

Time: 3 Hours

Max. Marks: 60

- Note: 1. It is compulsory to answer the questions of Part -1. Limit your answers within 20-40 word in this part.
2. Answer any four questions from Part -2 in detail.
3. Different parts of the same question are to be attempted adjacent to each other.
4. Assume suitable standard data wherever required, if not given.

PART -1

- Q1 (a) How many networks can each IP address class can have? (2)
(b) What is the purpose of DNS? What is the function of a secondary or tertiary DNS server. (2)
(c) What are the NTFS, FAT, HPFS file systems. (2)
(d) What happens if the process writes to a socket which has already received a RST? (2)
(e) Why asynchronous multiplexing is better than synchronous multiplexing? (2)
(f) What happens if IPv6 router receives a datagram whose size exceeds outgoing link's MTU? (2)
(g) By nature UDP server is iterative or concurrent? Explain (2)
(h) Explain three way handshake protocol ? (2)
(i) What is the purpose of ping program? Give example (2)
(j) What is byte ordering? Explain byte ordering used in network communication. (2)

PART -2

- Q2 (a) Why would an application use UDP instead of TCP. Discuss (5)
(b) List the protocols presently supported by Intranet and explain the use of each protocol in Intranet administration. (5)
- Q3 (a) Explain the connection oriented and connection less services using bind, connect, listen and accept system calls. (5)
(b) Draw the TCP header and list its components. Also, explain how can TCP handle urgent data? (5)
- Q4 Explain the purpose of recvfrom() and accept() system calls? Explain all the parameters also. (10)
- Q5 Explain various types of RPC models in detail. (10)
- Q6 (a) Write a program to check whether FTP and HTTP services are running on a host. If the services are supported then print their respective port numbers. (5)
(b) Write short notes on : (i) SNMP (ii) NET STAT (5)
- Q7 Explain various types of debugging techniques. (10)
