Income Approach to Value (Plant & Machinery)

Keywords: Annuities, Capitalization, Rate of Capitalization, Years Purchase, Sinking Fund, Redemption of Capital, Reversionary Value, Gross Income-Outgoings, Net Income and Year's Purchase, Actual Income Vs Potential Income, Terminal Income, Remunerative and Accumulative Rates of Interest, Capitalization of Earnings Method, Discounted Future Earnings Method (DCF Technique, Pitfalls of DCF Technique

P&M: Plant & Machinery, DCF: Discounted Cash Flow

1 **Indication of value by converting future cash flows to a single current capital value is called…**

A Market approach
B **Income approach**
C Cost approach
D Capitalization

2 **Money that an individual or business receives in exchange for providing a goods or service or through investing capital is called…**

A **Income**
B Exchange of goods
C Capital
D Expenditure

3 **The return on an investment is called…**

A Income
B Capital
C **Yield**
D Rate

4 **Expression of annual yield as a percentage based on an investment's cost or its current market value is called…**

A Rate of income
B Rate of capital
C **Yield rate**
D Annual rate

5 **Mr. A received Rs. 8,000 as annual return on the investment of Rs. 1,00,000 in stock market than what would be a yield rate…**

A 10%
B 9%
C 11%
D **8%**

6 **A series of annual payments made or received at regular intervals either for indefinite or definite period of time is called…**

A Income
B **Annuity**
C Yield
D Expense

7 **Interest received from fixed deposit in bank is an example of…**

A Income
B Expense
C Yield
D **Annuity**

8 **The conversion of a periodic income to an equivalent capital value is called…**

A Profit
B Capital investment
C **Capitalization**
D All of above

9 **The return represented by the income produced by an investment, expressed as a percentage…**

A **Capitalization rate**

B Capital investment rate
C Rate of Profit
D Rate of income

10 Mr. A received as a net rent Rs. 1,000 per month on the investment of Rs. 1,00,000 in P&M than what would be a capitalization rate…

A 10%
B 9%
C 11%
D 12%

11 Formula to work out amount with simple interest =

(P = Principal amount, R = Rate of interest, n = Number of years, A = Amount receivable at end of n numbers of years including amount of principal & interest)

A $\mathbf{A = P + (P \times R \times n)}$
B $P = A + (P \times R \times n)$
C $R = N + (A \times P \times n)$
D $N = R + (A \times P \times n)$

12 If Mr. A deposits Rs. 10,000 at 10% (simple interest rate) in the bank for 10 years. What would be receivable amount for Mr. A at the end of 10 years?

A Rs. 21,000
B Rs. 18,000
C Rs. 20,000
D Rs. 19,000

13 Formula to work out amount with compound interest =

(P = Principal amount, R = Rate of interest, n = Number of years, A = Amount receivable at end of n numbers of years including amount of principal & interest)

A $A = R \times (1 + P)^{n}$
B $R = P \times (1 + A)^{n}$
C $P = A \times (1 + R)^{n}$
D $\mathbf{A = P \times (1 + R)^{n}}$

14 If Mr. A deposits Rs. 10,000 at 10% (compound interest rate) in the bank for 2 years. What would be receivable amount (future value) for Mr. A at the end of 2 years?

A Rs. 12,000
B Rs. 12,100
C Rs. 19,000
D Rs. 19,100

15 A rate of return used to convert a future monetary sum or cash flow into present value is called…

A Cash discount
B Conversion rate
C Discount rate
D None of above

16 The value of a future payment or series of future payments discounted to the specified date at suitable discount rate is called…

A Present value
B Future value
C Past value
D All of above

17 Formula to work out present value =

(PV = Present value, C = Capital sum at future date, R = Rate of interest, n = Number of years)

A $PV = C + (1 + R)^{n}$

B PV = C x $(1 + R)^n$

C PV = C / $(1 + R)^n$

D PV = C - $(1 + R)^n$

18 Formula to work out present value factor =

A PV factor = 1 + $(1 + R)^n$

B PV factor = 1 x $(1 + R)^n$

C PV factor= 1 / $(1 + R)^n$

D PV factor = 1 - $(1 + R)^n$

19 Mr. A want to purchase a machine at Rs. 1,08,900 after 2 years (in future). How much amount Mr. A has to deposit, if the bank or financial institute offered 10% compound interest rate?

A Rs. 1,00,000

B Rs. 90,000

C Rs. 95,000

D Rs. 1,08,000

21 A fund formed by setting aside an annual recurring amount for a given period of time to recoup capital invested in a landed property is called…

A Investment fund

B Sinking fund

C Capital fund

D All of above

22 A fund formed by periodically setting aside money for the gradual repayment of a debt or replacement of a wasting asset is called…

A Investment fund

B Sinking fund

C Capital fund

D None of above

23 Mr. A is wanted to receive Rs. 12,211 after 5 years. How much rupees Mr. A has to deposit in the bank at end of each year if bank offers 10% compound interest rate?

