



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESS WAY, JABI – ABUJA
FACULTY OF MANAGEMENT SCIENCES
DEPARTMENT OF FINANCIAL STUDIES
2020_1 EXAMINATION

COURSE CODE: MBF839

CREDIT UNIT: 3

COURSE TITLE: QUANTITATIVE TECHNIQUES FOR BANKING & FINANCE

TIME ALLOWED: 2^{1/2}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**
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1a. Describe the objective functions and the constraint of Linear Programming. 15marks

1b. A company sells x units of an item each day at the rate of N50 per unit. The cost of manufacturing and selling these units is N35 per unit plus a fixed daily overhead cost of N1000. Determine the profit function. 10marks

2a. Discuss Net Present Value and how is it computed? 10marks

2b. Calculate the present value of N1,000 receivable in seven year's time, assuming a 5% rate of interest. 5marks

3a. Explain annuity and how it works 5marks

3b. Explain the fundamental characteristics of ordinary shares and preference shares. 10marks

4a. Executives at all levels in business and industry make decisions at every course of daily activities. List and explain 5 advantages of the study of quantitative method for managers.

10marks

b. if Mr. Richman deposits N100,000 in a bank account which pays interest at 60% compounded semi-annually, how much will he have at the end of 5 years ?

5marks

5a. Discuss linkage between earnings per share and dividends per share? **10marks**

5b. In a firm of 1,250 employees, 575 are male. Find the percentage of female employees

5marks

6a. A grocery store charges N100 for 5 packs of oranges. Assuming there is a no quantity discount, how much will be charged for 18 packs of oranges? **5marks**

6b. Discuss extensively the following features:

i. Face Value **2marks**

ii. Interest Rate **2marks**

iii. Maturity **2marks**

iv. Redemption Value **2marks**

v. Market Value **2marks.**