GITAM (Deemed to be University)
[EECE2141]

GST/GSS/GSB/GSHS Degree Examination
IV 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) Differentiate between 2G and 3G cellular systems.

   c) Explain the applications of Radio-Frequency Identification (RFID).

   d) Explain the concept of wavelength-division multiplexing (WDM) in optical networks

   e) Describe the advantages of satellite communication.

Section-B

Answer the following: **(5×5=25)**

UNIT-I

2. Describe the functionalities of the telephone system.

OR

3. Explain the Internet telephony in detail.

UNIT-II

4. Explain the basic principle of cell handoff in cellular networks.

<center>**OR**</center>

5. Define Long Term Evolution (LTE) and its significance in cellular communication.

<center>**UNIT-III**</center>

6. Explain Zigbee and Metropolitan Area Network with suitable diagrams.

<center>**OR**</center>

7. Explain the concept of personal area networks (PANs) and Bluetooth technology using the suitable diagram, and also discuss its application.

<center>**UNIT-IV**</center>

8. Evaluate the factors influencing the design and performance of fiber-optic cables.

<center>**OR**</center>

9. Analyze the scalability and sustainability of 40/100-Gbps optical networks.

<center>**UNIT-V**</center>

10. Explain the concept of satellite orbits and their significance in communication.

<center>**OR**</center>

11. Discuss Ground Station Systems in detail with suitable diagrams.

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