

N.B.: (1) Question No.1 is compulsory.

(2) Answer **any three** out of remaining **five** Questions.

(3) **Assumptions** made should be **clearly stated**.

(4) '**Marks**' to the **right** indicate **full marks**.

(5) Illustrate answers with **sketches** whenever **required**.

(6) **Answer to questions should be grouped and written together.**

1. Attempt any 4 :

- a) Explain the "Tunneling Procedure" in IPv6 protocol. **05**
- b) Explain the different RTCP messages used for real time communication. **05**
- c) Explain the need of audio or video compression in multimedia communication. **05**
- d) Differentiate between leaky bucket and token bucket methods of traffic shaping. **05**
- e) How is SCTP association different with respect to TCP connection establishment? **05**

2. a) An ISP is granted a block of addresses starting with 190.200.0.0/16. **12**  
What is the meaning of "/16"?

This ISP needs to distribute these addresses to three groups of customers as follows :

- i) First group has 64 customers each needing 256 addresses.
- ii) Second group has 128 customers each needing 128 addresses.
- iii) Third group has 128 customers each needing 64 addresses.

Allocate the sub-blocks and find out how many addresses are still available after these allocations.

b) With the help of a transition diagram, explain DHCP protocol. Also, calculate the renewal and rebinding time if lease time provided is 8 hours. **08**

3. a) Explain the different traffic scheduling techniques used for providing QoS. **10**

b) Explain in brief the characteristics "Jitter", "timestamp", "Mixing" and "Translation" in real time audio and video communication with respect to RTP. **10**

4. a) Elaborate on PGP scenarios for Application layer security. **10**

b) Explain how DNS queries are resolved by iterative and recursive methods and also explain why caching is required in DNS? **10**

5. a) Compare the procedures : streaming of stored audio/video, streaming live audio/video and interactive audio/video over Internet. **10**

b) Explain MPEG for video compression in detail with reference to JPEG compression. **10**

6. Write a note on (any four) : **20**

- a) SSL/TSL protocol for transport layer security
- b) H.261
- c) ICMPv6 messages
- d) RSVP : reservation protocol



**Correction in 1T01027 - B.E.(Electronic & Telecommunication Engineering)(SEM-VII)(Choice Base) / 42456 - Internment Communication Engineering (DLOC - III)**

1 message

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Fri, Nov 22, 2019 at 11:06 AM



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Correction in **1T01027** - B.E.(Electronic & Telecommunication Engineering)(SEM-VII)(Choice Base) / **42456** - Internment Communication Engineering (DLOC - III)  
Q.P. Code: **76098**

Q6 should be read as

**Write short notes on (any two) :**  
instead of  
**Write short notes on (any 4)**

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