



**PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

DEPARTMENT OF LAND AND SPATIAL SCIENCES

QUALIFICATION(S): BACHELOR OF PROPERTY STUDIES BACHELOR OF LAND ADMINISTRATION DIPLOMA IN PROPERTY STUDIES	
QUALIFICATION(S) CODE: 08BOPS 07BLAM 06DIPS	NQF LEVEL: 6
COURSE CODE: LET621S	COURSE NAME: LAND ECONOMICS AND TAXATION
EXAMS SESSION: NOVEMBER 2025	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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INSTRUCTIONS
<ol style="list-style-type: none">1. Read the entire question paper before answering the Questions.2. Please write clearly and legibly!3. Please START EACH QUESTION ON A FRESH PAGE.4. The question paper contains a total of 5 questions.5. You must answer <u>ALL QUESTIONS.</u>6. Make sure your Student Number is on the EXAMINATION BOOK(S).

PERMISSIBLE MATERIALS

1. Non-programmable Scientific Calculator

THIS QUESTION PAPER CONSISTS OF 11 PAGES (Including this front page and attached Appendix A)

Question 1

For each of the following statements indicate whether it is 'TRUE' or 'FALSE'. Each correct answer carries 1 mark.

- 1.1 With the physical and biological framework, the important test is feasibility not capability of the natural environment.
- 1.2 The threefold framework affecting land use includes consideration of land capability and suitability for different uses.
- 1.3 Ricardo theory of land rent dwells on resource quality while Von Thunen's emphasis is on accessibility as a component of Land Use capacity.
- 1.4 In Von Thunen's theory of location, differences in land use could be directly attributed to difference in crop productivity (yield)
- 1.5 Climate change resilience is an important factor in the environmental aspect of the threefold land use framework.
- 1.6 The three (3) framework affecting land use encourage participatory decision-making involving local communities and stakeholders.
- 1.7 Except for location and distance to the market, Von Thunen's analysis held constant all the natural features affecting land use.
- 1.8 Conflicts between agricultural land use and urban development are not considered in the threefold framework of land use.
- 1.9 The highest and best use of land is always identical to its present use.
- 1.10 Urban development often involves the revitalization of older neighbourhoods.

- 1.11 Land use capacity refers to the land's potential to support certain types of uses based on its physical, environmental, and socio-economic characteristics.
- 1.12 The buoyancy of property taxes mainly depends on the tax rate structure and the methods used for revaluing properties.
- 1.13 Procedural improvements alone will significantly increase property tax revenue, even if policies around rate-setting are not reviewed.
- 1.14 Devolving control of property tax policy to local governments is suggested because local governments are directly impacted by property taxes.
- 1.15 Contracting out property tax administration functions is discouraged for central governments responsible for property tax collection.
- 1.16 Land use capacity assessments only focus on how land is currently used and do not consider future use options.
- 1.17 Public perception can greatly affect the success of a property development project.
- 1.18 The concept of highest and best use describes the most profitable and legally allowed use of a piece of land that is physically possible.
- 1.19 In most economic systems, the market is the primary mechanism for allocating resources, with public intervention amending the market forces in certain spheres and replacing them in others.
- 1.20 True or False: Central governments often restrict high property tax rates because they do not directly benefit financially from the property tax revenues.
- 1.21 Property taxes account for a large proportion of total public sector tax revenues in developing countries.

- 1.22 Local governments tend to rely more on indirect taxes, transfers, and discretionary grants than on property tax revenues because of political challenges in administering property taxes.
- 1.23 Landlords usually make rental concessions during periods when the supply of tenants is low. This occurs during and when an economy experiences rapid growth.
- 1.24 Land by itself has little economic value until it is used in conjunction with inputs of capital, labour and management.
- 1.25 The concept of use capacity is used in land economics to give an indication of relative abilities of a single parcel to provide net returns or other satisfactions.
- 1.26 Legislation and policies form part of the social dimension in the threefold land use framework.

