

TRL3702

May/June 2014

TRANSPORT PLANNING AND INVESTMENT

Duration 2 Hours

70 Marks

EXAMINERS
 FIRST
 SECOND
 EXTERNAL

MR JW BARENDRECHT
 PROF A BRITS
 DR KJ MALULEKA

Closed book examination

This examination question paper remains the property of the University of South Africa and may not be removed from the examination venue

SECTION A

ANSWER ALL THE QUESTIONS IN THIS SECTION

QUESTION 1

- (i) Once the existing transport system has been simulated by transport models, alternative plans are generated in transport planning. Indicate how you would go about generating these alternatives (5)
- (ii) Briefly explain what is meant by the technical assessment in the application of the suitability theory (5)
- (iii) Explain the objectives of the airport master plan (5)
- (iv) What is the purpose of toll systems and what are its disadvantages? (5)

TOTAL
SECTION A **[20]**

Question 2 / continues

QUESTION 2

Explain the synthesis phase of the multicriteria (MC) evaluation of transport infrastructure. In your answer refer to the methodological foundations and the three types of aggregate procedures. Briefly give the disadvantages of MC and the reasons for pre-multicriteria analysis. Also indicate how this evaluation should be practically applied by inter alia referring to the two purposes of multicriteria evaluation.

[25]

QUESTION 3

(i) A cost/benefit analysis may be defined as a practical way of evaluating the desirability of a project, "

Briefly discuss the different criteria for project evaluation.

(10)

(ii) Explain the interaction between a port and its environment by referring to its hinterland and the economies that can be realised from its immediate surroundings. Briefly indicate how you would ensure transport integration in port planning and development.

(15)

[25]

QUESTION 4

Discuss in detail the process you would follow in planning an airport at local, regional and provincial level.

[25]

TOTAL
SECTION B

[50]

First Examiner Mnr JW Barendrecht
Second Examiner Prof A Brits
External Examiner Dr KJ Maluleke