



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

COURSE CODE: BHM 303

CREDIT UNIT: 2

COURSE TITLE: Managerial Economics

TIME ALLOWED: 2 Hours

Instructions: 1. Attempt question Number one (1) and any other two (2) questions.

2. Question number 1 carries 30 marks, while the other questions carry 20 marks each

3. Present all your points in coherent and orderly manner

1a. Find the level of Q for which revenue will be maximized if the price is

given by:

$$P=500-5Q$$

Where $TR=PQ$

Where $MR=dTR/dQ$

1b. Let the profit of an hypothetical firm be given as:

$$\Pi = f(X, Y) = 100X - 2X^2 - XY + 180Y - 4Y^2$$

Where X and Y represent to products, $X + Y = 30$

Hint:

First note that the process of the substitution method involves two steps

a. Express one of the variables (X or Y in this case) in terms of the other

and solve the constraint equation for one of them (X or Y).

b. Substitute the solution obtained into the objective function (that is, the

function to be maximized or the profit function) and solve the outcome for the other variable.

2a. Outline and enumerate the 2 demand forecasting techniques.

- b. List and describe the 4 types of demand encountered in business.
- 3. State and describe the 2 scope of managerial economics.
- 4. State and discuss the 5 theories of profit.
- 5. Explain the marginal conditions of profit maximization.