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Question 2

- 2.1 Attached as appendix A (i.e. Page 7) is a graph illustrating the effect of transportation cost on land rent producing capacity associated with the use of land at various locations from Epukiro, the market. With the information provided answer questions i) to vi) below. (All figures are in N\$ per tonne of products).
- i) At which location (town) does *No rent margin* occur and why? (2)
- ii) Between which two towns are the locations considered profitable for business? (1)
- iii) What is the amount of land rent earned per tonne for land use in Tses? (1)
- iv) If operators of Tses land are to enjoy any land rent, what is expected of them and by what amount (in your opinion) will lead to that. (2)
- v) Estimate the amount of land rent per tonne associated with the use of Aranós and Aminius lands located at a distance of 25km and 35km respectively from the market. (3)

- vi) What is the land rent associated with the location considered optimal? (1)
- vii) At the 'No rent margin' what is the total cost of transportation per tonne? (1)
- viii) At the 'No rent margin' what is the total cost of production per tonne including transport to the market? (1)
- 2.2 Differentiate between any two (2) of the following terms as frequently used in the Law of Diminishing Returns. (6)
- Total Cost and Total Revenue
 - Average Cost and Average Revenue
 - Marginal Physical Product and Marginal Returns
 - Average physical product and marginal cost
- 2.3 List any three (3) factors that may cause changes in the Use-Capacity of land. (3)
- [21]**
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Question 3

- 3.1 The yield capacities of four grades of land are respectively given in the table below.

Land	A	B	C	D
Unit of Output (in tonnes)	150	Z	112	98

Cost of Capital and labour amounting to N\$450 was incurred on each of these tracts of land.

Additional Information

- Cost of capital experienced a uniform upward adjustment by N\$45
 - A combined total of 480 tonnes of output was harvested from the four (4) parcels of land.
- i) Calculate the land rent amount attributable to each tract of land when they are utilized sequentially in production. [correct your answers to the two decimal place]. (13)
- 3.2 Calculate the expected land value if an expected gross return of N\$3580 is discounted at 5% interest rate for 10 years. Note that an outgoing amounting to N\$580 is still outstanding. (3)
- This is calculated as follows.

- 3.3 State the meaning of 'Tax base' as used in administration of property tax. (2)
- 3.4 Mention any three (3) items about a rateable property contained in a Provisional Valuation Roll. (3)
- [21]
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Question 4

- 4.1 Briefly discuss any two (2) challenges faced in the administration of property tax in a country of your choice, focusing particularly on their implications for revenue mobilization. (6)
- 4.2 What recommendations would you suggest to address the situation? Please discuss two (2) recommendations briefly. (6)
- [12]
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Question 5

Read each question carefully. Among the alternative answers, choose the letter that correspond to the best/correct answer. Each correct answer carries 1 mark.

- 5.1 Which of the following does NOT directly influence land values?
- A) Rent paying capacity of the land
 - B) Expected productivity or returns
 - C) speculative demand
 - D) Number of farm animals
- 5.2 Which factor does NOT directly affect land use capacity?
- A) Soil type
 - B) Slope gradient
 - C) Owner's personal preference
 - D) Climate conditions

- 5.3 Land use capacity primarily aims to determine:
- A) The maximum market price of land
 - B) The sustainable potential uses of land to prevent degradation
 - C) The historical uses of the land
 - D) Ownership boundaries
- 5.4 One major difficulty in identifying the liable party for property tax arises because:
- A) The title registry is often poorly organized and unreliable
 - B) Absentee landlords always pay the taxes
 - C) Tenants are usually the only liable parties
 - D) The legal framework clearly defines all taxpayers
- 5.5 High property turnover and inadequate title registration in some Francophone countries cause tax administrators to:
- A) Send tax bills to the current occupant only
 - B) Deliver tax bills to the recorded owner regardless of actual ownership
 - C) Ignore property taxes altogether
 - D) Frequently update the fiscal cadastre
- 5.6 Rent paying ability of land is mainly influenced by:
- A) The land's productive capacity and location
 - B) The current owner's income
 - C) The climate of the nearest city
 - D) Land capability classification only
- 5.7 Which method is commonly used to analyze land capability?
- A) Soil sampling and GIS mapping
 - B) Market surveys alone
 - C) Oral history interviews
 - D) Political boundary mapping
- 5.8 In Nigeria, who typically holds the primary responsibility for paying property taxes?
- A) Tenants
 - B) Property owners

