

**COVENANT UNIVERSITY  
NIGERIA**

*TUTORIAL KIT  
OMEGA SEMESTER*

**PROGRAMME: ESTATE  
MANAGEMENT**

**COURSE: ESM 321**

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# ESM 321: PRINCIPLES OF VALUATION 11

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1. Write short notes on
  - Equated yield
  - Growth rate
  - Review Period
  - Inflation risk free yield
  - All risk yield
2. A Freehold Shop property let on a 25 year lease with provision for 3 yearly rent reviews at ₦150, 000 has just been sold for ₦3, 000, 000. Redemption yield on gilts is 10%. What is the implied growth rate?
3. What are the major criticisms of the traditional methods of valuation?
4. Give examples of the contemporary methods of valuation?
5. What are the variables to be considered in equated yield analysis
6. A freehold investment has been purchased for N410, 000. The current rental value is N20, 000 p.a. it is let on a lease for growth at 10% p.a. Determine the equated yield?
7. Discuss the various downside risks in investment valuation.
8. A recently let freehold shop property has an estimated gross full rental value of ₦50, 000. Outgoings are 10% of this sum and expected initial yield is 5%. Determine the Capital value and then determine the effect on Capital Value of 10% downside variations in gross rental value, outgoings and yield
9. Discuss the basic features of the Rational Valuation Model
10. Using the equated Yield Analysis, value the freehold interest in a property recently let at its full rental value of N18, 000 on a 5 year review pattern. A similar property was let recently at N20, 000 p.a. on a 5 yearly review pattern and subsequently sold for N800, 000. Yield on gilts is 10%
11. What difference would the value of the property in Question 10 above be assuming the Rational Model was utilized in the valuation
12. Using the real value/equated yield hybrid value a leasehold interest with a fixed head rent of N20, 000 p.a. still has 18 years to run. It has been sublet at N24, 000 p.a., renewable in 3 years time. The current rental value is N30, 000 p.a. subject to 5 yearly reviews.
13. Using a 8% yield, a Property is currently let for 2 years at N1,000. The position sequel to this is subject to various possibilities based on what market trends and the economy suggest to the valuer. First there is a consideration of an 80% probability that it could be immediately renewed

at N3, 000. Alternatively, there is a 20% probability that it could be vacant for a year after which it could be re-let at either N3, 000 or N4, 000 with respective probabilities of 60% or 40%.

14. Discuss the standards of quality in property valuation report preparation
15. Discuss the salient point to be included in a property valuation report
16. Using certainty equivalent, value a property with a current rental income of N10, 000 p.a. with a reversion in 4 years. The best estimate of current FRV is N15, 000 p.a. The best rental growth is 5%. A sale of the investment will take place following the review at a likely yield of 6% (best estimate). You are required to take 84% as certainty equivalent of FRV, Rental Growth and yield and a risk free rate of 13%
17. Discuss the approaches utilized in calculating downside risk-adjusted capital values.
18. Using the rational model, find the value of a leasehold interest with a fixed head rent of N20, 000 p.a. which still has 18 years to run. It has been sublet at N24, 000 p.a. renewable in 3 years time. The current rental value is N30, 000 p.a subject to 5 yearly reviews
19. Prove the formula for the annual growth rate?
20. Why is the equated yield kept at a higher rate than the gilt investment?

## ANSWERS

1. Write short notes on
  - Equated yield – Inflation prone target yield
  - Growth rate – average growth returns annually
  - Review Period – terms of rent review
  - Inflation risk free yield- yield on totally inflation proof
3. Major criticisms of the traditional methods of valuation:
  - Misrepresent the property market
  - Isolates property investment from other forms of investment
5.
  - The equated yield (e%)
  - Growth rate in rentals (g%)
  - Review period (t)
  - All risk yield (k%)
7.
  - Market risk
  - Financial risk

- Capital market risk
- Inflation risk
- Liquidity risk
- Environmental risk
- Legislative risk
- Management risk

9.

- It values the current (fixed) income stream separately from the reversionary income flow
- It takes account of the number of years to the next review(s) irrespective of whether the property is currently rack rented or not
- It uses only a rack rented investment yield capitalization rate at which the property would be valued in the market if it were leased on regular rent reviews
- It allows growth of the current rental value from the date of the valuation in line with the long term growth rate implied by the low investment yield rate

11.

$$CV = ((18000/0.12)) - (18000/0.12(1.12)^5) + ((18000(1.090436)^5)/0.025(1.12)^5)$$

$$= 150000 - 85114 + 655114 = N720,000$$

13.

**Branch 1**

Fixed rent for 2 years		1,000	
YP 2 years @ 8%		1.7833.00	
			1,7833.00
Reversion		3,000	
YP in per @ 8%			
PV 2yrs @ 8%	10.71674		32,150.00
<b>CV (Branch 1)</b>			<b>33,933.00</b>

**Branch 2**

Fixed rent for 2 years		1,000	
YP 2 years @ 8%		1.7833.00	
			1,7833.00
Reversion		3,000	
YP in per @ 8%			
PV 3yrs @ 8%	9.9229		29,769.00
<b>CV (Branch 2)</b>			<b>31,552.00</b>

**Branch 3**

Fixed rent for 2 years		1,000	
YP 2 years @ 8%		1.7833.00	
			1,7833.00
Reversion		4,000	

YP in per @ 8%		
PV 3yrs @ 8%	9.9229	39, 691.00
<b>CV (Branch 1)</b>		<b>41, 474.00</b>
N33,933 × 0.8		27, 146
31, 552 × 0.2 × 0.6		3, 786
41, 474 × 0.2 × 0.4		3, 317
Probability weighted Capital Value		<b>34, 249.00</b>

15.

- Executive Summary; Addressee; Valuation Brief; Date of Valuation; Purpose of Valuation; Situation; Date of Inspection; Tenure; Site; Description; Construction Details; Finishes; Accommodation; Services; Condition of property; Assumptions and Caveats; Basis of Valuation; Method of Valuation; Opinion of Value; Effective Date; Third Party Reference; Certification; Clause Prohibiting Publication; Identity of the Valuer; Appendix.

17.

- Sensitivity Analysis
- Stochastic Devision Tree
- Risk Adjusted Discount Rate
- Certainty Equivalent Cashflow
- Sliced income approach=Monte-Carlo simulation

19.

$$k = e - (ASF @ e) ((1+g)^t - 1)$$

$$e - k = ((ASF @ e) ((1+g)^t - 1))$$

$$\frac{e - k}{ASF @ e + 1} = (1+g)^t$$

$$(e - k) (((1+e)^t - 1)/e) + 1 = (1+g)^t$$

$$1+g = ((e - k) (((1+e)^t - 1)/e) + 1)^{1/t}$$

$$g = ((e - k) (((1+e)^t - 1)/e) + 1)^{1/t} - 1$$