

## Cost Approach to Value

**Keywords:** Cost Approach, Replacement Cost New, Reproduction Cost, Quantity Survey Method, Square Foot Cost/Flat Rate Method, Cost Index Method, Historical Cost, Book Value, Age, Physical Life, Economic Life, Useful Life, Legal Life, Factor Affecting Life, Balance/Remaining Economic or Useful Life, Depreciation, Lump Sum Method, Straight Line Method, Written Down Value Method, Digit Sum Method, Sinking Fund Method, Constant Percentage Method, Technological, Functional & Economic Obsolescence, Salvage Value, Scrap Value, Residual Value, Depreciated Replacement Cost

1	A valuation approach which is based on the economic principle that a buyer will pay no more for an asset than the cost to obtain an asset of equal utility, whether by purchase or by construction is called...
A	Cost approach
B	Market approach
C	Income approach
D	All of above
2	The current cost of construction for creating an identical or similar building offering equivalent utility and service is called...
A	Reproduction cost
B	Replacement cost
C	Construction cost
D	Utility & service cost
3	The current cost of construction for creating an identical or replica of building is called...
A	Reproduction cost
B	Replacement cost
C	Construction cost
D	Utility & service cost
4	Which of the following is not considered as a direct cost in computation of Replacement Cost?
A	Labor
B	Equipment
C	Insurance premium
D	Material
5	Which of the following is considered as a direct cost in computation of Replacement Cost?
A	Legal fees & expenses
B	Selling expenses
C	Insurance premium
D	Material
6	Out of following, which cost is not considered as an indirect cost in computation of Replacement Cost?
A	Building permission & license
B	Labor
C	Taxes
D	Contractor's profit
7	Out of following, which cost is considered as an indirect cost in computation of Replacement Cost?
A	Interest
B	Labor
C	Equipment
D	Material
8	A method of estimating of cost in which each items of building is worked out in details to find quantity to be used and multiply by current rate of items is called...

## Cost Approach to Value

A	Square foot method
B	Cost index method
C	Reinstatement method
D	<b>Quantity survey method</b>
9	If an estimation of cost of building is made on the basis of unit rate of building area or volume than it is called...
A	<b>Flat rate method or Plinth area rate</b>
B	Cost index method
C	Reinstatement method
D	Quantity survey method
10	In which method of estimation of cost, current cost of construction is estimated based on comparison with trend of cost?
A	Flat rate method
B	<b>Cost index method</b>
C	Reinstatement method
D	Quantity survey method
11	A building was built in the year of 2005 at cost of Rs. 5,00,000. If cost index for year 2005 and 2018 are 200 & 1000 respectively, with year of 2000 as base index 100. Find out the replacement cost of building for the year 2018.
A	Rs. 24,00,000
B	Rs. 30,00,000
C	<b>Rs. 25,00,000</b>
D	Rs. 1,00,000
12	An actual cost incurred to create or acquire an asset is called...
A	<b>Historical cost</b>
B	Sale price
C	Price
D	Value
13	Mr. A purchased a plot of land at Rs. 1,00,000 and built a building at cost of Rs. 50,000 in the year of 2014. In 2018, Mr. A sales this land & building at Rs. 2,00,000. What will be a historical cost for Mr. A for this land & building?
A	Rs. 1,00,000
B	<b>Rs. 1,50,000</b>
C	Rs. 50,000
D	Rs. 2,00,000
14	The cost of an asset or other amount substituted for cost, less its residual value is called,,
A	Depreciation
B	<b>Depreciable amount</b>
C	Substituted cost
D	None of above
15	The systematic allocation of the depreciable amount of an asset over its useful life is called...
A	<b>Depreciation</b>
B	Depreciable amount
C	Cost allocation
D	Price allocation
16	The amount at which an asset is recognized in the financial statements of an entity after deducting any accumulated depreciation and any accumulated impairment losses is called...
A	Historical cost
B	Replacement cost
C	Reproduction cost

