

**PROGRAM** 

: DEGREE

URBAN AND REGIONAL PLANNING

**SUBJECT** 

: TRANSPORTATION PLANNING A2

**CODE** 

: TRATRA2

DATE

: JUNE EXAMINATION

08 JUNE 2018

**DURATION** 

: (SESSION 1) 08:30 - 11:30

WEIGHT

: 50:50

TOTAL MARKS

: 100

**EXAMINERS** 

: MR BIGHTNES RISIMATI

**MODERATOR** 

: DR TRYNOS GUMBO

NUMBER OF PAGES

: 2 (TWO) PAGES.

### INSTRUCTIONS TO CANDIDATES

- Read the questions carefully and answer all questions IN SECTION A AND ANY THREE FROM SECTION B.
- Answer the questions in any order but label them clearly.
- Each question carries equal marks.
- 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 of knowledge

## SECTION A (COMPULSORY, ANSWER ALL QUESTIONS)

## **QUESTION 1**

"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. (40 MARKS)

# SECTION B (CHOOSE ONLY THREE QUESTIONS FROM THIS SECTION)

## **QUESTION 2**

"Transportation refers to the activity that facilitates the physical movement of goods and people from one place to another. It also enables trade between people, which is essential for the development of the urban areas".

Critically discuss this assertion and in your answer identify the various modes of transportation; highlighting their significance. (20 MARKS)

## **QUESTION 3**

Using the City of Johannesburg as a case study, distinguish between public and private transportation; highlighting their advantages and disadvantages. (20 MARKS)

#### **OUESTION 4**

Comprehensively, provide the history and evolution of transport planning. In your answer demonstrate how ancient transport planning has had an influence in the contemporary transportation experiences in South Africa. (20 MARKS)

### **QUESTION 5**

Identify and describe any 5 post-apartheid policies and legislative frameworks governing transport planning in the Republic of South Africa; highlighting their relevance in ameliorating contemporary transportation challenges in the Republic. (20 MARKS)

TOTAL MARKS [100]