



National Open University of Nigeria
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Science
2021_2 EXAMINATIONS

COURSE CODE: ESM407

COURSE TITLE: Geographic Information System (GIS)

CREDIT: 3 Units

TIME ALLOWED: 2 Hours: 30 minutes

Instruction: Attempt question number ONE (1) and any other FOUR (4) questions. Question number one (1) carries 22 marks, while the other questions carry (12) marks each.

1a) Define GIS, according to Arnoff, (1989) GIS can be defined as?

(3marks)

1b) Succinctly discuss the essential features of GIS

(19marks)

2) Explain in detail how GIS can be applied in deducing and resolving problems that arise under the following

(12 marks)

3a) Outline the special-purpose digital subsystems for GIS

(4marks)

3b) Highlight the developments over the centuries that have been cumulatively instrumental to the emergence and subsequent growth of the GIS technology

(8marks)

4) Elucidate on the contributions of the following to the development of GIS

(12marks)

Dr. Roger Tomlinson (9marks)

Howard T. Fisher (3marks)

5) Succinctly discuss the characteristics which the GIS technology uses to manipulate geographical data.

(12marks)

6a) Outline the major hardware-related elements essential for effective GIS operations

(4marks)

6b) Compare and discuss the functions of GIS and CAD

(6marks)

6c) Mention the major output devices employed in GIS

(2marks)