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BMS College of Engineering, Bangalore-560019

(Autonomous Institute, Affiliated to VTU, Belgaum)

July 2015 Supplementary Examinations

Course: Computer Network
Course Code: 10CI6GCCON

Duration: 3 Hours
Max Marks:100
Date:25.07.2015

Instructions: Answer any five full questions choosing one from each unit.

UNIT-I

1. a) Packet switching is more suitable than message switching for interactive applications. Justify? 05
- b) Illustrate the role of VCC and VP in ATM. 08
- c) Describe Flooding, its disadvantage and ways to control Flooding. 07

UNIT-II

2. a) Explain with diagram the TCP/IP architecture 08
- b) Explain IPV4 header. 06
- c) Explain the random early detection. 06

OR

3. a) Describe Fair queuing at Packet level. Illustrate the transmission sequences for fluid flow and packet by packet fair queuing by considering two logical buffers. Assume each has a single L bit packet to transmit at t=0 and no subsequent packet arrives. Assume $C = L \text{ bits/second} = 1 \text{ packet/second}$. 10
- b) What is congestion? Discuss the general principles of congestion control? 10

UNIT-III

4. a) Explain the structure of management information in network management. 06
- b) What are the three ways of communication to access management information provided by SNMP. 04
- c) Explain in detail the MPLS 10

OR

5. a) Explain tunneling and point to point protocol in VPN. 10
- b) Explain different security threats in networks. 05
- c) Explain RSA algorithm for encryption and decryption. 05

UNIT-IV

6. a) Explain the different steps in H.323 protocol signaling 10
- b) Explain JPEG process for production and compression of Still images. 10

UNIT-V

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| 7. | a) | List the security vulnerabilities in Ad-hoc networks and Explain types attacks on Ad-hoc networks. | 06 |
| | b) | Explain Zigbee technology and IEEE 802.15.4 standard. | 04 |
| | c) | List the different criteria's for secure routing protocol. | 04 |
| | d) | Write DEEP clustering algorithm. | 06 |
