



National Open University of Nigeria  
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja  
Faculty of Science  
2021\_1 EXAMINATIONS

**COURSE CODE: ESM 407**

**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) Attempt an explanation of the view expressed by Huxhold, 1991 on GIS (6marks)

1b) Outline the learning outcome acquired in learning about GIS (9marks)

1c) Complete the following definition with the appropriate words (7marks)

"A geographic information system is a \_\_\_\_\_ for \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ that pertain to the surface of the earth. This is a broad definition . . . a considerably narrower definition, however, is more often employed. In common parlance, a geographic information system or GIS is a \_\_\_\_\_ of computer hardware and software specifically designed for the \_\_\_\_\_, \_\_\_\_\_, and use of \_\_\_\_\_."

2a) Outline the five major ways in which GIS introduces a cut across perspective for all areas of life (5marks)

2b) What do the following questions depict in GIS (2marks)

QUESTION	ANSWER
Where is it?	
What has changed since?	
What spatial patterns exist?	
What if?	

2c) Highlight the goals of understanding geographical data (5marks)

3) Discuss the historical evolution of GIS in the 80s and 90s (12 marks)

4a) Discuss the contributions of John Snow to the development of modern GIS (6marks)

4b) Fill in the missing words (6marks)

Computerized \_\_\_\_\_ have been developed \_\_\_\_\_ in several related fields. The present status of GIS would not have been achieved without \_\_\_\_\_ between \_\_\_\_\_ such as \_\_\_\_\_, cadastral mapping, \_\_\_\_\_, thematic cartography, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, earth science, and \_\_\_\_\_.

5a) Discuss the role of the traditional geographical features in GIS (4marks)

5b) Expatiate on the significance of geographical data as it relates to everyday living.

6) Mention 24 of the most common and widely used terms in GIS

**(8marks)**

**(12marks)**