## Assignment (1)

- 1. What is the definition of geodesy and what are its main objectives?
- 2. How can geodesy be applied in different branches and fields?
- 3. Provide a brief overview of the history of geodesy and its development over time.
- 4. What are the main factors that determine the shape and size of the Earth?
- 5. Explain the concept of latitude and longitude and their significance in geodesy.
- 6. What is the geoid and how does it differ from the Earth's actual shape?
- 7. Describe the concept of an ellipsoid and its relationship to the Earth's shape.
- 8. How is geodesy used in modern navigation systems and satellite positioning?
- 9. What are some of the challenges and limitations in measuring and representing the Earth's shape accurately?
- 10. What are the main techniques used in geometric geodesy to measure and analyze the Earth's surface properties?
- 11. What are the main aspects of the Earth's physical properties that are studied in physical geodesy?
- 12. Can you provide examples of practical applications of geodesy in engineering, mapping, and surveying?