

HOME WORK # 1

1. What is the main function of the TT&C ground station in a satellite communication system?
2. List the main elements of a DBS satellite communication system. What is the main function of a gateway in such a system?
3. What are the main disadvantages of a geostationary communication satellite?
4. What are the main advantages of having communication satellite in a Low Earth Orbit (LEO)?
5. List all types of orbits that are used for communication satellites.
6. Why is the microwave frequency range suitable for satellite communications?
7. What are the advantages of using lower microwave frequency range, such as the C band (4-6 GHz) in satellite communications?
8. What are the disadvantages of using lower microwave frequency range, such as the C band (4-6 GHz) in satellite communications?
9. Calculate the radius of a circular orbit for which the period is 6 hours.