Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 20732

B.E/B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2018.

Eighth Semester

Information Technology

IT 6008 — NETWORK PROGRAMMING AND MANAGEMENT

(Regulations 2013)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List the two ways to store the two bytes in memory.

2. What are the five I/O models available under UNIX?

3. What are the ways to get and set the options that affect a socket?

4. In what situation would an application programmer be most likely to use the sctp_peeloff function?

5. Write about any three features provided by raw socket but not provided by normal TCP and UDP sockets.

6. What is a thread?

7. What are the objectives of MIB to serve the needs of a network management system?

8. List any two limitations of SNMP.

9. Write down the design goals of RMON.

10. What are the three types of access to management information provided by SNMPv2?

PART B — (5 × 16 = 80 marks)

11. (a) Compare the various socket address structures. (16)

Or

(b) Write down the steps taking place for the following

(i) Crashing of server Host (6)

(ii) Rebooting of server Host (5)

(iii) Shutdown of server Host (5)

12. (a) With the diagram explain about SCTP one-to-one style socket functions. (16)

Or

(b) Write the program for UDP echo server and client. (16)

13. (a) Write short notes for the following

(i) Raw socket creation, Raw socket input, Raw socket output (12)

(ii) IPV4 Vs IPV6 (4)

Or

(b) Explain the implementation of a trace route program in detail. (16)

14. (a) Discuss about MIB structure in detail with diagram. (16)

Or

(b) (i) With a neat diagram explain in detail the network management protocol architecture. (8)

(ii) Analyse the role SNMP proxies in network communication. (8)

15. (a) Analyse the role of RMON in networks. (16)

Or

(b) Explain the architecture of SNMPv3 with neat diagram. (16)