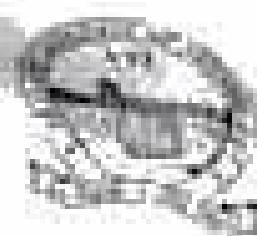**VIT**
Vellore Institute of Technology

# SCHOOL OF INFORMATION TECHNOLOGY & ENGINEERING

### Continuous Assessment Test – 1
### Winter Semester 2019-20

Programme: B.Tech

Course Name: Data Communication and Computer Networks

Course Code: ITE3001

Duration: 90 Minutes.

Max. Marks: 50

Course Mode: CAL

### Slot: A2 + TA2

## PART – A
## Answer all the questions (5 X 10 = 50)

1. When person A wants to talk to person B over telephone which type of switching will be used to connect themselves and person B wants to send a message to A over telephone then which type of switching will be used? Describe both the switching technique in detail.

2. Explain the different techniques used to convert bits into signals?

3. Identify the protocol architecture used in E-commerce applications and explain it.

4. Calculate the checksum for a text of 9 charaters ("Tanenbaum"). The receiver side recalculate the checksum and find whether is there any error in the transmission.

5. A sender sends the 7 bit dataword 1111001. Compute the hamming code of 11 bit codeword such that C(11,7) at the sender side.
   Showcase the following cases at the receiver side.
   a. Receiver receives the codeword without error
   b. Receiver receives the codeword with an error