



CBCS SCHEME

15MT654

Sixth Semester B.E. Degree Examination, June/July 2019 Satellite Communication

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain types of satellite orbits. (08 Marks)
b. Explain orbital parameters of satellite. (08 Marks)

OR

- 2 a. Explain Keplers law of planetary motion. (08 Marks)
b. Explain Newton's law of orbits for satellite. (08 Marks)

Module-2

- 3 a. Explain payload in a satellite. (08 Marks)
b. Explain power subsystem of satellite. (08 Marks)

OR

- 4 a. Describe in detail tracking, telemetry and control. (08 Marks)
b. Explain attitude and orbit control. (08 Marks)

Module-3

- 5 a. Explain SCPC system. (08 Marks)
b. Briefly explain TDMA used in satellite. (08 Marks)

OR

- 6 a. Describe FDMA used in satellite communication. (08 Marks)
b. Derive the transmission equation. (08 Marks)

Module-4

- 7 a. Explain typical satellite TV network. (08 Marks)
b. Explain VSAT network topologies. (08 Marks)

OR

- 8 a. Describe payloads in a communication system. (08 Marks)
b. Explain earth station architecture. (08 Marks)

Module-5

- 9 a. Classify and explain remote sensing satellite. (08 Marks)
b. Briefly explain the development of satellite navigation systems. (08 Marks)

OR

- 10 a. Explain sensor parameters in a remote sensing satellites. (08 Marks)
b. Explain types of images obtained by a remote sensing satellite based on processing. (08 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.