**

**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**Plot 91, Cadastral Zone, NnamdiAzikwe Expressway, Jabi, Abuja**

**Faculty of Sciences**

**JANUARY/FEBRUARY, 2018 EXAMINATIONS**

**COURSE CODE: ESM 407 CREDIT UNIT:** 2**TIME ALLOWED:** 2 HOURS

**COURSE TITLE: GEOGRAPHICAL INFORMATION SYSTEM**

**Instruction:** Attempt question number one (1) and any other three (3).

**1.** According toBurrough (1986) Geographical Information System is a Set of tools for collecting, storing, retrieving at will, transforming and displaying spatial data from the real world for a particular set of purposes while Arnoff (1989) defines GIS as "a computer based system that provides four sets of capabilities to handle geo-referenced data: data input, data management manipulation and analysis, and data output." Discuss this statement with relevant information. **(25marks)**

**2.** Discuss the quality of a good storage device. **(15marks)**

**3.** Discuss thetypical questions that Geographic Information System can answer **(15marks)**

**4.**Discuss thehistorical background to the development of science and technology of Geographic Information Systems. **(15marks)**

**5.**Examine the factors responsible for the growth of GIS. **(15marks)**