

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF SPATIAL PLANNING UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF ARTS IN SPATIAL PLANNING SEMESTER2 2021/2022 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

CODE: PPB1408 COURSE TITLE: SPATIAL STRUCTURE AND PROVISION OF INFRASTRUCTURE IN CITIES

EXAM VENUE: MAIN CAMPUS

STREAM: SPATIAL PLANNING

DATE:

EXAM SESSION: 2021/2022

TIME: 2 HOURS Instructions:

- 1. Answer question 1 (compulsory) and ANY other 2 questions.
- 2. Candidates are advised not to write on the question paper.
- **3.** Candidates must hand in their answer booklets to the invigilator while in the examination room.

Q1a)Discuss the following statement with the aid of examples: "Infrastructure is aprincipal determinant of economic growth in urban areas and cities" [10 Marks]	
 b) "Provision of infrastructure in sufficient quantities and quality has remained an elusive goal in cities of developing countries". Provide plausible reasons [10 Marks] c) Explain the concept of integrated urban infrastructure planning and development (IUIPD) with the aid of examples [5Marks] d) What are the benefits of adopting the integrated approach in the planning and development of infrastructure in urban areas and cities? [5 Marks] Q2a) Calculate the Per Capita Gross National Product (PGNP) for 1000Km of paved roads in 	
Kenya	[5Marks]
b) What are the benefits of Compact Cities?	[5 Marks]
c) Using examples, discuss the concept of inclusivity in the context of infrastructure planning	
and development in cities	[10 Marks]
Q3a) Explain the following terms	
i) Urban form	2Marks
ii) Infrastructure	2Marks
iii) Public infrastructure	2Marks
iv) Sewerage	2Marks
v) Green infrastructure	2Marks
3b) Explain how spatial equity can be realized in provision of infrastructure and services in a city	
made up of 10 electoral Wards	[10 Marks]
Q4a) Discuss the concept of devolution in the context of infrastructure planning and	

development in Kenya

[10 Marks]

b) Using a sketch diagram, explain the challenges associated with the planning and development of infrastructure in cities characterized by multi-nuclei structure? [10 Marks]

Q5a) Explain why most countries have adopted Public-Private Partnership (PPP) approach to the planning and development of infrastructure in their urban areas and cities [10Marks]
b) Using examples, explain why Comprehensive Social and Environmental Impact Assessment (CSEIA) is mandatory for major urban infrastructure projects [10Marks]

2