

Code: EC8T1

**IV B.Tech-II Semester–Regular/Supplementary Examinations–May 2022**

**TV AND SATELLITE COMMUNICATIONS  
(ELECTRONICS AND COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

**PART – A**

Answer *all* the questions. All questions carry equal marks

11x 2 = 22 M

1.

- a) List out the characteristics of visible light.
- b) Explain scanning process in television system.
- c) Explain Dynamic Range.
- d) List out the practical limitations of D/A conversion.
- e) Define Quantizing range.
- f) Write about Audio Synchronization.
- g) Mention the Applications of Satellites.
- h) Define the term Look Angle.
- i) List the types of Launch Vehicles used for Satellites.
- j) Write the functions of Telemetry, Tracking and Command Subsystem.
- k) Compare Apogee and Perigee.

## PART – B

Answer any **THREE** questions. All questions carry equal marks.

$$3 \times 16 = 48 \text{ M}$$

2. Explain in detail about the Transmission standards and constraints. 16 M
3. Illustrate Quantizing error and Quantizing the sampled values. 16 M
4. a) Explain about Synchronization between Digital Audio and Video Signal. 8 M  
b) Illustrate the concept of the Sampling Rates and Coded Signals. 8 M
5. a) Explain the three Kepler's laws of planetary motion. 8 M  
b) Explain Orbital Effects in Communication Systems. 8 M
6. Explain Communication Subsystems. 16 M