[Nov - 24]

GITAM (Deemed to be University)

GST/GSS/GSB/GSHSS Degree Examination

V/VII Semester

EECE2141 : TELECOMMUNICATIONS FOR SOCIETY

Time: 2 Hours **Max. Marks: 30**

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

Section - A

1. Answer all questions **(5x1=05)**

a. What is the typical resolution of older facsimile systems in lines per inch (LPI)?

b. What is the major issue in the cellular industry?

c. What is NFC?

d. The numerical aperture of a fiber-optic cable is 0.29. What is the critical angle?

e. What is a geostationary orbit?

Section - B

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

UNIT - I

2. List out the key circuit components that help to understand the telephone system.

OR

3. Illustrate the general diagram of the modular interface (Subscriber interface) in a telephone system.

UNIT - II

4. Compare the features of TDMA, FDMA, CDMA and OFDMA.

OR

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

UNIT - III

6. Explain how a mesh network increases the transmission range and reliability.

OR

7. Explain the access mode, modulation, and frequency bands for the newest form of UWB. What is the primary disadvantage of UWB?

UNIT - IV

8. Explain the optical communication system with a neat diagram.

OR

9. Describe the Coarse WDM technique.

UNIT - V

10. Draw and explain a generic DBS receiver.

OR

11. Explain the role of the Control Segment in the Global Positioning System (GPS) and discuss the importance of atomic clocks in maintaining the accuracy of GPS signals.