

LAIKIPIA



UNIVERSITY

UNIVERSITY EXAMINATIONS

1ST SEMESTER 2023/2024 ACADEMIC YEAR

THIRD YEAR EXAMINATION FOR THE DEGREE
OF BACHELOR OF SCIENCE IN ECONOMICS &
STATISTICS AND BACHELOR OF ECONOMICS &
SOCIOLOGY

ECON 312: TRANSPORT & URBAN ECONOMICS

STREAM: BSC (ECON STAT/SOCI)

TIME: 2 HRS

DAY: MONDAY [14.30-16.30 P.M]

DATE: 4/12/2023

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

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INSTRUCTIONS: Answer question ONE and any other TWO questions**QUESTION ONE (30 marks)**

- a) Explain the following terms as used in Transport and Urban Economics
- i) Derived demand (2 marks)
 - ii) Consumption externality (2 marks)
 - iii) Metropolitan (2marks)
 - iv) Urbanization (2 marks)
 - v) Industrialization (2 marks)
- b) Explain any four conditions under which price discrimination in the transport sector is possible. (4 marks)
- c) Kenya Airways has two types of passengers, the business class and the economy class who generally have quite different willingness to pay. The business class passengers pay substantially more for their tickets, but they receive an enhanced level of service while the economy class pay less and receive a lower level of service. Assume that the demand function for the economy class whose maximum price is relatively low and whose elasticity of demand is relatively high is given as $Q_e = 225 - 50P_x$ and the business class passengers whose price is relatively high and elasticity of demand is relatively low is $Q_f = 105 - 10P_x$. Assume further that the total cost to maintain both passengers is $C = 40 + 0.25Q$
- i) Construct an expression for the aggregate market demand for the KQ tickets. (4 Marks)
 - ii) Determine the optimal price charged for each group of passengers assuming that there is price discrimination. (6 Marks)
- d) Explain any **four** advantages and disadvantages of government regulation of public transportation in Kenya. (6 marks)

QUESTION TWO

- a) Describe the socio-economic implications of high rate of rural-urban migration. (10 marks)
- b) Discuss whether a national road pricing system will be effective in solving the market failure arising from road traffic congestion. (10 marks)



QUESTION THREE

- a) Explain five challenges faced by urban planners in developing countries. (10 Marks)
- b) Explain any five factors that may determine prices of urban land. (10 Marks)

QUESTION FOUR

- a) Explain the applicability of the concept of elasticity in the transport sector. (5 marks)
- b) Given that a 15 per cent increase in gasoline costs resulted into a 7 per cent increase in bus investment and a 9 per cent decrease in gasoline consumption in a certain city. Use the information to calculate the implied direct and cross elasticities of demand. (5 marks)
- c) Discuss exhaustively the importance of transport to economic development of Kenya giving relevant examples where necessary. (10 marks)

QUESTION FIVE

- a) Briefly explain the tenets of sessional paper of 2012 on integrated national transport policy in Kenya. (10 marks)
- b) With reference to urban economics, economic growth is defined as the increase in a city's average wage or per-capita income. Discuss five factors that lead to urban economic growth. (10 marks)

