



Course Code: ECN 301
Course Title: Intermediate Microeconomics
Instructions: Answer any THREE questions
Time Allowed: 2 hours

Credit Units: 2

Date: March, 2019

Question One

1a). Where applicable use graph, explain the following concepts

10 marks

- i. Short-run optimization
- ii. Equilibrium
- iii. Short-run profit under perfect competition
- iv. Short-run in industry equilibrium and firm optimum

1b). A firm operating in a perfect competitive industry has its cost function given as:

$$TC = 100 + 4q - 10q^2 + \frac{1}{3}q^3. \text{ If the market price, } P = \text{₦}30.$$

Find the profit maximizing units of output and the total profit at this level of outputs.

10 marks

Question Two

2a). Firms can achieve monopoly power from different sources, list and explain them.

10 marks

2b). With the aid of diagrams, explain the short-run profit maximization under pure monopoly market structure.

10 marks

Question Three

3a). A monopolist's demand curve is given as $P = 200 - 4q$. $TC = 100 + 20q$. Determine the profit maximizing units of output and the profit at this level of output

10 marks

3b). State five assumptions of Cournot model

5 marks

3c). Briefly describe the concept of Cartels

5 marks

Question Four

4). List and explain 4 types of productions

20 marks

Question Five

5a). Find the extremum of the function $z = f(x, y) = 2\frac{1}{2}x^2 + y^2$, subject to the constraint $4x + 2y = 13$

10 marks

5b). List and explain the motives of any firm in the industry

10 marks