

**B.Tech. SEM -V Info. Tech. 2014 Course (CBCS) : SUMMER - 2019**

**SUBJECT: DATA COMMUNICATION & NETWORKS**

Day: Saturday  
Date: 11/05/2019

S-2019-2678

Time: 10.00 AM TO 01.00 PM  
Max Marks : 60

---

**N.B. :**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Use of non-programmable calculator is **ALLOWED**.
  - 4) Assume suitable data, if necessary.
- 

**Q.1** What do you mean by Data Communication? Demonstrate with the help of suitable example how the Digital data is suitable for communication purpose than Analog data. (10)

**OR**

**Q.1** Elaborate and compare digital data signal encoding methods. (10)

**Q.2** Briefly explain different types of transmission media used for data communication. (10)

**OR**

**Q.2** Describe switching with its types. Differentiate between Circuit switching and Packet switching. (10)

**Q.3** Compare Asynchronous and Synchronous way of transmission. (10)

**OR**

**Q.3** State and explain various types of Spread spectrum techniques. (10)

**Q.4** List the classification of network in detail according to the area covered. Also explain each classification of network in detail. (10)

**OR**

**Q.4** Draw and explain the TCP/IP model used for the network. How it is different than OSI/ISO seven layers model? (10)

**Q.5** With diagram explain how Address resolution protocol and Reverse address resolution protocol work on network. (10)

**OR**

**Q.5** Using an example, explain how Routing is done through an Internet. (10)

**Q.6** Explain the significance of Quality of Services (QoS). List the techniques available to improve Quality of services (QoS) and explain any two of them in detail. (10)

**OR**

**Q.6** Discuss the following application layer protocols briefly: (10)

- i) FTP
- ii) SMTP
- iii) HTTP
- iv) Telnet

\* \* \* \* \*