



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESS WAY, JABI – ABUJA
FACULTY OF MANAGEMENT SCIENCES
DEPARTMENT OF BUSINESS ADMINISTRATION
2023 2 EXAMINATIONS

COURSE CODE: BUS406

CREDIT UNIT: 3

COURSE TITLE: ANALYSIS FOR BUSINESS DECISIONS

TIME ALLOWED: 2½HRS

INSTRUCTIONS:

- 1. Attempt Question One (1) and any other three (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. The table below shows us how some items are transported from five locations A,B,C,D and E to four location P,Q,R,S with the unit cost of transportation in them being shown in the box. Determine the initial feasible solution by finding minimum cost of transportation using the North West Corner method. **15Marks**

	P	Q	R	S	Supply
A	150	120	135	105	2000
B	90	140	130	140	8000
C	120	100	120	150	7000
D	180	140	200	162	3000
E	110	130	100	160	2500
Demand	1000	4000	8500	4500	

b. Briefly discuss areas of Industrial Application of Linear Programming. **2Marks each = 10Marks**

2a. A plant manufactures washing machines and dryers. The major manufacturing departments are the stamping department, motor and transmission department and assembly department. The first two departments produce parts for both the products while the assembly lines are different for the two products. The monthly department capacities are

Stamping department : 1,000 washers or 1,000 dryers

Motor and transmission department : 1,600 washers or 7,000 dryers

Washer assembly line : 9,000 washers only

Dryer assembly line : 5,000 dryers only.
Profits per piece of washers and dryers are #270 and #300 respectively.

Formulate the L.P model. **7½ Marks**

b. Highlight five (5) different forms of systems **1½ Marks each = 7½ Marks**

3a. Give reasons why operations research is necessary in industries. **6marks**

b. Describe Nine (9) body of knowledge of Project Management Institute. **1Marks each = 9Marks**

4. Trace the history and development of operations to the founding fathers of the field of management. **15Marks**

5a. Discuss different classifications of inventories. **10Marks**

b. Identify five limitations of Simulation. **5 Marks**