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. (1**5 marks)**

4. Explain the following;

a) Inventory Management:

b) Network analysis

c) Linear programming. (1**5 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? (1**5 marks)**