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## 0091116 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  $(8 \times 0.5 = 4)$ 

- a) Communication between a computer and a keyboard involves transmission.
- data are continuous and take continuous values. b)
- The \_\_\_\_\_layer adds a header to the packet coming from the C) upper layer that includes the logical address of the sender and receiver.
- d) The address uniquely defines a host on the internet.
- Routing between autonomous systems is referred to e) as\_\_\_\_routing
- protocol has flow control, but no error control. f)
- g) UDP is an acronym for\_\_\_\_\_
- \_\_\_\_\_cipher can be categorized as monoalphabetic and h) polyalphabetic.

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## (2)

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### **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

 $(4 \times 3 = 12)$ 

- 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.



## SECTION - D

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# 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.