



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESS WAY, JABI – ABUJA
FACULTY OF MANAGEMENT SCIENCES
DEPARTMENT OF BUSINESS ADMINISTRATION
2022_2 EXAMINATION

COURSE CODE: BUS406 CREDIT UNIT: 3

COURSE TITLE: ANALYSIS FOR BUSINESS DECISIONS

TIME ALLOWED: 2 ½ HRS

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. Contingency Matrix 1

States of Nature	Alternatives		Probability
	Stock Rice (A ₁)	Stock Maize (A ₂)	
High demand (S ₁) (₦)	4,000	15,000	0.6
Low demand (S ₂) (₦)	7,000	-5,000	0.4

Compute the EMV for alternatives A₁ and A₂ and draw out optimal contingency strategy.

15Marks

1b. Discuss various classifications of inventories. 10Marks

2a. Outline six (6) Limitations of the EOQ Model. 6Marks

2b. Describe the phases in decision analysis. 9Marks

3a. Discuss four (4) steps involves in decision theory approach. 8Marks

3b. Briefly discuss the phases involved in the Scientific Method in Operations research.

7Marks

4. Customers arrive at a service facility to get required service. The interval and service times are constant and are 1.8minutes and minutes respectively. Simulate the system for 14minutes. Determine the average waiting time of a customer and the idle time of the service facility.

15Marks

5a. Describe Monte Carlo Simulation and steps involved. **9Marks**

5b. Discuss assumptions of Linear Programming. **6Marks**