

**PROGRAM** : BACHELOR DEGREE

URBAN AND REGIONAL PLANNING

**SUBJECT** : TRANSPORTATION PLANNING 2A

CODE : TRATRA2

DATE : WINTER SUPPLEMENTARY EXAMINATION

**<u>DURATION</u>** : (SESSION 1) 08:00 - 11:00

<u>WEIGHT</u> : 50:50

TOTAL MARKS : 100

**EXAMINERS** : MR BRIGHTNES RISIMATI

**MODERATOR** : PROF TRYNOS GUMBO

**NUMBER OF PAGES** : 2 (TWO) PAGES.

### INSTRUCTIONS TO CANDIDATES

- Read the questions carefully and answer all questions.
- Answer the questions in any order but label them clearly.
- The answer will be assessed on the basis of their content and structure.
- You must show competency in theory and concept awareness.
- Be very logical in your responses, use examples and demonstrate clear understanding in your application and evaluation of knowledge

## **QUESTION 1**

- a) Critically, identify and discuss various modes of transportation; highlighting their significance (15 MARKS)
- b) With aid of concrete and relevant local examples, critically distinguish between Public and Private Transport, highlighting their advantages and disadvantages. (15 MARKS)

# **QUESTION 2**

- a) Critically outline the role of sustainable transport in terms of mobility, accessibility and affordability for the urban poor in the City of Johannesburg and identifies the key issues/challenges in sustainable transport for urban poor. (10 MARKS)
- b) Identify and discuss three (3) key transport strategies for City of Johannesburg; in your answer critically explicate how the identified strategic will address the key issues/challenges in sustainable transport for urban poor. (20 MARKS)

### **QUESTION 3**

Critically, with aid of concrete and relevant examples demonstrate the attributes of the following post-apartheid transport planning policies and legislatives in South Africa, in your answer also highlight their contribution towards the planning and development of contemporary transportation systems in South Africa:

- i. White Paper on National Transport Policy (1996)
- ii. Moving South Africa (1998)
- iii. National Development Plan (2012)
- iv. National Land Transport Transition Act (no 22 of 2000)
- v. National Rail Policy Green paper (2015)

(20 MARKS)

### **QUETION 4**

"The major objective of Intelligent Transportation Systems (ITS) is to evaluate, develop, analyze and integrate new sensor, information and communication technologies and concepts to achieve traffic efficiency, improve environmental quality, save energy, conserve time, and enhance safety and comfort for drivers, pedestrians, and other traffic groups" (Vanajakshi et al., 2010:2).

Using this assertion within the context of smart mobility, comprehensively explicate Intelligent Transportation Systems as advanced applications to collect, store and process data, information and knowledge aiming at planning, implementing and evaluating integrated initiatives and policies of Smart Mobility. (20 MARKS)

TOTAL MARKS [100]