

FACULTY OF INFORMATICS

B.E. 3/4 (IT) II – Semester (New) (Main) Examination, April / May 2013

Subject : Computer Networks

Time : 3 hours

Max. Marks : 75

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (25 Marks)

- | | |
|--|---|
| 1. What is a computer network? Give an example. | 3 |
| 2. Distinguish between connection-oriented and connection-less service. | 2 |
| 3. List and give the range of various IP address classes. | 3 |
| 4. List the protocols used by RIP and OSPF. | 2 |
| 5. What are the applications of UDP? | 3 |
| 6. What is a proxy server? | 2 |
| 7. What is a reserved port? How a reserved port can be assigned to an application? | 3 |
| 8. What is LDAP? | 2 |
| 9. Give the format of DNS resource record. | 3 |
| 10. What is the difference between private key and public key algorithms? | 2 |

PART – B (50 Marks)

- | | |
|--|----|
| 11. Discuss about any two routing algorithm with suitable examples. | 10 |
| 12.a) Distinguish between virtual circuits and datagram subnets. | 4 |
| b) Explain the header format of IP packet with a neat diagram. | 6 |
| 13. What is congestion? Discuss about the congestion control methods used in datagram subnets. | 10 |
| 14.a) Discuss about the steps performed by the internet super server. | 6 |
| b) List and explain any two advanced socket system calls. | 4 |
| 15.a) What are the functions of an email system? | 5 |
| b) Compare between POP3 and IMAP. | 5 |
| 16. What is IPsec? Discuss about the modes of IPsec. | 10 |
| 17. Write short notes on :
a) IPv6
b) RPC | 10 |
