K22U 0194

VI Semester B.C.A. Degree (CBCSS-Supple./Improv.)
Examination, April 2022
(2016-2018 Admissions)
Core Course (Elective)
6B20BCA-E05 : NETWORK PROGRAMMING

Time : 3 Hours　　　　　　　　　　　　　　　　　　　　　　　Max. Marks : 40

SECTION – A

1. Answer **all** questions :

   a) The maximum size of an IPv6 datagram is _____ bytes.

   b) To perform network I/O, the first thing a process must do is call the _____ function.

   c) The prefix that stands for protocol family is _____

   d) Expansion of HTTP is _____

   e) _____ socket option specify out going packets are to byepass normal routing mechanism of underlying protocol.

   f) The client issues an active open by calling _____ .

   g) A _____ uniquely identifies every TCP connection on a network.

   h) _____ is a well known port for TELNET.　　　　　　　　**(8×0.5=4)**

SECTION – B

Answer **any 7** questions of the following. **Each** question carries **2** marks :

2. Name protocols used by common internet applications.

3. What is the use of fork and exec function ?

4. State various functions to implement echo client.

5. State purpose of SO_ERRORR Socket Option.

P.T.O.

6. What do you mean by handshaking ?

7. What are the functions of a raw socket ?

8. What is the purpose of bind function ?

9. Write information maintained by Zombie state.

10. Write parameters to str_echo().

11. State how a socket is listened during a TCP connection.   (7×2=14)

SECTION – C

Answer **any four** questions. **Each** question carries **3** marks :

12. How various ways TCP connection establishment and termination ?

13. Explain how a raw socket can be created.

14. Compare getsockopt and setsockopt functions.

15. Write short note on host_serv, tcp_connect and tcp_listen functions.

16. Write short note on DNS.

17. Explain client server architecture.   (4×3=12)

SECTION – D

Answer **any two** questions. **Each** question carries **5** marks :

18. Write note on signal sets.

19. Write a program to illustrate echo client and echo server communication.

20. Explain various TCP socket options.

21. Explain various socket address structures.   (2×5=10)