

(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 2289943

Roll No.

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## B.TECH.

Regular Theory Examination (Odd Sem - VII) 2016-17

### VOICE OVER INTERNET PROTOCOL

Time : 3 Hours

Max. Marks : 100

#### Section - A

1. Attempt all parts. Each question carry equal marks.

(2×10=20)

- Discuss advantage of VOIP over PSTN Telephony.
- Explain the OSI Layer Structure.
- What role does Gatekeeper play in H.323
- What are protocols? Name any two VOIP protocols.
- Where does ISUP finds its application.
- List the application of Session Description Protocol.
- Explain what is QOS?
- What are Codec? Name any two

- What is RAS signaling in H.323.
- What role does bandwidth play in IP Telephony.

#### Section - B

2. Attempt any five parts. Each question is of three marks. (5×10=50)

- Explain Transmission control protocol (TCP) with its header format. Explain IPv6 in detail.
- Explain RTP & RTCP along with their header format? Why these two protocols are necessary.
- Explain Message Formats in Session initiation Protocol. How it is Similar to HTTP.
- Explain IP Protocol Suite with a Layered diagram.
- How we can Secure H.323 Messages from unauthorized use.
- What are Speech Coders? Explain in Brief G.711
- Explain SS7 Protocol Suite with a neat sketch explaining each component in brief.
- Explain Stream Control Transmission Protocol with its Packet Format?

#### Section - C

Note: Attempt any two questions (2×15=30)

- Develop a Call Flow Model Using H.323 between John and Mark if both IP are known to each other?

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- b) Explain Voice Sampling? Draw Mathematical Model of Speech?
  - c) Draw the protocol Overview structure of H.323. Why it is So important in VOIP?
- 4.**
- a) Draw the call flow method in MGCP? How it is used to correlate with H.323 and SIP explains in brief.
  - b) What are the performance requirement in SS7 Protocol when used for networking.
  - c) List Difference between User Datagram Protocol and TCP?
- 5.**
- a) Explain Resource Reservation Protocol along with its frame format?
  - b) Draw soft switch Architecture? Explain in brief.
  - c) What are Waveform Coders? Why they are required.

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