



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI, ABUJA
FACULTY OF MANAGEMENT SCIENCES
2025_1 EXAMINATION...

COURSE CODE: MBF839 **CREDIT UNIT:** 3
COURSE TITLE: QUANTITATIVE TECHNIQUES FOR BANKING AND FINANCE
TIME ALLOWED: 2^{1/2} HOURS
INSTRUCTIONS: 1. Attempt question Number one (1) and any other three
2. Question number 1 is compulsory and carries 25marks, while the other questions carry 15 marks each.
3. Present all your points in coherent and orderly manner

QUESTIONS

- 1(a) Explain the following terms
- i. Matrix
 - ii. Sensitivity Analysis
 - iii. Quantitative techniques. **(6 marks each)**
- 1(b) Musa bought a computer set costing N140,000 and makes a down payment of 40% while the balance will be amortized in 6 equal monthly instalments over a 2year period at 9% per year compounded monthly, what will be the amount of each monthly instalment. **(15 marks)**
- 1C) Define Payback period. **(4 marks)**
- Q2. Explain the following terms;
- i. Sensitivity Analysis:
 - ii. Simulation
 - iii. Queuing Theory:**(15 marks each)**
- Q3 Explain the three concepts under which decisions are made. **(15 marks)**
4. Explain the following;
- a) Inventory Management:
 - b) Network analysis
 - c) Linear programming. **(15 marks each)**
- 5) An equipment costing N1,000 has an expected life of 5 years. It is estimated that the cash flow resulting from the use of the machine will be N400 a year. The rate of return expected from capital of this type is 15%. Is the investment worthwhile? **(15 marks)**