) inputs other than quoted prices that are observable for the asset or liability, for example:

- (i) interest rates and yield curves observable at commonly quoted intervals;
- (ii) implied volatilities; and
- (iii) credit spreads.
- (iv) market-corroborated inputs.

Example :

Receive-fixed, pay-variable interest rate swap based on a yield curve denominated in a foreign currency. It requires rate of swap which is of 11 years. However, normally the rates are available only for the maximum period of 10 years. The rate for 11 years can be established using extrapolation or some other techniques which is based on 10 years' available rates of swap. The fair value of 11 years so derived would be level 2 fair value.

Example :

An entity has an investment in another entity which has no active market. However, some similar investment is being traded in an active market. Now, the fair valuation can be done based on either the prices based on the market which is not active or similar traded investment in an active market. This would be considered as level 2 inputs.

<u>Level 3 Inputs :</u>

Level 3 inputs are unobservable inputs for the asset or liability. Unobservable inputs shall be 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. However, the fair value measurement objective remains the same, i.e. an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability. Therefore, unobservable inputs shall reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.

Assumptions about risk include the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model) and the risk inherent in the inputs to the valuation technique. A measurement that does not include an adjustment for risk would not represent a fair value measurement if market participants would include one when pricing the asset or liability.

17. DISCLOSURE :

An entity shall disclose information that helps users of its financial statements assess both of the following:

(a) for assets and liabilities that are measured at fair value on a recurring or non-recurring basis in the balance sheet after initial recognition, the valuation techniques and inputs used to develop those measurements.

(b) for recurring 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.

18. SELF PRACTICE QUESTIONS :

Question 9 –

An asset is sold in 2 different active markets at different prices. An entity enters into transactions in both markets and can access the price in those markets for the asset at the measurement date.

In Market A :

The price that would be received is Rs.26, transaction costs in that market are Rs.3 and the costs to transport the asset to that market are Rs.2.

In Market B :

The price that would be received is Rs.25, transaction costs in that market are Rs1 and the costs to transport the asset to that market are Rs.2.

You are required to calculate:

(i) The fair value of the asset, if market A is the principal market, and

(ii) The fair value of the asset, if none of the markets is principal market.

Question 10 – Company J

Company J acquires land in a business combination. The land is currently developed for industrial use as a factory site. Although the land's current use is presumed to be its highest and best use unless market or other factors suggest a different use, Company J considers the fact that nearby sites have recently been developed for residential use as high-rise apartment buildings.

On the basis of that development and recent zoning and other changes to facilitate that development, Company J determines that the land currently used as a factory site could be developed as a residential site (e.g., for high-rise apartment buildings) and that market participants would take into account the potential to develop the site for residential use when pricing the land.

Determine the highest and best use of the land.

Question 11 – ABC Ltd.

ABC Ltd. acquired 5% equity shares of XYZ Ltd. for Rs. 10 crore in the year 20X1-20X2. The company is in process of preparing the financial statements for the year 20X2-20X3 and is assessing the fair value at subsequent measurement of the investment made in XYZ Ltd. Based on the observable input, the ABC Ltd. identified a similar nature of transaction in which PQR Ltd. acquired 20% equity shares in XYZ Ltd. for Rs. 60 crore. The price of such transaction was determined on the basis of Comparable Companies Method (CCM)- Enterprise Value (EV) / EBITDA which was 8. For the current year, the EBITDA of XYZ Ltd. is Rs. 40 crore. At the time of acquisition, the valuation was determined after considering 5% of liquidity discount and 5% of non-controlling stake discount. What will be the fair value of ABC Ltd.'s investment in XYZ Ltd. as on the balance sheet date?

Question 12 – UK Ltd.

UK Ltd. is in the process of acquisition of shares of PT Ltd. as part of business reorganization plan. The projected free cash flow of PT Ltd. for the next 5 years are as follows:

(Rs. in crore)

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
Cash flows	187.1	187.6	121.8	269	278.8
Terminal Value					3,965

The weightage average cost of capital of PT Ltd. is 11%. The total debt as on measurement date is Rs. 1,465 crore and the surplus cash & cash equivalent is Rs. 106.14 crore.

The total numbers of shares of PT Ltd. as on the measurement date is 8,52,84,223 shares. Determine value per share of PT Ltd. as per Income Approach.

Question 13 – KK Ltd.

