

Roll No

EC-7002 (CBGS)

B.E. VII Semester

Examination, November 2019

Choice Based Grading System (CBGS)

Satellite Communication

Time : Three Hours

Maximum Marks : 70

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Define the following parameters with reference to satellite orbits.
 - i) Apogee and Perigee
 - ii) Eccentricity
 - iii) Ascending and descending nodes.b) Discuss the Kepler's three laws of planetary motion.
2. a) Discuss about the frequency allocation of satellite systems.
b) Discuss briefly about inclined orbits.
3. a) What is polarization of antenna? Also explain the linear polarization and elliptical polarization.
b) Write down short notes on following:
 - i) Antenna look angles
 - ii) Ionospheric depolarization
4. a) Explain briefly about transponder.
b) Explain about the receive only home TV system.

5. a) Calculate the combined uplink and downlink *C/N ratio*.
b) Write the link power budget equation and explain its different terms.
6. a) With the help of block diagram explain the operation of DBS system.
b) What is VSAT system? How does a VSAT work? Who uses VSAT system?
7. a) What are the important components of an earth station.
b) Explain interference between satellite circuits.
8. a) Describe briefly Satellite Radio Broad Casting.
b) Write short note on advanced Tiros-N space craft.
