

Code No: R20A0420

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

III B.Tech II Semester Regular Examinations, May 2023**Satellite Communications****(ECE)**

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Time: 3 hours**Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION – I

- 1 State Kepler's three laws of planetary motion. Illustrate in each case their relevance to artificial satellites orbiting the earth [14M]

OR

- 2 Explain in detail about geocentric-equatorial coordinate system which is based on the earth's equatorial plane [14M]

SECTION – II

- 3 Discuss and derive the expression for C/N for the combined link [14M]

OR

- 4 What are the different transmission losses in satellite communication systems? Explain? [14M]

SECTION – III

- 5 Explain Telemetry, Tracking and Command system in detail. [14M]

OR

- 6 Explain in detail about Receive-Only Home TV Systems [14M]

SECTION – IV

- 7 Explain the block diagram and its functioning of a SPADE System [14M]

OR

- 8 Describe the ways in which demand assignment may be carried out in FDMA. [14M]

SECTION – V

- 9 Write a detailed notes message transmission by TDMA [14M]

OR

- 10 Define packet and explain in detail about packet reservation. [14M]
