END TERM EXAMINATION

FIFTH SEMESTER [BCA] NOVEMBER - DECEMBER 2017

Paper Code: BCA-311	Subject: Advanced Computer Networks

Time: 3 Hours	Maximum Marks: 75

Note: Attempt any five questions including Q.no.1 which is compulsory. Select one question from each unit.

Q1 Attempt **any five** of the following: (5x5=25)
 (a) What is Inter-domain Routing? Explain.
 (b) Explain Sliding Window and H.323.
 (c) Differentiate Synchronous and Asynchronous Protocols.
 (d) List differences between ATM and Frame Relay.
 (e) Handshaking techniques in TCP.
 (f) What is PGP? Explain its characteristics.

Unit-I

Q2 (a) Explain Framing in Byte and Bit oriented protocols. Also explain framing errors. **(6.5)**
 (b) Explain NRZ, NRZI and Manchester encoding. Also show the NRZ, NRZI and Manchester encoding for the following bit pattern: **(6)** 1100010111001101.

Q3 (a) What is Routing? Explain different type of routing algorithms. **(6.5)**
 (b) What are different Error detection approaches? Explain. **(6)**

Unit-II

Q4 (a) Explain Routing among mobile devices in details. **(6)**
 (b) Explain RCP, and RTP with the help of example. **(6.5)**

Q5 (a) Explain Multi Protocol Label Switching and Remote Procedure Call. **(6.5)**
 (b) Explain tunneling, fragmentation and Reliable Byte Stream (TCP) in detail. **(6)**

Unit-III

Q6 (a) Explain RTSP, RTCP, SIP in detail. **(6)**
 (b) What is Congestion and Resource Allocation? Explain Congestion Control and Congestion Avoidance Mechanism in detail. **(6.5)**

Q7 (a) Explain Quality of Service in detail. Explain all the techniques for achieving good quality of service. **(6.5)**
 (b) Define Flow Control. Explain sliding window protocol with suitable example. **(6)**

Unit-IV

Q8 (a) How security can be implemented over Internet using TLS and SSL? **(6.5)**
 (b) What are the different types of Firewalls? What are the strengths and weakness of firewalls? **(6)**

Q9 (a) What is intrusion detection? Explain measures used for intrusion detection. **(6.5)**
 (b) Explain Authentication Protocols in detail. **(6)**

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