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**NATIONAL OPEN UNIVERSITY OF NIGERIA**

Plot 91, Cadastral Zone, NnamdiAzikwe Expressway Jabi-Abuja

**FACULTY OF SCIENCES**

**DEPT. OF ENVIRONMENTAL SCIENCE AND RESOURCES MANAGEMENT**

**JULYEXAMINATION2017**

**COURSE CODE: ESM 421**

**COURSE TITLE: -ELEMENTS OF LAND SURVEYING**

INSTRUCTION- ANS QUESTION ONE (1) AND ANY OTHER THREE (3) QUESTIONS.

**TIME ALLOWED**: 2: 30 Mins.

1. a. Highlight some basic procedures involved in surveying. **(6Marks)**

 b. Elucidate two (2) classifications on the basis of purpose. **(7 marks)**

c. Explain why some developers have always tend to undermine some types of surveying.**(12 Marks)**

2a. Define surveying **(10 marks)**

2b. Classification surveying on the basis of surface and area to be surveyed**(10 marks)**

3a.In surveying classification based on instrument used is paramount,briefly comment on this. **(7.5 marks)**

b. Outline the sources of errors in chain survey and draw inference for their rectifications. **(7.5mks)**

4. Itemize the characteristics of the three main phases in the process of surveying. **(10 marks)**

4. Briefly outlined theprocess of surveying**(5 marks)**

5. Write short notes on the following terms in relation to chain survey

(i) Purpose, (ii) suitability (iii) unsuitability.**5 marks each(15 marks)**