

Sheet (1)

Definitions and Units

Note: You are required to submit your answers in a report with hand writing

1. Give complete definition to the following types of surveying

Plane surveying - Topographic survey - Geodetic surveying - Global Positioning System (GPS) - Control survey - Cadastral, land, boundary, or property survey - photogrammetric survey - Remote Sensing - Geographic Information Systems (GIS) - Construction survey- Hydrographic survey

2- Convert the following angles to grade units

- a) $290^{\circ} 52' 39.5''$
- b) $87^{\circ} 52' 32.5''$
- c) 73.3265°
- d) 2.251 Radian

3- Convert the following angles to radian units

- a) $231^{\circ} 19' 11.5''$
- b) $345^{\circ} 43' 15.2''$
- c) 254.3388°
- d) 69.5578°

4- Convert the following angles to Sexagesimal system

- a) $354^{\circ} 88^{\text{cg}} 16.5^{\text{cc}}$
- b) $236^{\circ} 33^{\text{cg}} 11.4^{\text{cc}}$
- c) 041.4617^{s}
- d) 3.1414 Radian
- e) 0.7545 Radian

5- If the length of one road between Riyadh and Al-Qassium cities is 354 km. Calculate the length of that road in miles.

6- A ruler of 120 cm length. Find its length in inches.

7- A football playground has a length of 75 yards. Find its length in meters.

8- If the area of a farm is determined as 125000 square meter. Compute its area in Fadden and in hectare.

9- A rectangular empty land ready to construct a domestic compound on it. Its area is calculated as 603500 square meter. It is required to calculate its area in square kilometer units.

10- If the internal volume of a fuel tank is found to be 250 cubic meter. Calculate the volume of the fuel inside it in liters.

11- A transport vehicle equipped with a fuel tank in the form of a cylinder size of 12.25 cubic meters. Calculate the capacity of this reservoir of fuel in liters

Good Luck