



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS
SCHOOL OF MANAGEMENT SCIENCES
JANUARY/FEBRUARY 2013 EXAMINATION

Course Code: MBF 839 **Credit Units:** 2
Course Title: Quantitative Techniques for Banking and Finance
Time Allowed: 2 Hours

Instructions:

- 1. Attempt question number one (1) and any other two (2).**
- 2. Question number 1 is compulsory and carries 30 marks while the other 2 questions carry 20 marks each.**
- 3. Present all your points in coherent and orderly manner.**

1(a) As Finance manager, Suppose that your Habib Company Ltd, placed N1,000 in the savings account of a bank at 5 percent interest rate. How much shall it grow at the end of the three years?

1(b) Suppose N100 is invested at 5% per annum , what is the interest earned after 1st year?

1(c) If an ABC organization invested N1000 at 7% per annum, company invest. What is the value of investment at the end of the tenth year?

2(a)i What is sinking fund?

ii Why would a company generally create sinking fund? State and explain sinking fund formula.

2(b) Oshodi and Ikeja alliance company, wishes to make provision for the replacement of certain items of capital equipment which will mean out in 8 years time. The estimated cost of replacement is N50,000. If the rate of interest is 8%, what annual provision must it make to ensure funds being available?

2(c) Suppose an investor is considering the purchase of a five - year N1,000 per value bond, bearing a nominal rate of interest at 7% per annum. The investor's required rate of return is 8%. What will he be willing to pay now to purchase the bond if it matures at par?

3(a) If the rate of interest on N1000 per value perpetual bond is 8 percent, and its price is N800, what will be its YTM?

3(b) A company may issue a pure discount bond of N1,000 face value for N520 today for a period of five years. What is the price of N520?

4(a) Why do investors buy shares?

4(b) Suppose P x Y company pay a dividend of Naira 4 shares in the first year and reinvest the retained earnings (RE) of a rate of return ($r = ROE$) of 20 percent. What is the company's pay out ratio, retention rate and growth rate?

- 4(c) List and briefly explain five (5) characteristics of constant cycle?
- 5(a) What are series of stages of a project life cycle?
- 5(b) Identify and briefly explain five (5) phases of a project life cycle?
- 5(c) Outline five (5) advantages and three (3) disadvantages of Re- order level system?