

Exam.Code:1000 Sub. Code: 7635

## 1059

## M.E. (Computer Science and Engineering) Second Semester Elective – IV

CS-8210: Telecommunication Technologies

Time allowed: 3 Hours

Max. Marks: 50

**NOTE:** Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Attempt the following:
  - a) Differentiate between wireless cellular network and adhoc networks.
  - b) What is importance of MPLS networks? Also explain where they are being used.
  - c) Give four examples of network simulators.
  - d) Why do we need Path and Resv messages in RSVP?
  - e) How trust services are provided in real time communication?

(5x2)

## <u>UNIT - I</u>

- II. What is Cellular Communication? How UMTS differs from cdma2000? Why 3G is not being considered as a very. successful technology? (10)
- III. a) Differentiate between different communication session protocols for packet networks.
  - b) Explain the architecture of SIP? How it is used in IP Multimedia Subsystem? (10)
- IV. Explain briefly the primacy of the following:
  - a) Debian OS
  - b) Unified communication environment
  - c) FreeSwitch

d) RTP (10)

## UNIT - II

V. How QoS is provided and maintained for different type of applications in network? Distinguish between guaranteed services and controlled load services in Integrated services of providing QoS? Also define the parts of flow specification in the same.

(10)

(2)

- VI. What is significance of SSL protocol? What are the components of SSL protocol? Also differentiates between SSL Session and SSL Connection? (10)
- VII. a) Explain the difference between the duties of the IETF and IRTF. What are maturity levels of an RFC?
  - b) Why it is important for any system to be RFC Compliant? Explain with the help of a case study. (10)