INTERNATIONAL DIPLOMA IN LOGISTICS AND TRANSPORT

TRANSPORT PLANNING
DIP04

NOVEMBER EXAMINATION 2024

Instructions to Candidates

- Duration of examination: **3 hours**
- **Answer Question 1 (Compulsory) and any FOUR questions.**
- Questions may be answered in any order.
- Allocation of marks is indicated along each question.
- Credit will be given for citing relevant examples.
- Write legibly.

QUESTION 1 COMPULSORY

Road construction contributes significantly to traffic increase – Stuttgart

According to German Minister of Transportation, traffic demand does not increase with road infrastructure. Rather, it's claimed that improved road infrastructure and the promotion of public transport systems both decrease fuel consumption, thereby contributing to environmental protection.
For a 2km 4-lane highway projected in Stuttgart, an overall time saving of 5 million hours per year was calculated. Motorists spend 93 million hours per year on Stuttgart's roads and car traffic in the city consumes 302,500 tonnes of fuel a year (Minister of Nutrition, Agriculture, Environment and Forestry, Badden-Wutlermberg 1986). The highway project would, therefore, boost road traffic with respect to the overall traffic in Stuttgart by as much as approximately 5%. Fuel consumption would increase by roughly 44 tonnes per day. As it is assumed that the official calculations are over-estimated, actual time savings within the CBA framework, the actual increase in traffic and fuel consumption is probably less than 44 tonnes per day. However, fuel consumption will increase as a result of new highways. Decrease in fuel consumption demonstrated in CBA is under-estimated.

Extrapolating from this one road project in Stuttgart to all projects under consideration in Germany, it is estimated that the annual growth induced by road construction presently is approximately 1/3 of total growth in traffic (in
Germany). Road infrastructure improvement is, therefore, one of the major causes of traffic increase in general.
(Source: Whitelegg, J. and Hag, G., (2003). World Transport: Policy and Practice Earthscan.)

Critically evaluate the above case study above in relation to the effectiveness of the proposal for reducing traffic levels. **(20 marks)**

SECTION B

Answer any FOUR questions

QUESTION 1

''Dealing with overcrowded buses during rush hours is problematic". Can you explain a solution to satisfy the frustrated passengers? **(20 marks)**

QUESTION 2

Explain what you foresee are the main problems with this method of highway assignment.

(20 marks)

QUESTION 3

During the 1970s, other writers (such as Professor Wilson, Leeds University) preferred to view planning as a scheme of:

Analysis

Design;

Policy

Describe each element in the transport planning process. **(20 marks)**

QUESTION 4

Suggest, in relation to transport provision and planning some of the ways government policies can approach, address, and resolve the issues. **(20 marks)**

QUESTION 5

(a) Identify the main objectives and key features of a balanced transport strategy, for your own local area in the:

i) Long term; **(4 marks)**

ii) Medium term; **(4 marks)**

iii) Short term. **(4 marks)**

(b) Explain how acceptable you think that your objectives from '**Part A'** will be for the:

i) Transport providers. **(4 marks)**

ii) Environment groups. **(4 marks)**