- C) Agents acting on behalf of owners
 - D) Government authorities
- 5.9 Why might tenants or agents be reluctant to pay taxes on behalf of property owners?
- A) They have no legal right to do so
 - B) They cannot recover the tax costs from rents easily
 - C) They prefer to pay taxes directly
 - D) Absentee landlords usually handle taxes themselves
- 5.10 What characteristic is least likely to reduce land's rent paying ability?
- A) Proximity to urban centers
 - B) Poor soil fertility
 - C) Access to transportation
 - D) Severe physical limitations
- 5.11 What does highest and best use of land exclude?
- A) Use that is legally permitted
 - B) Use that maximizes financial return
 - C) Use that is physically impossible
 - D) Use that is environmentally sustainable
- 5.12 Which of the following best describes the relationship between land use capacity and rent paying ability?
- A) Higher land use capacity generally increases rent paying ability
 - B) Rent paying ability is independent of land use capacity
 - C) Greater rent paying ability decreases land use capacity
 - D) Land use capacity is only a legal term and does not affect rent
- 5.13 What mainly influences the level of land rent in agricultural land?
- A) Proximity to urban employment centers
 - B) Soil fertility and expected productivity
 - C) The owner's personal wealth
 - D) Length of ownership

- 5.14 The capitalization rate in land economics is used to:
- A) Calculate soil nutrient levels
 - B) Measure lease duration
 - C) Convert expected land rents into land values
 - D) Determine property tax brackets
- 5.15 Which of the following is a major challenge in administering property taxes in many African cities?
- A) Over-assessment of properties resulting in excessive tax collections
 - B) The absence of detailed and regularly updated fiscal cadastral maps
 - C) Efficient delivery of tax bills due to well-established street addressing systems
 - D) High penalties that deter property tax evasion
- 5.16 Why is tax liability difficult to link to properties in many African urban areas?
- A) Properties are identified mainly through canvassing rather than formal titles
 - B) The presence of detailed cadastral maps that separate parcels incorrectly
 - C) The existence of well-named streets but irregular house numbering
 - D) Excessive updating of property records causing confusion
- 5.17 What is a fundamental reason that many assessed properties in Africa remain unpaid?
- A) The existence of an ideal fiscal cadastre with clear property codes
 - B) The lack of an efficient monitoring and enforcement system for tax collection
 - C) The widespread use of tax maps and formal street addresses
 - D) Regular updating of property rolls leading to taxpayer confusion
- 5.18 In cities lacking street addresses and numbered houses, what is the consequence for property taxation?
- A) Tax bills are easier to deliver and enforce penalties
 - B) Properties become easier to assess accurately
 - C) Tax liabilities cannot be accurately linked to property owners, leading to widespread non-payment
 - D) The fiscal cadastre system works optimally due to canvassing

5.19 How does increasing distance from employment centres generally affect land rent?

- A) Increases rent due to privacy
- B) Decreases rent due to lower accessibility
- C) No effect on rent
- D) Makes rent more volatile

