2022/TDC/ODD/SEM/CSCDSE–502T/093

TDC (CBCS) Odd Semester Exam., 2022

COMPUTER SCIENCE

(5th Semester)

Course No. : CSCDSE–502T

(Network Programming)

Full Marks : 50
Pass Marks : 20

Time : 3 hours

The figures in the margin indicate full marks for the questions

UNIT—I

1. Answer any *three* of the following questions :

$1 \times 3 = 3$

(a) Name different types of protocol used in transport layer.

(b) Define port number.

(c) What is throughput?

(d) What is flow control in SCTP?

J23/369 (Turn Over)

2. Answer any *one* of the following questions : 2

(a) Write down the use of UDP.

(b) Write down the difference between reliable and unreliable process to process delivery.

3. Answer any *one* of the following questions : 5

(a) Explain the difference between UDP and TCP.

(b) Explain different TCP services to the processes at the application layer.

UNIT—II

4. Answer any *three* of the following questions :

1×3=3

(a) What is socket?

(b) How is socket created?

(c) What are different stages for client?

(d) What are the types of socket programming?

5. Answer any *one* of the following questions : 2

(a) Write down the difference between socket and port.

(b) What is a TCP/IP socket connection?

J23/369 (Continued)

(3)

6. Answer any *one* of the following questions : 5

(a) How are signals handled in network programming? Explain with suitable program.

(b) Draw the state diagram for server and client model of socket. Explain different stages for server and client for socket creation and execution. 2+3=5

UNIT—III

7. Answer any *three* of the following questions :

1×3=3

(a) Define socket address.

(b) Can multiple clients connect to the same socket?

(c) What is polling in socket programming?

(d) How is address lookup used to find any IP address?

8. Answer any *one* of the following questions : 2

(a) How is select function different from poll function?

(b) What are socket options?

J23/369 (Turn Over)

(4)

9. Answer any *one* of the following questions : 5

   (a) Explain UDP client/server model with example.

   (b) Explain different I/O multiplexing models used in UDP socket programming.

UNIT—IV

10. Answer any *three* of the following questions : 1×3=3

   (a) What is local login?

   (b) Define NVT.

   (c) What is the meaning of the character 'AYT'?

   (d) What is MTA?

11. Answer any *one* of the following questions : 2

   (a) What are different services of user agent?

   (b) Write a short note on MIME.

12. Answer any *one* of the following questions : 5

   (a) Explain different protocols of E-mail.

   (b) Explain Linux network administration.

(5)

UNIT—V

13. Answer any *three* of the following questions : 1×3=3

   (a) What is SNMP?

   (b) What is fault management?

   (c) What do you mean by troubleshooting?

   (d) Write the full form of MIB.

14. Answer any *one* of the following questions : 2

   (a) What are the functions of SNMP manager?

   (b) Write down the functions of network management system.

15. Answer any *one* of the following questions : 5

   (a) How can debugging be done in network management? Explain with different tools.

   (b) Explain the architecture of SNMP.

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