



NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SCIENCES
DEPARTMENT OF ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT
Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja
2020_2 EXAMINATIONS

COURSE CODE: ESM421

COURSE TITLE: ELEMENTS OF LAND SURVEYING

CREDIT: 2 Units

TIME ALLOWED: 2 Hours

Instruction: Attempt question number ONE (1) and any other THREE (3) questions. Question number one (1) carries 25 marks, while the other questions carry (15) marks each.

- 1a) What is Surveying? (5marks)
- b) Describe the primary divisions of Surveying. (6marks)
- c) Outline four classes of surveys on the basis of instrument used (4marks)
- d) Briefly describe the following: (5marks)
 - i. Topographic survey
 - ii. Engineering survey
 - iii. Cadastral survey
 - iv. City surveys
- e) Examine the Purpose, Suitability and Unsuitability of Chain survey (5marks)
- 2a) Discuss the basic principles of Surveying. (7marks)
 - b) Explain the process of surveying (4marks)
 - c) List the equipment used in Chain survey (4 marks)
- 3a) Describe the different types of tapes that exist for chain surveying (7 marks)
- b.) Itemize the process involved in chain survey. (3 marks)
- c) Differentiate between Compensating Errors and Gross errors in surveying (5 marks)
- 4a) How can you overcome obstacles during chaining? (6marks)
 - b) What is compass survey? (3marks)
 - c) Differentiate between prismatic compass and surveyor's compass (6marks)
- 5a) How can error of closure be adjusted according to Agor (1993)?. (5marks)
 - b) What is leveling? (4 marks)**
 - c) What are the Instruments required in levelling? (6marks)