## **ASSIGNMENT**

- 1 Categorized basic four topologies and explain each topology in brief with their advantages.
- 2 Explain OSI reference model and brief major responsibilities of each layer.
- 3 Give the difference between OSI model and TCP/IP model.
- 4 Explain three types of transmission impairment.
- 5 Distinguish between baseband transmission and broadband transmission.
- 6 Can we represent composite signal as a combination of simple sine wave with different frequencies, amplitudes and phases? Explain how.
- 7 Distinguish the performance of Low pass channel compared to wide-band channel for baseband transmission.
- 8 Explain SNR and explain how channel capacity depends of SNR and how can we enhance channel capacity.
- 9 Explain Simple, Half-Duplex and Duplex transmission mode.
- 10 Explain different addressing modes:
  - Physical address, Logical Address, Port Address

## Note:

- Last date of Submission: 07/06/2021, 05:00 PM
- Use BLANK PAPERS to write answer of given problems. (soft copy is not permitted)
- Write your NAME and ENROLLMENT and BRANCH on each page.
- SCAN your answers and submit your assignment in single PDF files. Make sure that all pages are orientated in portrait only. (i.e. It should be readable in desktop mode without rotating page)
- You must maintain the naming convention of PDF file as shown below: Filename: **<<Enrollment No>> + "\_" + <<Student Name>> + ".pdf"** (i.e. 12345678901\_DHAVAL SATHAWARA.pdf)