A Rs. 1,850

B Rs. 2,100

C Rs. 1,500

D Rs. 2,000

24 Formula to work out amount of sinking fund (ASF) =

A ASF = [n] ÷ [$(1 + R)^n$ – 1]

B ASF = [1] ÷ [$(1 + R)^n$ – 1]

C ASF = [R] ÷ [$(1 + R)^n$ – 1]

D ASF = [R] ÷ [$(1 + R)^n$ + 1]

25 The capital sum (value) required to be invested once, in order to receive an annual income as an annuity of rupee one (Rs. 1) for finite period of time at fixed rate of interest is called…

A Annual annuity

B Years' purchase

C Capital investment

D None of above

26 Rate of capitalization is ____________ excepted by the investor on his capital investment.

A Rate of investment

B Rate of yield

C Rate of interest

D All of above

27 The present value of Rs. 1 per annum receivable at the end of each year after accounting for a sinking fund to accumulate at the same rate of interest as that which is required on the invested

capital is called…

A Years' purchase
B Years' purchase dual rate
C Years' purchase single rate
D All of above

28 Formula to work out present value of amount of Rs. 1 per year (YP, single rate) =

A $YP = [1 - \{1 \div (1 + R)^n\}] \div [R]$
B $YP = [1 + \{1 \div (1 + R)^n\}] \div [R]$
C $YP = [1 \times \{1 \div (1 + R)^n\}] \div [R]$
D $YP = [R \times \{1 \div (1 + R)^n\}] \div [R]$

29 If Mr. A want to receive Rs. 1,000 at end of each year for next 5 years than how much amount Mr. A has deposit in the bank if rate of interest is 7%?

A Rs. 5,000
B Rs. 4,500
C Rs. 4,100
D Rs. 3,800

30 Mr. A want to yield income in form of rent Rs. 1,000 per year for next 5 years than how much amount Mr. A has invest in real estate if required rate of interest is 7%?

A Rs. 5,000
B Rs. 4,500
C Rs. 4,100
D Rs. 3,800

31 Formula to work out present value of amount of Rs. 1 per year (YP, dual rate) =
(R = Remunerative Rate of Interest, S = Sinking fund)

A 1 / (R - S)
B R / (R - S)
C S / (R - S)
D 1 / (R + S)

32 The rate of interest adopted for return on capital investment is called…

A Accumulative rate of interest
B Remunerative rate of interest
C Both (A) & (B)
D None of above

33 The rate of interest adopted for working out sinking fund (recoupment fund) is called…

A Accumulative rate of interest or Recoupment rate of inertest
B Remunerative rate of interest
C Both (A) & (B)
D None of above

34 Which relationship represent correct picture…

A Remunerative rate of interest = Accumulative rate of interest
B Remunerative rate of interest < Accumulative rate of interest
C Remunerative rate of interest > Accumulative rate of interest
D None of above

35 The gain or loss on an investment over a specified time period, expressed as a percentage of the investment's cost is called…

A Rate of gain
B Rate of loss
C Rate on return
D Rate of return

36 Which statement is correct….

A Rate of return includes rate of interest
B Rate of interest includes rate of return

C	Both (A) & (B)
D	None of above
37	**Investor makes buying/selling decisions on the basis of _______ rather than ________.**
A	**Yield, cost**
B	Income, profit
C	Cost, yield
D	Yield, income
38	**The estimated value of an investment property at the end of a period during which the rental income is either above or below the market rent is called…**
A	Revised value
B	**Reversionary Value**
C	Reserved value
D	Revert value
39	**The value at the end of an explicit forecast period of all remaining projected cash flows is called…**
A	Time value
B	**Terminal Value**
C	Transfer value
D	Trade value
40	**The process of dividing a property's net operating income by an overall capitalization rate…**
A	Capitalization
B	**Direct capitalization**
C	Indirect capitalization
D	All of above
41	**The amount that a business earns from the sale of goods or services is called…**
A	Price of sale
B	Cost to sale
C	Business value
D	**Gross income**
42	**Selling expense, administrative expense, tax, cost of repair, is an example of…**
A	Part of business
B	Revenue expense
C	**Outgoing**
D	None of above
43	**Income after all expenses are deducted from gross operating income is called…**
A	**Net operating income**
B	Gross loss
C	Profit margin
D	Gain
44	**The expenses that is necessary to operate and maintain an income producing property is called…**
A	Income expenses
B	Maintenance expenses
C	**Operating expenses**
D	All of above
45	**The two parts of a capitalization rate are…**
A	The rate of return on the investment & yield rate
B	Rate of interest & The rate of return of the investment
C	**The rate of return of the investment & The rate of return on the investment**
D	All of above
46	**Equation for value calculations using the overall capitalization rate is…**
	I = net operating income, R = overall cap rate, V = Estimated value of property
A	**I ÷ R = V**