## Cost Approach to Value

<b>D</b>	<b>Book Value (Carrying amount)</b>
<b>17</b>	<b>Mr. A purchased an asset at Rs. 2,00,000 on 1 January 2015. If accumulated depreciation is Rs. 50,000 for last three years than what will be a book value of asset for Mr. A at 1 January 2018?</b>
A	2,00,000
B	50,000
<b>C</b>	<b>1,50,000</b>
D	2,50,000
<b>18</b>	<b>Mr. A purchased an asset at Rs. 2,00,000 on 1 January 2015. If accumulated depreciation is Rs. 50,000 for last three years and accumulated impairment loss is Rs. 25,000 for last year than what will be a book value of asset for Mr. A at 1 January 2018?</b>
A	2,00,000
B	50,000
C	2,75,000
<b>D</b>	<b>1,25,000</b>
<b>19</b>	<b>The number of years that have passed since the asset/building/structure was built is called...</b>
<b>A</b>	<b>Actual age or Age (chronological age)</b>
B	Life
C	Future Life
D	Effective age
<b>20</b>	<b>If a building is better maintained than other buildings in its vicinity than the _____ age of the building will be less than its actual age.</b>
A	Calculate
B	Economic
<b>C</b>	<b>Effective</b>
D	Useful
<b>21</b>	<b>The actual survival life of span of the asset before it collapses or demolition is called...</b>
A	Chronological age
<b>B</b>	<b>Physical life</b>
C	Future life
D	Useful life
<b>22</b>	<b>The life span of the asset during which it will generate positive net income (economic benefit) with sustainable cost of repair &amp; maintenance is called...</b>
<b>A</b>	<b>Economic life</b>
B	Physical life
C	Future life
D	Useful life
<b>23</b>	<b>The period over which an asset is expected to be available for use by an entity for which it was designed is called...</b>
A	Economic life
B	Physical life
C	Future life
<b>D</b>	<b>Useful life</b>
<b>24</b>	<b>If building is properly used than...</b>
<b>A</b>	<b>Physical life &gt; Useful life &gt; Economic life</b>
B	Physical life < Useful life < Economic life
C	Physical life = Useful life = Economic life
D	Physical life < Useful life > Economic life
<b>25</b>	<b>Which method of estimation of cost is most appropriate for litigation or court purpose?</b>
A	Flat rate method or Plinth area rate
B	Cost index method

## Cost Approach to Value

C	Reinstatement method
D	<b>Quantity survey method</b>
26	<b>Which method of estimation of cost used for quick estimation of cost of construction?</b>
A	<b>Flat rate method or Plinth area rate</b>
B	Cost index method
C	Reinstatement method
D	Quantity survey method
27	<b>Which method of estimation of cost used by contractor to bid a job?</b>
A	Flat rate method or Plinth area rate
B	Cost index method
C	Reinstatement method
D	<b>Quantity survey method</b>
28	<b>Which method of estimation of cost used for to obtain administrative approval and budgetary purpose for the cost of construction?</b>
A	Flat rate method or Plinth area rate
B	<b>Cost index method</b>
C	Reinstatement method
D	Quantity survey method
29	<b>The price expected for a whole property whose service/useful life is over but is still in continued use and in working condition is called...</b>
A	Useful value
B	Value in use
C	Scrap Value
D	<b>Salvage value</b>
30	<b>The estimated price of the dismantled materials of the property which has become completely useless for any further use is called...</b>
A	Useful value
B	Value in use
C	<b>Scrap Value</b>
D	Salvage value
31	<b>If the depreciation of asset is provided on the basis of visual inspection of deterioration than it is called...</b>
A	<b>Lump sum Method</b>
B	Visual method
C	Straight line method
D	Written down value method
32	<b>If the building is very old and any data regarding year of construction or renovation is not available than which method of depreciation should be use?</b>
A	<b>Lump sum method</b>
B	Sum of Digit method
C	Straight line method
D	Written down value method
33	<b>In which method of depreciation, constant depreciable amount is provided for each year over it useful life?</b>
A	Lump sum method
B	Sum of Digit method
C	<b>Straight line method</b>
D	Written down value method
34	<b>Formula of annual depreciation in straight method is... (where D = Annual depreciation, C = Historical / Replacement cost, F = Salvage value &amp; N = Total life (useful/economic))</b>



