

[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

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

Section-A

1. Answer all questions: **(5×1=5)**

- a) Discuss the social and economic implications of internet telephony.
- b) Describe the key features of Long Term Evolution (LTE)?
- c) What is a Wireless Local Area Network (WLAN)?
- d) What are the main components of optical fiber?
- e) Identify the role of ground stations in satellite communication.

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. Analyze the components and operation of a facsimile (fax) machine. Describe how fax machines transmit documents over telephone lines and the role they play in modern communication.

UNIT-II

4. Explain in detail Base stations and Small cells concept with suitable diagrams.

OR

5. Analyze the potential future directions of 4G cell phone technology.

UNIT-III

6. Describe the features and applications of Bluetooth technology.

OR

7. Explain infrared wireless technology in detail with relevant diagram?

UNIT-IV

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

OR

9. Discuss the advantages of passive optical networks (PONs) in broadband communication.

UNIT-V

10. Discuss the future trends and challenges in the field of satellite communication.

OR

11. Describe the basic principles behind global navigation satellite systems (GNSS).

[II/VI/124]