NATIONAL OPEN UNIVERSITY OF NIGERIA FACULTY OF SOCIAL SCIENCES DEPARTMENT OF ECONOMICS 2020_2 EXAMINATION

COURSE TITLE: ADVANCED MICROECONOMIC THEORY COURSE CODE: ECO 711
UNITS: 3
TIME ALLOWED: 3 HOURS

## INSTRUCTION: ANSWER ONE AND ANY OTHER THREE QUESTIONS

1. Suppose that the unit price of a commodity is defined by $P=100-2 Q$ and the total cost is given as $\mathrm{TC}=100-0.5 \mathrm{Q}^{2}$. Apply the first-order condition and second order condition for profit maximization and determine the profit-maximizing level of output. ( $\mathbf{2 5}$ marks).

2a. What is welfare economics? ( $\mathbf{3}$ marks)
b. Distinguish between comparative static and dynamic equilibrium analysis ( $\mathbf{6}$ marks)
c. Differentiate between income consumption curve and price consumption curve ( $\mathbf{6}$ marks)

3a. Define the term externalities. (3 marks)
3b. Discuss the effects of externalities and how can externalities problems be solved. ( $\mathbf{6}$ marks)
3c. Discuss three types of externalities ( $\mathbf{6}$ marks)
4a. State five assumptions of linear programming for production. ( 5 marks)
b. State five advantages and disadvantages of linear programming. ( $\mathbf{1 0} \mathbf{~ m a r k s}$ )

5a. Explain the term cost benefit analysis. (2 marks)
b. State four steps taken and three cost incurred in cost benefit analysis. ( 7 marks).
c. Outline three merits and demerits of cost benefit analysis. ( 6 marks).
6. Write short notes on the following:
a. Law of Diminishing Marginal Utility and Average Utility. ( 6 marks).
b. Total Utility and Marginal Utility. ( 6 marks).
c. State three assumptions of the Law of Diminishing Marginal Utility. ( $\mathbf{3}$ marks).

