

**National Open University of Nigeria**

**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**

**Faculty of Science**

**APRIL, 2019\_1 EXAMINATIONS**

**COURSE CODE: ESM 407**

**COURSE TITLE: Geographic Information System.**

**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.Define GIS **(3marks)**

b. What is data updating? **(2marks)**

c. Outline the factors aiding the rise of GIS. **(8marks)**

d. Discuss the process of attribute data updating **(9marks)**

2a. What is hardware? **(1mark)**

b. List the factors to be considered for measuring quality of data. **(3marks)**

c. Examine the various GIS Hardware components and their functions **(8marks)**

3a. Explain the following as components of GIS

i)Hardware **(4marks)**

ii)Software **(4marks)**

b. Discuss the components of GIS in respect of data **(4marks)**

4a. Highlight the factors aiding the rise of GIS. **(8marks)**

b. Identify and discuss any four (4) determinants of a good quality storage device **(4marks)**

5a. What is geographic data? **(3marks)**

b. Discuss the process of attribute data updating **(9marks)**

6a. State the characteristics of Geographic features (**6marks)**

b. List the qualities of a good storage device **(6marks)**