

[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 questions:** **(5×1=5)**

- a) Compare and contrast the features of landline and mobile phone services.
- b) What are the benefits and challenges of implementing small cell technology?
- c) What is Ultrawideband (UWB) wireless technology?
- d) Enlist the components of an optical communication system.
- e) Explain in brief detail Global Navigation Satellite Systems?

**Section-B**

**Answer the following:** **(5×5=25)**

**UNIT-I**

2. Describe the role of telecommunication systems in enhancing global connectivity and facilitating international communication. Provide examples of how telecommunication systems bridge geographical distances and connect people worldwide.

**OR**

3. Explain in detail Facsimile with relevant block diagram?

**UNIT-II**

4. What are the benefits and challenges of implementing small cell technology?

**OR**

5. Compare the features and capabilities of different generations of cellular networks.

### **UNIT-III**

6. Discuss infrared wireless communication in detail.

**OR**

7. Investigate the role of wireless technology in short-range telecommunication.

### **UNIT-IV**

8. Describe the structure and function of fiber-optic cables.

**OR**

9. Compare different types of optical transmitters and receivers based on their efficiency and reliability.

### **UNIT-V**

10. Analyze the factors influencing the selection of satellite orbits for different communication purposes.

**OR**

11. Explain and describe satellite communication systems in detail with a suitable diagram?

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