## Cost Approach to Value

A	$D = (C - F)/N$
B	$D = (F - C)/N$
C	$D = (N - F)/C$
D	$D = (C - N)/F$
<b>35</b>	<b>What would be an annual depreciation, if replacement cost of asset is Rs. 10,000, useful is 10 years and salvage value is null?</b>
A	Rs. 900
<b>B</b>	<b>Rs. 1,000</b>
C	Rs. 1,100
D	Rs. 800
<b>36</b>	<b>What would be an annual depreciation, if replacement cost of asset is Rs. 10,000, useful is 10 years and salvage value is 10%?</b>
<b>A</b>	<b>Rs. 900</b>
B	Rs. 1,000
C	Rs. 1,100
D	Rs. 800
<b>37</b>	<b>Which method of depreciation is adopted for preparation of balance sheet of company for taxation purpose?</b>
A	Lump sum method
B	Sum of Digit method
C	Sinking fund method
<b>D</b>	<b>Written down value method</b>
<b>38</b>	<b>What would be the written down value of an asset, if it is purchased at Rs. 10,000 after 2 years at 10% of depreciation rate?</b>
A	Rs. 9,000
<b>B</b>	<b>Rs. 8,100</b>
C	Rs. 8,900
D	Rs. 8,200
<b>39</b>	<b>What would be the accumulated depreciation by written down value method for depreciation of an asset, if it is purchased at Rs. 10,000 after 2 years at 10% of depreciation rate?</b>
A	Rs. 2,000
B	Rs. 2,100
<b>C</b>	<b>Rs. 1,900</b>
D	Rs. 1,800
<b>40</b>	<b>Which method of depreciation is used by engineers of Public Work Department?</b>
<b>A</b>	<b>Constant percentage method (linear method)</b>
B	Sum of Digit method
C	Straight line method
D	Written down value method
<b>41</b>	<b>Which method of depreciation gives lower depreciation per year in initial years of life span of the asset and higher depreciation per year in latter period of life of the asset?</b>
A	Constant percentage method (linear method)
B	Statutory depreciation method
C	Straight line method
<b>D</b>	<b>Sinking fund method or Sum of Digit method</b>
<b>42</b>	<b>Difference between total economic life and age or effective age is called...</b>
A	Physical life
<b>B</b>	<b>Future/Balance economic life</b>
C	Useful life
D	Legal life

## Cost Approach to Value

43	The cost established by depreciating the replacement cost in order to reflect the value attributable to the remaining portion of the total useful/economic life of the asset, taking due account of age, condition, obsolescence and other relevant factors, including salvage/scrap value at the end of the asset's useful/economic life is called...
A	Replacement cost
B	Depreciation
<b>C</b>	<b>Depreciated replacement cost</b>
D	None of above
44	Mr. A & Mr. B has entered into lease agreement for an open land for 30 years. As per lease agreement, Mr. B will construct building and after completion of lease period Mr. B will demolish the building and revert back an open to Mr. A. Life of building (30 years) will be considered as...
<b>A</b>	<b>Legal life</b>
B	Useful life
C	Economic life
D	All of above
45	Declining in value due to new inventions, changes in design or demand, improved methods of production/construction, change in legislation and taste and preference of consumers is called...
A	Depreciation
<b>B</b>	<b>Obsolescence</b>
C	Deterioration
D	All of above
46	The declining in value caused by usage, wear and tear and/or disintegration of the structural components of the building due to age is called...
A	Depreciation
B	Obsolescence
<b>C</b>	<b>Physical deterioration</b>
D	None of above
47	Which of the following is an example of physical deterioration?
A	Pre-fabricated structure
B	Small room sizes and irregular room layout
C	Nearby dirty industries
<b>D</b>	<b>Cracks in plaster</b>
48	The declining in value generated by inherent defects in the design of the structure or by changes in consumer attitudes toward the design of the structure and its fixtures is called...
A	Physical deterioration
<b>B</b>	<b>Functional obsolescence</b>
C	Economic obsolescence
D	Technical obsolescence
49	Which of the following is an example of functional obsolescence?
A	Pre-fabricated structure
<b>B</b>	<b>Old-fashioned bathroom &amp; kitchen</b>
C	Nearby dirty industries
D	Cracks in plaster
50	The declining in value caused by changes in economic, governmental policies, demographic, or locational influences outside the property is called...
A	Physical deterioration
B	Functional obsolescence
<b>C</b>	<b>Economic obsolescence</b>

