

**III B. Tech II Semester (Substitute Subject) Regular/ Supply Examinations, April - 2018****DATA COMMUNICATION**

(Common to CSE and IT)

Time: 3 hours

Max. Marks: 70

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- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answering the question in **Part-A** is compulsory  
3. Answer any **THREE** Questions from **Part-B**
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**PART -A**

- 1 a) Explain Peer-to-Peer client/server network. [4M]
- b) Write a note on Transverse Electromagnetic wave. [4M]
- c) List and explain the four most common methods of pulse modulation. [4M]
- d) Define Electromagnetic Radiation. [3M]
- e) List the features of personal communication system. [3M]
- f) Define data communication modems and tell why they are used in data communications circuits. [4M]

**PART -B**

- 2 a) Explain briefly about standards organization for data communication. [8M]
- b) Define digital modulation? Give a brief description of amplitude-shift keying and frequency-shift keying. [8M]
- 3 a) Draw the electromagnetic frequency spectrum and explain it. [8M]
- b) Write the advantage and disadvantages of optical fiber comparison. [8M]
- 4 a) Define signal voltage-to-quantization noise ratio. Determine the SQR for Linear PCM Code. [8M]
- b) Define T Carrier system? Describe a T1 carrier system. [8M]
- 5 a) Draw the block diagram of microwave Radio link and explain it. [8M]
- b) Write the advantages and disadvantages of Geosynchronous satellite. [8M]
- 6 a) Briefly describe the basic functions of a standard telephone set. [8M]
- b) Describe the united states digital cellular system. [8M]
- 7 a) Define POSTNET. How logic 0s and 1s indicated with the POSTNET base code [8M]
- b) Give the difference between asynchronous and synchronous modems. [8M]

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