



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF SPATIAL PLANNING AND NATURAL RESOURCE MGT
UNIVERSITY EXAMINATION FOR DIPLOMA IN LAND SURVEY
2ND YEAR 2ND SEMESTER 2023/2024 ACADEMIC YEAR
MAIN REGULAR

COURSE CODE: PCD 1203

COURSE TITLE: THEMATIC MAPS II

EXAM VENUE: LAB 10

STREAM: (DIPLOMA IN CARTOGRAPHY)

DATE: 03/05/2024

EXAM SESSION: 9.00 – 11.00 AM

TIME: 2 HOURS

Instructions:

- i. Attempt Question ONE (COMPULSORY) and any other TWO questions.**
- ii. Candidates are advised not to write on the question paper.**
- iii. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

QUESTION ONE

- a) You have been hired by the county cartographer to prepare thematic map that visualize on spatial patterns, distribution or relationship on specific theme. Briefly discuss on the steps involve in preparing a thematic map (20 marks)
- b) Highlight 6 importance of using a thematic map (6 marks)
- c) State 5 characteristics of a map (5 marks)
- d) Identify 5 types of thematic maps: (5 marks)
- e) Identify 4 types of information contained in a Choropleth map (4 marks)

QUESTION TWO

- a) Differentiate between vertical and horizontal coordinate system (6 marks)
- b) Briefly explain two steps involved in a map projection (4 marks)
- c) Outline the classifications of map projection (4 marks)

QUESTION THREE

Assuming that you have been tasked by the county government of Siaya to produce a new thematic map. As a cartographer briefly outline:

- a) Five sources of information during map compilation (10 marks)
- b) Five procedures taken during map production (10 marks)

QUESTION FOUR

- a) Storing and archiving of Thematic maps involve consideration in terms of both data storage and meta data management. Outline the key aspects to consider when storing and archiving thematic maps (10 marks)
- b) Outline the steps considered when selecting sources for a Thematic map during preparation (10 marks)

QUESTION FIVE

- a) Georeferencing is acritical process in GIS and Cartography. Briefly outline georeferencing of map according to; (10 marks)
 - i. Its Importance
 - ii. How its done
 - iii. What tools and software that are used during georeferencing
 - iv. Common challenges in georeferencing
 - v. Application of georeferencing
- b) With reference to coordinate system differentiate between reference datum and coordinate system projection (4 marks)
- c) Briefly explain 3 types of horizontal coordinate system (6 marks)