You are a senior consultant of your firm and are in process of determining the valuation of KK Ltd. You have determined the valuation of the company by two approaches i.e. Market Approach and Income approach and selected the highest as the final value. However, based upon the discussion with your partner you have been requested to assign equal weights to both the approaches and determine a fair value of shares of KK Ltd. The details of the KK Ltd. are as follows:

Particulars	Rs. in crore
Valuation as per Market Approach	5268.2
Valuation as per Income Approach	3235.2
Debt obligation as on Measurement date	1465.9
Surplus cash & cash equivalent	106.14
Fair value of surplus assets and Liabilities	312.4
Number of shares of KK Ltd.	8,52,84,223 shares

Determine the Equity value of KK Ltd. as on the measurement date on the basis of above details.

Question 14 – DS Limited

Comment on the following by quoting references from appropriate Ind AS.

(i) DS Limited holds some vacant land for which the use is not yet determined. the land is situated in a prominent area of the city where lot of commercial complexes are coming up and there is no legal restriction to convert the land into a commercial land.

The company is not interested in developing the land to a commercial complex as it is not its business objective. Currently the land has been let out as a parking lot for the commercial complexes around.

The Company has classified the above property as investment property. It has approached you, an expert in valuation, to obtain fair value of the land for the purpose of disclosure under Ind AS.

On what basis will the land be fair valued under Ind AS?

(ii) DS Limited holds equity shares of a private company. In order to determine the fair value' of the shares, the company used discounted cash flow method as there were no similar shares available in the market.

Under which level of fair value hierarchy will the above inputs be classified?

What will be your answer if the quoted price of similar companies were available and can be used for fair valuation of the shares?

Question 15 – A Ltd.

On 1st January, 20X1, A Ltd assumes a decommissioning liability in a business combination. The reporting entity is legally required to dismantle and remove an offshore oil platform at the end of its useful life, which is estimated to be 10 years. The following information is relevant:

If A Ltd was contractually allowed to transfer its decommissioning liability to a market participant, it concludes that a market participant would use all of the following inputs, probability weighted as appropriate, when estimating the price it would expect to receive:

a. Labour costs

Labour costs are developed based on current marketplace wages, adjusted for expectations of future wage increases, required to hire contractors to dismantle and remove offshore oil platforms. A Ltd. assigns probability to a range of cash flow estimates as follows:

Cash Flow Estimates:	100 Cr	125 Cr	175 Cr
Probability:	25%	50%	25%

b. Allocation of overhead costs:

Assigned at 80% of labour cost

c. The compensation that a market participant would require for undertaking the activity and for assuming the risk associated with the obligation to dismantle and remove the asset. Such compensation includes both of the following:

   i. Profit on labour and overhead costs:
   A profit mark-up of 20% is consistent with the rate that a market participant would require as compensation for undertaking the activity

   ii. The risk that the actual cash outflows might differ from those expected, excluding inflation:

   A Ltd. estimates the amount of that premium to be 5% of the expected cash flows. The expected cash flows are 'real cash flows' / 'cash flows in terms of monetary value today'.

d. Effect of inflation on estimated costs and profits
   A Ltd. assumes a rate of inflation of 4 percent over the 10-year period based on available market data.

e. Time value of money, represented by the risk-free rate: 5%

f. Non-performance risk relating to the risk that Entity A will not fulfill the obligation, including A Ltd.'s own credit risk: 3.5%

A Ltd, concludes that its assumptions would be used by market participants. In addition, A Ltd. does not adjust its fair value measurement for the existence of a restriction preventing it from transferring the liability.

You are required to calculate the fair value of the asset retirement obligation.

Question 16 – Entity A

(i) Entity A owns 250 ordinary shares in company XYZ, an unquoted company. Company XYZ has a total share capital of 5,000 shares with nominal value of Rs. 10. Entity XYZ's after-tax maintainable profits are estimated at Rs. 70,000 per year. An appropriate price/earnings ratio determined from published industry data is 15 (before lack of marketability adjustment). Entity A's management estimates that the discount for the lack of marketability of company XYZ's shares and restrictions on their transfer is 20%. Entity A values its holding in company XYZ's shares based on earnings. Determine the fair value of Entity A's investment in XYZ's shares.

(ii) Based on the facts given in the aforementioned part (i), assume that, Entity A estimates the fair value of the shares it owns in company XYZ using a net asset valuation technique. The fair value of company XYZ's net assets including those recognised in its balance sheet and those that are not recognised is Rs. 8,50,000. Determine the fair value of Entity A's investment in XYZ's shares.

Thanks ....