

NATIONAL OPEN UNIVERSITY OF NIGERIA 14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS SCHOOL OF MANAGEMENT SCIENCES 2013 2 EXAMINATION

COURSE CODE: BHM711 CREDIT UNIT: 2

COURSE TITLE: BASIC MATHS AND STATISTICS FOR

MANAGERS

TIME ALLOWED: 2 hrs

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 questions

carry equal marks each

3. Present all your points in coherent and

orderly manner.

1 (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?

(15 marks)

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

(15 marks)

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

(20 marks)

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

(10 marks)

- (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 (10 marks)
- 4. (a) A commercial bank pays its salespersons either N6.50, N7.50, or N8.50 with the corresponding weights given as 14, 10, and 2 respectively. What is the average payment to the salespersons? (10 marks)
- (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?

(10 marks)

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. (20 marks)