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Sixth Semester B.E. Degree Examination, June/July 2014
Computer Network – II

Time: 3 hrs.

Max. Marks:100

**Note: Answer FIVE full questions, selecting
atleast TWO question from each part.**

PART – A

- 1 a. Differentiate between connection oriented and connectionless services. (05 Marks)
b. Compare the datagram packet switching and virtual packet switching. (06 Marks)
c. Explain the Dijkstra's routing algorithm, with an example. (09 Marks)
- 2 a. Explain the FIFO and priority queue scheduling for managing traffic at packet level. (08 Marks)
b. Define congestion control with graph. Explain the leaky bucket algorithm for policing the traffic at flow level. (12 Marks)
- 3 a. Explain :
i) IP address classification (10 Marks)
ii) Subnet addressing. (10 Marks)
b. Give the format of IPV6 basic header. Compare IPV6 with IPV4. (10 Marks)
- 4 a. Explain OSPF protocol and its operation. (10 Marks)
b. Write a note on :
i) IGMP protocol (10 Marks)
ii) Mobile IP. (10 Marks)

PART – B

- 5 a. Write a note on only Two :
i) Remote login protocols
ii) File transfer and FTP
iii) World wide web and HTTP. (08 Marks)
b. Define network management and explain SNMP and SNMP messages. (06 Marks)
c. Compare secret key and public key cryptography systems. (06 Marks)
- 6 a. Explain the differentiated services QoS with a neat diagram. (08 Marks)
b. Explain VPN and its types based on tunneling. (08 Marks)
c. Explain the need for overlay networks. (04 Marks)
- 7 a. Briefly explain the MPEG standards and frame types for compression. (06 Marks)
b. Explain the Huffman encoding, with an example. (06 Marks)
c. With a neat diagram, explain the H.323 components and list the steps in signaling. (08 Marks)
- 8 a. Explain the wireless routing protocol for AD – HoC networks. (05 Marks)
b. Briefly explain the direct and multihop routing of intracluster routing protocol, with the help of relevant diagrams. (06 Marks)
c. Write short notes on :
i) Clustering in sensor networks
ii) Security vulnerabilities of AD – HoC networks. (09 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.