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**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS**

**SCHOOL OF MANAGEMENT SCIENCES**

**OCTOBER 2016 EXAMINATION**

 **COURSE CODE: MGS 303 CREDIT UNIT: 3**

 **COURSE TITLE: Managerial Economics**

 **TIME ALLOWED: 21/2 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 equal marks each.**

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

 1a. Suppose that the unit price of a commodity is defined by:

 P=100 – 2Q

 Then, TR= PQ = (100 – 2Q) Q

 100Q – 2Q2

 Suppose all so that the total cost of producing this commodity is defined

 by the cost function TC = 100 + 0.5Q2

1. You are required to apply the first- order condition for profit maximization.
2. Determine the profit- maximizing level of output. (12 ½ marks)

1b. State and Describe the 2 Scope of Managerial Economics. (12 ½ marks)

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

∏ = f(X, Y) = 100X – 2X2 – XY + 180Y – 4Y2

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

Hint:

1. 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).

1. 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. (15 marks)

 3. List and Explain the important features of Decision Making in Business. (15 marks)

 4. State and Discuss the 5 Theories of Profit. (15 marks)

5. Explain the Marginal conditions of Profit Maximization. (15 marks)

6. List and Describe the 4 types of Demand encountered in Business. (15 marks)