## Cost Approach to Value

D	Technical obsolescence
<b>51</b>	<b>Which of the following is an example of economic obsolescence?</b>
A	Pre-fabricated structure
B	Old-fashioned bathroom & kitchen
<b>C</b>	<b>Poorly maintained adjacent properties</b>
D	Cracks in plaster
<b>52</b>	<b>Economic obsolescence is...</b>
A	Curable
<b>B</b>	<b>Incurable</b>
C	May be curable
D	All of above
<b>53</b>	<b>Functional obsolescence and physical deterioration is...</b>
A	Curable
B	Incurable
<b>C</b>	<b>May be curable or incurable</b>
D	All of above
<b>54</b>	<b>Replacement cost - Depreciation =</b>
<b>A</b>	<b>Depreciated replacement cost</b>
B	Reproduction cost
C	Historical cost
D	All of above
<b>55</b>	<b>Which of the following is an example due to technological obsolescence?</b>
<b>A</b>	<b>Pre-fabricated structure for construction</b>
B	Old-fashioned bathroom & kitchen
C	Poorly maintained adjacent properties
D	Cracks in plaster
<b>56</b>	<b>Replacement cost - Depreciation - Obsolescence =</b>
A	Approximate to salvage value
<b>B</b>	<b>Approximate to market value</b>
C	Approximate to scrap value
D	None of above
<b>57</b>	<b>Which of the following is not affecting factor for life of building?</b>
A	Quality of material used for construction
B	Quality of workmanship
C	Status of repair & maintenance
<b>D</b>	<b>None of above</b>
<b>59</b>	<b>Valuation by cost approach is appropriate for...</b>
A	Investment property
<b>B</b>	<b>Non-investment property</b>
C	Marketable property
D	All of above
<b>60</b>	<b>Which of the following is not affecting factor for life of building?</b>
A	Usage of structure
B	Soil condition
C	Weather & Environment
<b>D</b>	<b>None of above</b>
<b>61</b>	<b>Which of the following is not affecting factor for life of building?</b>
A	Design & Foundation
B	Lease tenure
C	Status of repair & maintenance

## Cost Approach to Value

<b>D</b>	<b>None of above</b>
<b>62</b>	<b>For valuation of specialized asset and to find insurable amount, which approach is appropriate...</b>
<b>A</b>	<b>Cost approach</b>
B	Market approach
C	Income approach
D	All of above
<b>63</b>	<b>For the valuation of religious &amp; public properties, which approach is most appropriate...</b>
A	Market approach
B	Income approach
<b>C</b>	<b>Cost approach</b>
D	All of above
<b>64</b>	<b>Age/effective age + future/balance useful life =</b>
A	Total physical life
<b>B</b>	<b>Total useful life</b>
C	Total economic life
D	Total legal life
<b>65</b>	<b>In valuation of industrial unit (land &amp; building) by adopting cost approach, estimation of value of land is derived by...</b>
A	Income approach
<b>B</b>	<b>Market approach</b>
C	Cost approach
D	All of above
<b>66</b>	<b>If comparable sale instances for identical or similar industrial unit (land &amp; building) are available than appropriate approach for valuation of industrial unit is...</b>
A	Income approach
<b>B</b>	<b>Market approach</b>
C	Cost approach
D	All of above
<b>67</b>	<b>Accrued depreciation is always measured as a charge against...</b>
A	Reproduction cost as of date of create or acquire
B	Actual cost when originally constructed
<b>C</b>	<b>Replacement cost new as of date of valuation</b>
D	Replacement cost as of date of create or acquire
<b>68</b>	<b>The judgment of Workmen N.G. Bank v/s N.G. Bank (AIR 1976, SC 611) is...</b>
A	Depreciation is decrease in value of the property through deterioration or obsolescence
B	Depreciation is decrease in value of the property through wear & deterioration
C	Depreciation is decrease in value of the property through deterioration & obsolescence
<b>D</b>	<b>Depreciation is decrease in value of the property through wear, deterioration &amp; obsolescence</b>
<b>69</b>	<b>In written down value method, for the first year depreciation is worked out on _____ and for successive years depreciation is worked out on _____.</b>
<b>A</b>	<b>Historical cost, reduced depreciated value of previous year</b>
B	Replacement cost, reduced depreciated value of previous year
C	Historical cost, reduced depreciated value of next year
D	Replacement cost, reduced depreciated value of next year
<b>70</b>	<b>Age and Effective age is...</b>
A	Equal
B	Not equal
<b>C</b>	<b>May be equal or not equal</b>
D	None of above



## Cost Approach to Value

### Case Study

71 Mr. A purchased an open plot of industrial land having area about 1,000 square meter at the rate of Rs. 5,000 per square meter and construct an industrial building having area about 500 square meter at the rate of Rs. 10,000 per square meter in end of the year 2012. The commercial operation of an industrial unit was started on 1 January 2013.