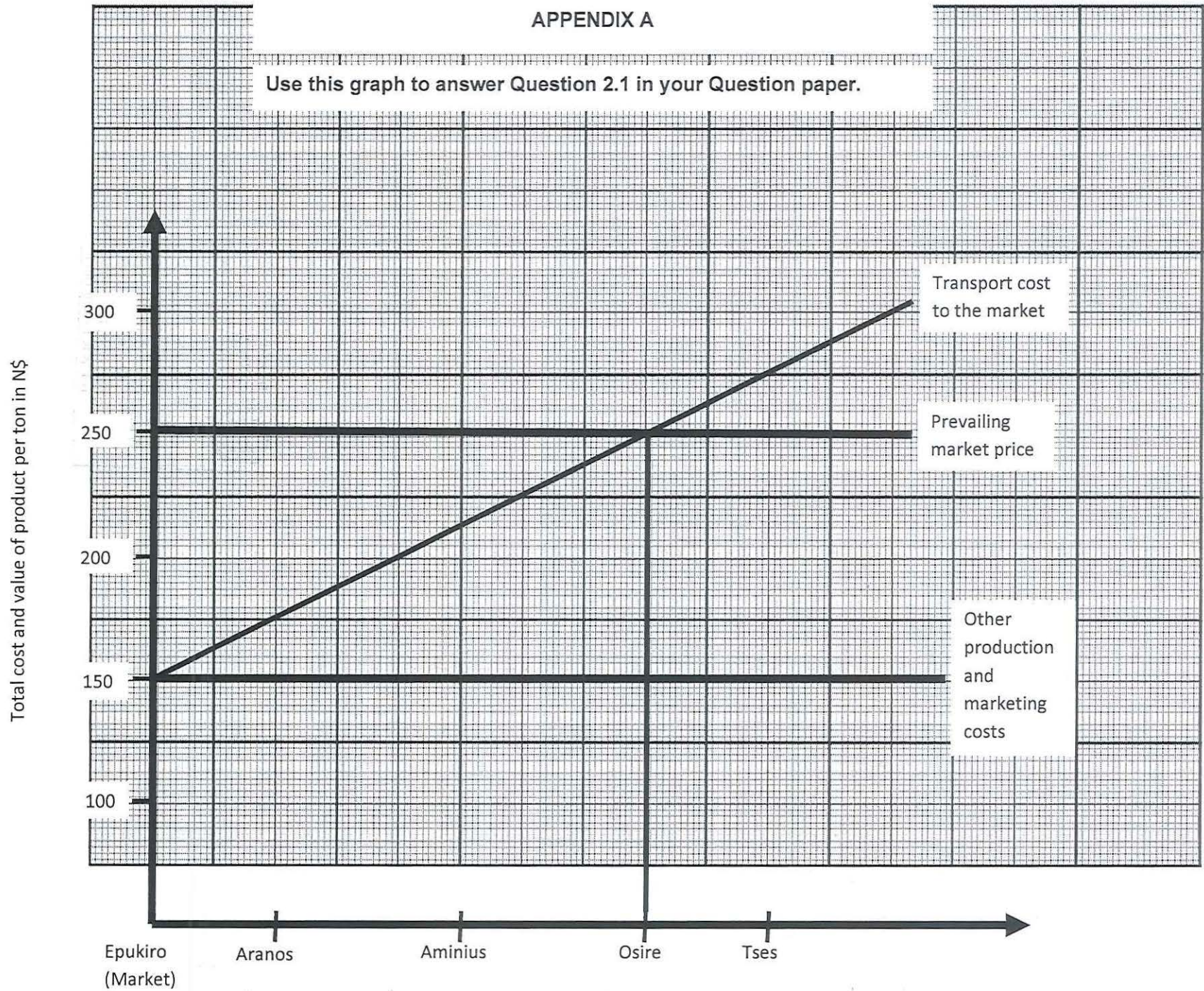
5.20 Which factor has a positive correlation with land rent but a negative correlation with population density?

- A) Proximity to agricultural land
- B) Land productivity value
- C) Length of contract lease
- D) Number of rural development funds

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APPENDIX A

Use this graph to answer Question 2.1 in your Question paper.



Towns located at distance from the market