



NATIONAL OPEN UNIVERSITY OF NIGERIA

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

FACULTY OF SCIENCES

DEPARTMENT OF ENVIRONMENTAL SCIENCE

COURSE CODE: EMT 409 CREDIT UNIT: 2 TIME: 2:30MINS

POP EXAMINATION 2022_2

COURSE TITLE: GEOGRAPHIC INFORMATION SYSTEM

Question 1 and any other 3. Question 1(25 marks) and others (15marks)

1a). Using a well labelled diagram show how data can be integrated using GIS (10marks)

1b). Give an overview of the uses and applications of GIS in our society and daily lives (15marks)

2a). List the characteristics of the fields in an attribute database (2marks)

2b). Geographical features have some characteristics which the GIS technology uses to manipulate geographical data, discuss. (13marks)

3a). Define data editing(1mark)

3b). In a tabular form differentiate between manual digitizing and automatic scanning (14marks)

4). Discuss the following hardware components of a GIS (15marks)

Computer(4marks)

Input Devices(7marks)

Storage devices(1mark)

Output devices(3marks)

5a). Explain how an electronic scanner can be employed in the digitization or conversion of existing paper-based records, plans, maps and charts to digital format(7marks)

5b). Outline the traditional grouping of geographic features based on their geometric dimensions(4marks)

5c). List the key considerations that must be taken in discussing or determining the GIS procedure in any organization. (4marks)

6a). Outline why cartographic application is the foundation of GIS(3marks)

6b). Write on map production and map making as cartographic functions of GIS (12marks)