



**K19U 0189**

Reg. No.: .....

Name: .....

**VI Semester B.C.A. Degree (CBCSS – Reg./Supple./Improv.)**

**Examination, April 2019**

**(2014 Admission Onwards)**

**Core Course (Elective)**

**6B20BCA-E05: NETWORK PROGRAMMING**

Time : 3 Hours

Max. Marks : 40

**SECTION – A**

1. Answer **all** questions.

- a) When an error occurs in a Unix function (such as one of the socket functions), the global variable \_\_\_\_\_ is set to a positive value indicating the type of error.
- b) The maximum size of an IPv4 datagram is \_\_\_\_\_ bytes.
- c) The IPv6 socket address is defined by including the \_\_\_\_\_ header.
- d) The \_\_\_\_\_ function is used by a TCP client to establish a connection with a TCP server.
- e) The \_\_\_\_\_ function assigns a local protocol address to a socket.
- f) Expansion of TCP is \_\_\_\_\_.
- g) setsockopt requires a \_\_\_\_\_ flag value to turn on options.
- h) Functions return either the local protocol address associated with a socket. **(8×0.5=4)**

**SECTION – B**

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

2. What do you mean by web server ?
3. What do you mean by three way handshake ?
4. What are various byte manipulation functions in C ?
5. What is the purpose of socket function ?

P.T.O.

**K19U 0189**



6. State various functions to implement echo server.
7. What do you mean by protocols ?
8. What is the use of str\_echo() function ?
9. How tp\_connect function works ?
10. Write a error handling statement in network communication.
11. What is a domain name server ? (7×2=14)

**SECTION – C**

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

12. Write code for implementation of a TCP time-of-day client.
13. Write short note on TCP.
14. Write short note on Standard TCP/IP services.
15. Compare various Socket Address Structures.
16. Write Program to determine host byte order.
17. Explain how a normal start up and termination of a server host can be performed. (4×3=12)

**SECTION – D**

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

18. Explain TCP connection establishment and termination.
19. Short note on various name and address conversion methods.
20. Explain TCP socket options.
21. Write code to implement echo client-server. (2×5=10)