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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
  - 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
  - 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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