B	R ÷ I = V
C	V ÷ R = I
D	None of above
47	**The rate of return is developed by…**
A	**Ratio of income or yield to original investment**
B	Ratio of original investment to income or yield
C	Ratio of original investment to expenses
D	Ratio of expenses to original investment
47	**Capitalization Rate =**
A	Yield rate – rate of return
B	Yield rate – projected growth rate of earning
C	**Discount rate – projected growth rate of earning**
D	Projected growth rate of earning – discount rate
48	**Which of the following method falls under the income approach?**
A	Depreciated replacement cost method
B	**Discounted cash flow method**
C	Summation method
D	Sale comparison method
49	**Which of the following method falls under the income approach?**
A	Depreciated replacement cost
B	**Capitalization method**
C	Summation method
D	Sale comparison method
50	**A method within the income approach in which a discount rate is applied to future expected income streams to estimate the present value is called…**
A	Depreciated replacement cost method
B	**Discounted cash flow method**
C	Summation method
D	Sale comparison method
51	**___________ is the discount rate when valuing the asset using the income approach**
A	Average of cost of capital
B	Cost of capital
C	**Weighted average cost of capital**
D	None of above
52	**The expected rate of return that the market requires in order to attract funds to a particular investment is called…**
A	Premium
B	Cost of investment
C	Cost of debt
D	**Cost of capital**
53	**Cash that is generated over a period of time by an asset, group of assets, or business enterprise is called…**
A	Income flow
B	**Cash flow**
C	Stream of profit
D	Stream of gain
54	**Which two methods are used to value of P&M by the income approach?**
A	Capitalization method
B	Cost method
C	DCF method
D	**(A) & (C)**
55	**Weighted average cost of capital is calculated by…**

A Weighting the cost of equity & cost of debt
B Weighting the cost & value
C Weighting the cost of capital & cost of investment
D All of above

56 Which of the following statements is false?
A The rate of return on capital combines a safe, or riskless, rate with a premium for risk, management burden, and illiquidity.
B A capitalization rate is the difference between the rate of return on capital and the rate of return of capital
C A total operating expense statement, which includes provisions for all items of repair and replacement, may show a sum that exceeds the actual expenditures of the most recent year.
D Lease data include the lease date, a legal description of the leased property, the names of the lessor and lessee, and the lease term.

57 Direct capitalization is a method used to convert an estimate of ________ into a value indication.
A Effective gross income
B Gross income
C Net income
D None of above

58 If a machine is purchased at Rs.10,00,000 and it generates an net income of Rs. 1,00,000 then the capitalization rate is…
A 10%
B 11%
C 0.1%
D 0.9%

59 What should be a monthly income, if Mr. X has purchased a machine at Rs. 7,77,000 and required rate of return is 12%? (Ignore all other out going)
A Rs. 92,400
B Rs. 7,700
C Rs. 9,240
D Rs. 77,000

60 How much income should be generated from the machine per year, if value is Rs. 13,57,000 and rate of return is required at 12%?
A Rs. 1,20,000
B Rs. 12,000
C Rs. 1,70,000
D **Rs. 1,62,900**

61 Discounted cash flow method is…
A Single period model
B Double period model
C Multiple period model
D All of above

62 For which of the following machine, the income approach is most suitable…
A Boiler
B Tunnel boring machine
C Turbine
D All of above

63 Income approaches can be adopted for machine or equipment which has an income stream directly attributable to it only.
A False
B True
C Cannot say

D	None of above
64	**For which of the following machine, the income approach is not suitable or may not be appropriate…**
A	Tower crane
B	Tunnel boring machine
C	Xerox machine
D	**Boiler**
65	**For which of the following machine, the income approach is most suitable…**
A	Kiln
B	Silo
C	**Aircraft**
D	Blast furnace
66	**Which of the following is a pitfall of income approach?**
A	Difficult to select an appropriate capitalization rate
B	Cannot apply for special purpose property
C	Estimation of income & expense is subjective
D	**All of above**
66	**Rate of capitalization of each industry is because of…**
A	Each industry is unique
B	**Each has its own characteristic of performance in market**
C	Industries are depends upon each other
D	Each industry has its own management
67	**First step in DCF method is…**
A	Forecast of period
B	Forecast of growth rate
C	Revenue – Expense = EBITDA
D	**None of above**
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