

**CS - 604**  
**B.E. VI Semester**  
Examination, June 2013  
**Computer Networking**

*Time : Three Hours*

**Maximum Marks : 100**

**Minimum Pass Marks :35**

**Note:** Attempt one question from each unit.

All questions carry equal marks.

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**Unit - I**

1. a) What is computer Network? Write advantages of computer Network. 10
- b) What are the reason of using layered protocol? 10

OR

2. a) Explain in detail TCP/IP reference model. 10
- b) Explain the difference between a virtual channel connection (VCC) and a virtual path connection (VPC) 10

**Unit - II**

3. a) Describe the working of a selective repeat protocol. 10
- b) Explain the finite state machine model for protocol verification. 10

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OR

4. a) What is bit stuffing? If the bit string 011110111110111110 is subjected to bit stuffing. What is the output string. 10

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PTO

- b) Explain sliding window protocol in detail. 10

### Unit - III

5. a) Explain why the efficiency of purer ALOHA is half of slotted ALOHA. 10  
b) Explain CSMA protocol in detail. 10

OR

6. a) Explain FDDI in detail. 10  
b) Ten thousand airline reservation stations are computing for the use of a single slotted ALOHA channel. The average station makes 18 request/hour. A slot is  $125\mu$  sec. What is the approximate total channel load. 10

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### Unit - IV

7. a) Differentiate between Adaptive Routing and non adaptive routing. 10  
b) How congestion effects the communication subnet? Explain any 2 strategies for controlling congestion. 10

OR

8. a) What is internet working? Describe in brief the working of concatenated virtual circuitry way of internet working? 10  
b) Explain the packet discarding approach of flow control. 10

### Unit - V

9. a) What are the services provided by transport layer? 10  
b) What is network security and write the aspects of network security? 10

OR

10. Write short notes on (any two) : 20  
a) Bluetooth                      b) Mobile IP  
c) Cryptography                  d) DNS