



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SCHOOL OF MANAGEMENT SCIENCES
MAY/JUNE 2012 EXAMINATION

BHM 711: BASIC MATHS AND STATISTICS FOR MANAGERS
TIME ALLOWED: 3Hours

INSTRUCTION(S): Attempt any three (3) questions of your choice. Each question carries 23.3 marks.

1 (a) Solve for X in $30X + 10 + 2X = 15X + X + 42$

(b) Joe and Nick are to share N54 such that Joe has N8 less than Nick. What are the shares of Joe and Nick?

2. Discuss in detail the various techniques of statistical sampling. What are the various techniques used in data collection?

3 (a) The length of a one-room apartment is 8 metres more than width. If the area of the apartment is 48 square metres what are the dimensions?

(b) The demand function for bread in markets x and y is given by $3x - 4y = 19$ and $x - 2y = 5$ respectively. Solve for the variables x and y

4. (a) A company pays the salespersons either N6.50, N7.50, or N8.50 with the corresponding weights given as 14, 10, and 2 respectively what is the weighted mean?

(b) The ages of a sample of 5 patients in a clinic are recorded as: 38yrs, 26yrs, 13yrs, 41yrs, and 22yrs. What is the standard deviation of ages of the patients?

5. The followings are data on the number of stores that purchase bottled water in the cities as listed: Jos 25,000 Abuja 20,000

Akure 20,000 Akwa Ibom 5,000, summarise these information using a pie chart.