NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS
2021_2 EXAMINATION[1234]

COURSE TITLE: OPERATIONS RESEARCH
COURSE CODE: ECO 314
UNITS: 3
TIME ALLOWED: 3 HOURS

INSTRUCTION: ATTEMPT QUESTION ONE (1) AND ANY OTHER THREE (3) QUESTIONS

1a Explain the evolution of operations research **(8 marks)**
 b. List eight (8) characteristics of operations research **(8 marks)**
 c. Highlight the judgment phase of the scientific method of operations research **(9 marks)**

2. Identify and discuss five (5) assignment problems known to you. **(15 marks)**

3a. Define business decision analysis. **(2.5 marks)**
 b. What are the phases of business decision analysis? **(8 marks)**
 c. What are the possible errors to guide against when making business decisions? **(4.5 marks)**

4. Write short notes on the following:
 a. Conceptual System **(3 marks)**
 b. Mechanical System **(3 marks)**
 c. Social System **(3 marks)**
 d. Deterministic System **(3 marks)**
 e. Probabilistic System **(3 marks)**

5a. Define simulation. **(3 marks)**
 b. Explain six (6) limitations of simulation models **(12 marks)**