

# QUIZIZZ Worksheets

## Geodesy 2 - Quiz I

Total questions: 20

Worksheet time: 11 mins

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Name

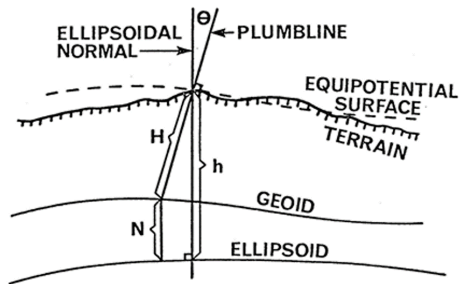
Class

Date

- ..... is a discipline within engineering that focuses on designing and analyzing systems where direct line-of-sight communication or observation is crucial.
  - Geodetic surveying
  - None of the above
  - Communication surveying
  - LOS engineering
- Triangulation stations should be chosen on high ground so that all relevant stations are .....
  - accessible
  - None of the above
  - intervisible
  - inaccessible
- If the distance between stations is large, the intervisibility is ascertained by knowing the ..... between the stations.
  - horizontal distance
  - None of the above
  - azimuth
  - vertical angle
- $h = D^2/2R(1 - 2m)$   
m is .....
  - height of station above datum
  - None of the above
  - coefficient of refraction
  - vertical distance
- The line of sight should be taken at least 3 m above the point of tangency T of the earth's surface to avoid .....
  - intervening ground
  - grazing rays
  - obstructions
  - none of the above



11. The quantities  $\Phi$ ,  $\Lambda$ , and  $H$  define the position of the observer with respect to the .....
- a) ellipsoid
  - b) None of the above
  - c) WGS1984
  - d) geoid & the mean rotational axis of the earth.
12. The geodetic coordinates are determined from ..... observed on the earth's surface, reduced to the ellipsoid.
- a) Triangulation or Trilateration
  - b) Astronomic observations reduced to ellipsoid
  - c) a and b
  - d) MSL
13. Ideally the origin of the rectangular coordinates system should be at the earth's center of gravity; the system is known as .....
- a) Geodetic Coordinate System
  - b) Average Terrestrial Coordinate System
  - c) Horizon system
  - d) None of the above
14. When the origin of the rectangular coordinates system is NOT the earth's center of gravity; the system is known as .....
- a) All of the above
  - b) ECEF
  - c) Geodetic Coordinate System
  - d) Average Terrestrial Coordinate System
15. In this system the coordinates  $U, V, W$  are expressed as functions of the observed azimuth  $A$ , zenith distances  $Z$  & spatial distance  $S$
- a) cartesian system
  - b) None of the above
  - c) Horizon system
  - d) geodetic system
16. What does a coordinate system provide a framework for?
- a) None of the above
  - b) Describing the shape of objects
  - c) Mathematical calculations
  - d) Determining the texture of objects



17.

In this figure, theta is .....

- a) normal gravity
- b) None of the above
- c) incidence angle
- d) deflection of the vertical

18. It is measured along the curved plumb line and obtained from spirit levelling and gravity observations.

- a) undulation
- b) orthometric height
- c) Normal height
- d) geodetic height

19. is the height of the observer above the reference ellipsoid, measured along the ellipsoidal normal.

- a) all of the above
- b) orthometric height
- c) Ellipsoidal height
- d) geoidal undulation

20. Relation between Astronomic and Geodetic Coordinates is characterized by .....

- a) C.G of ellipsoid
- b) None of the above
- c) normal gravity
- d) deflection of the vertical

**Answer Keys**

- |  |   |                           |
|--|---|---------------------------|
| 1. d) LOS engineering                        | 2. c) intervisible                                    | 3. a) horizontal distance |
| 4. c) coefficient of refraction              | 5. b) grazing rays                                    | 6. c) intersection        |
| 7. c) Resection                              | 8. resection  | 9. d) A coordinate system |
| 10. a) direction of gravity                  | 11. d) geoid & the mean rotational axis of the earth. | 12. c) a and b            |
| 13. b) Average Terrestrial Coordinate System | 14. c) Geodetic Coordinate System                     | 15. c) Horizon system     |
| 16. c) Mathematical calculations             | 17. d) deflection of the vertical                     | 18. b) orthometric height |
| 19. c) Ellipsoidal height                    | 20. d) deflection of the vertical                     |                           |

