

## NATIONAL OPEN UNIVERSITY OF NIGERIA PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESS WAY, JABI – ABUJA FACULTY OF MANAGEMENT SCIENCES DEPARTMENT OF BUSINESS ADMINISTRATION 2020 2 EXAMINATION.334

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
В	90	140	130	140	8000
С	120	100	120	150	7000
D	180	140	200	162	3000
Е	110	130	100	160	2500
Demand	1000	4000	8500	4500	

## **1b.** Highlight Formulation of Linear Programming Model. **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

**2b.** Highlight five (5) different forms of systems  $1\frac{1}{2}$  Marks each =  $7\frac{1}{2}$  Marks

**3a.** Discuss different classifications of inventories. **10Marks** 

**3b.** Identify five limitations of Simulation. **5 Marks** 

**4a.** What do you understand by a game? **5Marks** 

**4b.** Write short notes on the following. **2Marks each = 10Marks** 

i. Perfect Information

ii. Decision maker

iii. Pure Strategy

iv. Pay-offs

v. Zero-sum Game

**5a.** Explain what scheduling involves and the nature of scheduling. **7Marks** 

**5b.** Identify the "body of knowledge areas" in project management. **8Marks** 

**6.** Formulate a linear programming model for the transportation problem. **15Marks** 

	Lagos	Ibadan	Abuja	Supply
Somolu	5	8	2	250
Alimosho	4	3	7	100
Ojo	9	6	5	450
Ketu	3	4	6	300
Demand	600	200	300	