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BMS College of Engineering, Bangalore-560019

(Autonomous Institute, Affiliated to VTU, Belgaum)

JUNE 2015 Semester End Make Up Examinations

Course: Computer Network
Course Code: 10CI6GCCON

Duration: 3 Hours
Max Marks:100
Date: 22.06.2015

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

UNIT-I

1. a) Explain Virtual circuit packet switching with delays 08
- b) Explain the structure of a packet switch 04
- c) Differentiate between 08
 - i) Source routing versus Hop-by-hop routing
 - ii) Link state routing versus distance-vector routing

UNIT-II

2. a) What is FIFO Queuing? Explain HOL- Priority queuing with a diagram. 08
- b) What is RED? Explain. 04
- c) Explain any two types of OSPF Packets with its operation. 08

OR

3. a) Differentiate between leaky bucket Traffic Shaper and Token bucket Traffic Shaper. 06
- b) Describe the format of IPV6 basic header and also the extension headers 10
- c) A host in an organization has an IP address 150.32.64.24 and a subnet mask 255.255.240. Build the address of subnet for the same and the range of IP address that a host can have on this subnet? 04

UNIT-III

4. a) What is MPLS? Explain how the packets are forwarded using MPLS 06
- b) Discuss the differentiated services of QoS approach 08
- c) Apply RSA algorithm for the following: 06
 - i) Encrypt the plain text P=25 for p = 7, q = 11, e = 17.
 - ii) Find the value of d and decrypt the ciphertext.

OR

5. a) Explain in detail the leaky bucket traffic shaping algorithm 08
- b) Explain diffie-hellman key exchange algorithm with an example 06
- c) Categorize the functionalities performed by Network Management System 06

UNIT-IV

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| 6. | a) | Explain the need for data compression? Discuss the different types of Compression methods without loss. | 10 |
| | b) | Explain RTP and RTCP protocol in detail. | 10 |

UNIT-V

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| 7. | a) | Explain DSDV packet process algorithm | 06 |
| | b) | Explain different types of attacks in Ad-hoc networks | 04 |
| | c) | Explain the different units in wireless sensor node. | 06 |
| | d) | Write short notes on Zigbee Technology. | 04 |
