Regulation R18 *Subject code: 2O6FA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech VI Semester Supplementary Examinations, June/July 2023

PRINCIPLES OF ELECTRONIC COMMUNICATIONS

(IT)

Maximum Marks: 70 Date:03.07.2023 Duration: 3 hours

Note: **1.This question paper contains two parts A and B.**
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10x2M=20 Marks)

1 Draw the block diagram of a communication system?
2 Define modulation and classify?
3 Define base band transmission?
4 Define QPSK?
5 What is local loop in telephones?
6 What is the main purpose of a LAN?
7 What is the name of the centre of gravity of the earth?
8 What is the major application of fiber-optic cable?
9 What is handoff?
10 What are the functions of Mobile Station?

Part-B

Answer All the following questions. (10MX 5=50Marks)

11 Draw and describe the various frequency ranges in the electromagnetic spectrum with its applications? [10]

OR

12 What are the types of communication system and write short notes on line communication, radio communication? [10]

13 Describe the generation and detection of coherent QPSK signals. [10]

OR

14 Draw the block diagram of a digital communication system. Explain each block? [10]

15 A. State the general operation of a cordless telephone. [5]

B. Describe internet telephony? [5]

OR

16 Discuss the topology, encoding and transmission media used in Ethernet LANs. [10]

17 A. Explain what is meant by satellite altitude and briefly describe forms of altitude control. [5]
B. Write about telemetry and control subsystems? [5]

OR

18 Draw and explain electromagnetic spectrum showing the optical spectrum. [10]

19 Draw and explain GSM architecture in detail. [10]

OR

20 Write short notes on the following.

a) RFID communication [5]

b) UWB. [5]