



**FEDERAL UNIVERSITY OF TECHNOLOGY
SCHOOL OF ENVIRONMENTAL TECHNOLOGY
DEPARTMENT OF SURVEYING & GEOINFORMATICS
FIRST SEMESTER EXAMINATION 2018/2019 SESSION**

COURSE TITLE: Introduction to Geodesy **COURSE CODE:** SVG318

CREDIT UNIT: 2 **TIME:** 1hr 30 minutes

INSTRUCTION: Answer any **Three (3)** question

Q1. (a). Provide the modern definition of geodesy. Identify and briefly describe the various classification of geodesy. (10 marks)

b). Identify the three basic representation of the earth surface. With the aid of a well annotated diagram, show the relationship between these surfaces. (10 marks)

Q2. What is coordinate system and why is it essential? In defining a coordinate system what are the parameters that must be specified. (10 marks)

(b). Discuss point positioning in terms of astronomic and satellite positioning (10 marks)

Q3. What are the three basic types of coordinate system? Provide the features of geocentric and topocentric systems (15 marks)

(b). Enumerate the three pillars of geodesy and show their relationship using a well annotated diagram (5 marks)

Q4. Provide a short note on (i) right ascension, (ii) hour angle, and (iii) horizon systems (15 marks).

(b). Briefly discuss the two basic ways for locating points in a plane coordinate system. (5 marks)