Date of Valuation is 1 January 2018; Date of Appointment for Valuation is 31 May 2018 and assumes standard fire policy for insurance.

- 1 What would be historical cost of an industrial unit for Mr. A?  
Answer **Rs. 1,00,00,000**
- 2 What would be insurable value of an industrial unit on 1 January 2013, if cost of foundation & plinth is 10% of cost of construction?  
Answer **Rs. 45,00,000**
- 3 What would be a market value of land (rounded), if market rate of land was Rs. 697 per square feet on 1 January 2018?  
Answer **Rs. 74,99,720 or Rs. 75,00,000 (1 Square feet = 10.76 square meter)**
- 4 What would be a market value of land (rounded) on 1 January 2018, if current market rate of land is Rs. 705 per square feet as on 31 May 2018 and annual appreciation in the rate of land is observed at 3%?  
Answer **Rs. 74,90,978 or Rs. 75,00,000**
- 5 What would be a replacement cost of building (rounded), if cost of construction was Rs. 12,000 per square meter on 1 January 2018?  
Answer **Rs. 60,00,000**
- 6 What would be a replacement cost of building (rounded) on 1 January 2018, if current cost of construction is Rs. 12,100 per square meter as on 31 May 2018 and annual appreciation in the rate of cost of construction is observed at 5%?  
Answer **Rs. 59,74,375 or Rs. 60,00,000**
- 7 What is an age of industrial unit on 1 January 2018?  
Answer **5**
- 8 What would be balance economic life of an industrial unit on 1 January 2018, if total economic life is 10 years?  
Answer **5**
- 9 What would be the written down value of an industrial unit after 2 years, if rate of depreciation is 5%?  
Answer **Rs. 95,12,500**
- 10 What would be depreciated replacement cost (assume depreciated replacement cost is equal to market value) of an industrial unit, if market rate of land was Rs. 697 per square feet, cost of construction was Rs. 12,000 per square meter on 1 January 2018 and total economic life is 10 years? Use straight line method for depreciation and salvage value is null.  
Answer **Rs. 1,05,00,000**
- 11 What would be market value of an industrial unit, if market rate of land was Rs. 697 per square feet, cost of construction was Rs. 12,000 per square meter on 1 January 2018, economic life is 10 years and observed economic obsolescence is 5%? Use straight line method for depreciation and salvage value is 5%.  
Answer **Rs. 1,04,92,500**
- 12 What would be accumulated depreciation for first 3 years if cost of construction was Rs. 12,000 per square meter, total economic life is 10 years and salvage value is 5%? Use straight line method for depreciation.  
Answer **Rs. 17,10,000**
- 13 What would be accumulated depreciation for first 2 years if cost of construction was Rs. 12,000 per square meter, economic life is 5 years and salvage value is null? Use sum of digit method for

## Cost Approach to Value

depreciation.

Answer **Rs. 12,00,000**

14 What would be insurable value of an industrial unit on 1 January 2018, if cost of construction was Rs. 12,000 per square meter, total economic life is 10 years, rate is 3% and cost of foundation & plinth is 10% of cost of construction? Use sinking fund method.

Answer **Rs. 29,00,000**

15 Assess the claim payable for partial loss by fire, if damages is estimated at Rs. 2 Lacs and sum insured is Rs. 20,00,000. (use data of serial no. 14)

Answer **Rs. 1,37,931**

16 If cost index for year 2013 and 2018 are 500 & 1000 respectively, with year of 2001 as base index 100. Find out the replacement cost of building for the year 2018.

Answer **Rs. 1,00,00,000**

# Valuation of Real Estate

Sanjay Patel

+91 9624669492

make suggestion & query at

[swamibeic@gmail.com](mailto:swamibeic@gmail.com)