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: BFN728 **CREDIT UNIT: 2**
COURSE TITLE: QUANTITATIVE TECHNIQUES FOR FINANCIAL DECISION
TIME ALLOWED: 2 HRS
INSTRUCTIONS:
1. Attempt Question One (1) and any other two (2) questions
2. Question 1 carries 30 marks, while the other questions carry 20 marks each.
3. Present all points in coherent and orderly manner

1a. Identify and explain tools of quantitative analysis. **10marks**

b. Solve for the unknowns in the following linear equation: **12marks**

$\frac{7X + 3}{2} - \frac{9X - 8}{4} = 6$

c. Define enumeration and discuss it Advantages. **8marks**.

2a. Solve for X and Y in the following equations:

$3X - 4Y = 13$ ……..1

$3Y + 2X = 3$ ……2 **14marks**

b. Describe Classification of Data **6marks**

3a. Consider the following data on the sales by 90 sales representatives:

Sales (N'000s)	No. of Sales Reps.(f)
10-15	10
16-21	36
22-27	28
28-33	10
34-39	6

Calculate the modal value of sales. **8marks**

b. Discuss six methods of data collection. **12marks**

4. The board of directors of Zonbi Nig. Plc. agrees to redeem some of its bonds in 2 years. At that time, N1, 102,500 will be required for the redemption. Assume N1, 000,000 is presently set aside. At what compound annual rate of interest will the N1, 000,000 have to be invested in order that its future value will be sufficient to redeem the bonds? **10marks**

b. State and explain two basic methods of solving quadratic equation. **10marks**

5. Assume that a business project is being considered, with initial costs of N12,000 and corresponding revenues or inflows over the following 4 years of N8,000, N12,000, N10,000, and N6,500, respectively. If the project costs (outflows) over the 4 years are estimated at N8,500, N3,000, N1,500, and N1,500, respectively, and the discount rate is 10 percent, evaluate the project's Net Present Value (NPV). **20marks**