



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI, ABUJA**

**FACULTY OF MANAGEMENT SCIENCES**

**2023\_1 POP EXAMINATION**

**COURSE CODE: MBA 816**

**CREDIT UNIT: 3**

**COURSE TITLE: Quantitative Methods for Managers**

**TIME ALLOWED: 2½ Hours**

**INSTRUCTIONS: 1. Attempt question Number one (1) and any other three (3).**

**2. Question number 1 is compulsory and carries 25 marks, while the other questions carry 15 marks each**

**3. Present all your points in coherent and orderly manner.**

**QUESTION 1**

- (a) Define and discuss the Number system
- (b) Discuss the three basic types of fractions.

**QUESTION 2**

- (a) State the rule for multiplication of fractions.
- (b) Solve:  $4/6 \times 8/10 = ?$

**QUESTION 3**

- (a) Explain the term: Ratio, with 5 examples.
- (b) If a ratio is multiplied by the same number, how does it affect the ratio?

**QUESTION 4**

Explain the term: variation in mathematics.

**QUESTION 5**

Linear equations are widely used by practitioners in industry for a variety of reasons. Explain what they are with examples.

Find the value of  $y$  in the following equation.

$$y(10 - 2) = 80.$$

**QUESTION 6**

- (a) What is quadratic equation
- (b) With examples, discuss arithmetic progression