



**NATAL UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF ENGINEERING AND SPATIAL SCIENCES

DEPARTMENT OF ARCHITECTURE AND SPATIAL SCIENCES

QUALIFICATION: BACHELOR OF TOWN AND REGIONAL PLANNING	
QUALIFICATION CODE: 07BTAR	LEVEL: 6 CREDITS: 10
COURSE CODE: CCS611S	COURSE NAME: CRITICAL CITY STRUCTURE AND COMPONENTS
DATE: JUNE 2022	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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INSTRUCTIONS
<ol style="list-style-type: none">1. Answer ALL the questions.2. Write clearly and neatly.3. Number the answers clearly.4. Use sketches to improve your answers.

PERMISSIBLE MATERIALS

1. Calculator, ruler, pen, pencil and eraser

THIS QUESTION PAPER CONSISTS OF 4 PAGES (Including this front page)

Question 1

The definition and demarcation of the boundaries of a city's Central Business District (CBD) is an important skill every town planner should have. Compare the statistical and visual tools that are available to town planners to achieve the definition and demarcation of the CBD.

[10]

Question 2

Adriana Allen, in her research on the Peri Urban Areas of cities, highlights the classical planning perspectives planners used to control and manage the Peri Urban Area. Provide a detail description of these planning perspectives and their areas of intervention. (Provide the answer in a table format).

[10]

Question 3

You are appointed to determine the appropriate number and size of Public Open Spaces in a certain community. Describe the methods you would use to complete your assignment.

[6]

Question 4

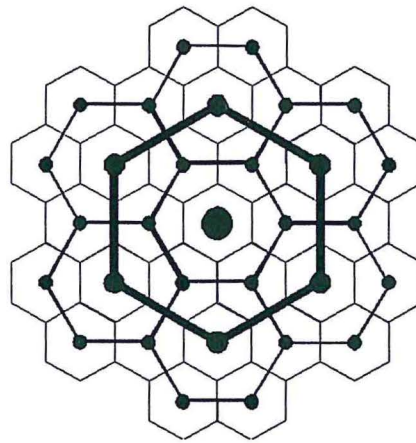
Provide sketches with a legend describing the locality of the different structural components of cities as per:

- (a) the model developed by Homer Hoyt in 1939 (study of 40+ American Cities) (5)
- (b) the model developed by Chauncy Harris and Edward Ullman in 1945 (5)

[10]

Question 5

The figure below illustrates the "K3" Market Principle of Walter Christaller's Central Place Theory that is used to determine the hierarchy of urban settlements and the spatial distribution of commercial developments.

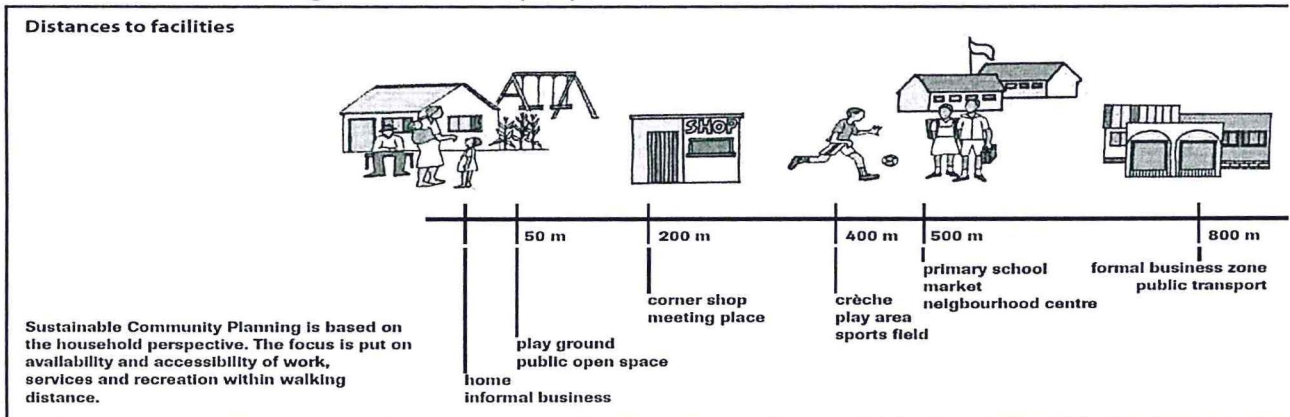


- a) Provide a detailed explanation why this is called the K3 Market principle. (6)
- b) Define the “Threshold” factor within the Central Place Theory. (3)
- c) Define the “Market area / range” factor within the Central Place Theory. (3)

[12]

Question 6

The figure below illustrates one guideline of a Sustainable Community Unit, being that basic facilities should be within walking distance from people’s residences.



How would you test if a neighbourhood adheres to all the guidelines for it to be classified as a Sustainable Community Unit?

[9]

Question 7

Town and Regional Planners can rate the utility value of different shopping centres in a town for a specific customer. Describe the model you would use to rate the utility value of shopping centres.

[11]

Question 8

The City of Windhoek would like to develop more new public open spaces in line with its Open Space Policy. Describe the general principles that must be considered when the locality of a new Public Open Space must be decided upon.

[8]

Question 9

The various recreational areas found in municipal areas can be divided into various categories. Name these categories and include an example of each category.

[8]

Question 10

You, as a Town and Regional Planner, are invited to the Namibia Association of Local Authorities to lead a workshop discussion on the possible use of Integrated Development Plans in our Villages, Towns and Municipalities.

- (a) Provide an explanation on the general steps or procedures executed for the compilation of an Integrated Development plan (8)
- (b) Describe the benefits a Local Authority could derive from implementing an Integrated Development Plan in their area of jurisdiction. (8)

[16]

END

TOTAL [100]