CHUKA



UNIVERSITY

# SUPPLEMENTARY/ SPECIAL EXAMINATIONS

## THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF ARTS IN ECONOMICS

## ECON 325: ECONOMICS OF TRANSPORT AND INFRASTRUCTURE

## **STREAMS:**

TIME: 2 HOURS

2.30 PM - 4.30 PM

DAY/DATE: MONDAY 01/02/2021 INSTRUCTIONS:

## Answer Questions One And Any Other Two Questions

## **QUESTION ONE (30 MARKS)**

(a)Explain why transport service demand is a derived demand. (5marks)

b) Consider the data below for 2 transport companies

		Fare	No. of passengers		
		(Ksh.)	making whole trip		
		Kensilver	Genesis	Kensilve	r Genesis
Before fare change		80	110	20	00 500
After fare change		60	110	30	00 350
% total change	25%	0		50%	30%

Calculate the cross elasticity of demand for this market. (5marks)

(d) An investor in Matatu transport sector asks your advice on the choice between two projects A&B. Project A requires an initial outlay of Kshs 9,000,000 and is expected to yield a return of Kshs.11,000,000 in three years. Project B requires an initial outlay of Kshs.400, 000 and will yield a return of Kshs. 520,000 in three years from now. Which one of these two projects will you recommend for the investor if the market rate of interest is 3%? Apply

(i)	NPV Approach	(5marks)
(ii)	IRR Approach	(5marks)

(c) Explain 5 elements used in cost/revenue analysis of public transport schemes.(5marks)

d) Explain five determinants of supply of transport services <b>QUESTION TWO (20 MARKS)</b>	(5marks)
a) Explain 5 ways in which a train operator can improve the quality of service.	(10marks)
Explain 5 reasons why peak problem is particularly bad in transport.	(10marks)

## **QUESTION THREE (20 MARKS)**

- (a) A bus company offers you a job as their manager. Once you take up the job, you realise that there is too much cost which need to be cut down. Propose to the board 5 ways in which cost can be saved.
  (10marks)
- (b) Differentiate between cost revenue analysis and cost benefit analysis. (5marks)

## **QUESTION FOUR (20 MARKS)**

- (a) The government of Kenya wants to make the Mombasa-Nairobi road a super highway by expanding it into 3 lane road. Identify 3 social cost and 3 social benefits and attach a shadow price to each.
  (12marks)
- (b) Evaluate the solutions to traffic problems in a city like Nairobi. (8marks)

## **QUESTION FIVE (20 MARKS)**

(a) Explain 5 reasons why Thika super highway was constructed. (10marks)

b) "Less Developed Countries have to put considerable dependence on transport investment". Discuss. (10marks)