1) **Compute** the ground resistance for a hemisphere of 0.5, 1 and 2m diameter, at distances 2m, 10m and 100m from the center of the sphere. **Present** the results in both tabular and graphical formats and for different soil composition.

2) **Calculate** the ground resistance and the overlapping coefficient for the grounding system shown below in each figure, given that the earth resistivity ρ=100 Ω.m, the length of the driven rod is 8 m, and its diameter is 6 cm. **Discuss** your results.

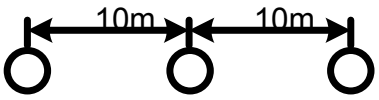

Fig. 1

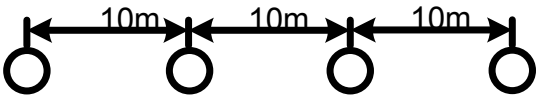

Fig. 2

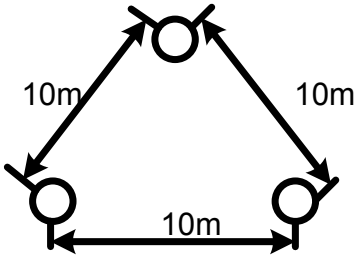

Fig. 3

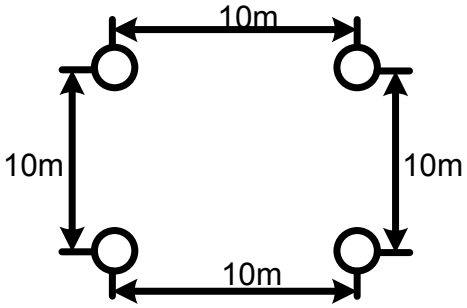

Fig. 4

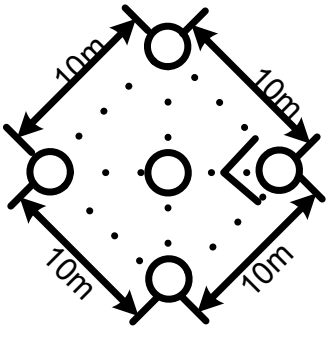

Fig. 5

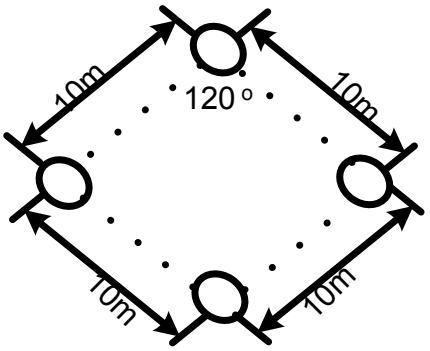

Fig. 6

3) If the earth resistance of a driven rod is 5 Ω, and its diameter is 5 cm, **Calculate** the length of the driven rod, given that the earth resistivity ρ=100 Ω.m.