

[Apr-24]

**GITAM (Deemed to be University)**  
**[EECE2141]**

**GST/GSS/GSB/GSHS Degree Examination**  
**VI Semester**

**TELECOMMUNICATIONS FOR SOCIETY**

(Effective from the admitted batch 2021–22)

**Time: 2 Hours**

**Max.Marks: 30**

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**Instructions:** All parts of the unit must be answered in one place only.

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**SECTION-A**

1. **Answer all the questions.** (5x1=5M)

- a) Explain the basic operation of a telephone system.
- b) What are the main components of a cellular telephone system?
- c) What do you understand by UWB?
- d) How does fiber optic technology impact telecommunication systems?
- e) List the various applications of satellite communication.

**SECTION-B**

**Answer the following:** (5x5=25M)

**UNIT-I**

2. Evaluate the advantages and disadvantages of different telecommunication technologies.

**OR**

3. Explain the purpose and function of facsimile (fax) machines.

## **UNIT-II**

4. Compare 2G, 3G, and 4G cell phone technologies.

**OR**

5. Explain in detail about different access methods in cell phone technologies.

## **UNIT-III**

6. Analyze the advantages and limitations of different wireless technologies.

**OR**

7. Discuss wireless local area network technology.

## **UNIT-IV**

8. Examine the applications of wavelength-division multiplexing in high-speed data transmission.

**OR**

9. Illustrate the structure and function of fiber-optic cables.

## **UNIT-V**

10. Explain and compare the features of geostationary and low Earth orbit satellites.

**OR**

11. Investigate the impact of satellite communication on global connectivity and digital inclusion.