



0090829

K19U 2197

Reg. No. : .....

Name : .....

V Semester B.C.A. Degree (CBCSS-Reg./Sup./Imp.)  
Examination, November- 2019  
(2014 Admn. Onwards)

CORE COURSE

5B14 BCA - DATA COMMUNICATION AND NETWORKS

Time : 3 Hours

Max. Marks : 40

SECTION - A

1. One Word Answer (8×0.5=4)
- a) Communication between a computer and a keyboard involves\_\_\_\_\_transmission.
  - b) \_\_\_\_\_data are continuous and take continuous values.
  - c) The \_\_\_\_\_layer adds a header to the packet coming from the upper layer that includes the logical address of the sender and receiver.
  - d) The\_\_\_\_\_address uniquely defines a host on the internet.
  - e) Routing between autonomous systems is referred to as\_\_\_\_\_routing
  - f) \_\_\_\_\_protocol has flow control, but no error control.
  - g) UDP is an acronym for\_\_\_\_\_
  - h) \_\_\_\_\_cipher can be categorized as monoalphabetic and polyalphabetic.

P.T.O.



**SECTION - B**

Write short note on any **Seven** of the following questions.

(7×2=14)

2. Differentiate analog and digital data.
3. Explain asynchronous data transmission.
4. Explain simplex stop and wait protocol.
5. Explain token bucket algorithm.
6. What is meant by character stuffing?
7. Define non adaptive algorithms.
8. Define DNS.
9. Explain the design issues of DLL.
10. Explain DES chaining.
11. Define transposition cipher.

**SECTION - C**

Write short notes on any **Four** of the following questions

(4×3=12)

12. Explain congestion control algorithm.
13. Explain how connections are established in transport layer.
14. Explain UDP header with diagram.
15. Explain TCP sliding Window.
16. Give a brief note on shortest path algorithm.
17. Explain fundamental principles of cryptography.



(3)

K19U 2197

**SECTION - D**

Write short notes on any **Two** of the following questions

(2×5=10)

18. Explain the ISO-OSI reference model.
  19. Explain different routing algorithms.
  20. Briefly discuss about various design issues in transport layer.
  21. Explain public key algorithms.
-