



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESS WAY, JABI – ABUJA**  
**FACULTY OF MANAGEMENT SCIENCES**  
**DEPARTMENT OF BUSINESS ADMINISTRATION**  
**2022\_1 EXAMINATION**

**COURSE CODE: BUS406**

**CREDIT UNIT: 3**

**COURSE TITLE: ANALYSIS FOR BUSINESS DECISIONS**

**TIME ALLOWED: 2½HRS**

**INSTRUCTIONS:**

- 1. Attempt Question 1 and any other 3 questions**
- 2. Question 1 carries 25 marks, while the other questions carry 15 marks each.**
- 3. Present all points in coherent and orderly manner**

**1a. Discuss four (4) steps in decision theory approach.**

**b. Solve the transportation model using least cost method**

<b>SOURCE</b>	<b>LAGOS</b>	<b>AKURE</b>	<b>AWKA</b>	<b>SUPPLY</b>
<b>SOKOTO</b>	90	85	70	<b>600</b>
<b>KANO</b>	175	110	95	<b>1400</b>
<b>MAIDUGURI</b>	205	190	130	<b>1100</b>
<b>DEMAND</b>	<b>1600</b>	<b>1050</b>	<b>350</b>	

**2a. Identify and discuss the situations under which decision are made. 10marks**

**b. What are the Algorithm for Least Cost Method 5marks**

**3a. Give reasons why operations research is necessary in industries. 8marks**

**b. Give two definitions of operations research with identified authors. 7marks**

**4a. Outline the advantages and disadvantages of models 7marks**

**b. List and explain the classification of models by structure. 8marks**

5. Find Solution using Vogel's Approximation method. **15marks**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>SUPPLY</b>
<b>E</b>	3	2	7	6	<b>5000</b>
<b>F</b>	7	5	2	3	<b>6000</b>
<b>G</b>	2	5	4	5	<b>2500</b>
<b>DEMAND</b>	<b>6000</b>	<b>4000</b>	<b>2000</b>	<b>1500</b>	<b>13500</b>

6a. Describe the limitations of simulation. **7marks**

b. Discuss different forms of systems. **8marks**