# K18U 1675

Reg. No. : .....

Name : ....

# V Semester B.C.A. Degree (CBCSS – Reg./Sup./Imp.) Examination, November 2018 (2014 Admn. Onwards) Core Course 5B14BCA : DATA COMMUNICATION AND NETWORKS

Time : 3 Hours

Max. Marks: 40

#### SECTION - A

1. One word answer.

(8×0.5=4)

- a) \_\_\_\_\_ is a set of rules that governs data communication.
- b) \_\_\_\_\_ is the expansion of TCP.
- Layer is responsible for establishing connection between source and destination.
- d) Expansion of WAN is \_\_\_\_\_
- e) \_\_\_\_\_ routing uses centralized routing technique.
- f) The topology there is a central controller or hub is \_\_\_\_\_\_
- g) Communication between a computer and a keyboard involves simplex data transmission. True/False.
- h) The OSI model has \_\_\_\_\_ layers.

SECTION - B

Write short notes on any seven of the following.

 $(7 \times 2 = 14)$ 

- 2. What do you mean by analog data transmission ?
- 3. What are the uses of computer network ?
- 4. What do you mean by routing ?
- 5. Define the term encryption.
- 6. State optimality principle for routing packets.
- 7. What do you mean by broad casting ?

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- 8. What are the steps done in RSA encryption method ?
- 9. Differentiate guided and unguided media.
- 10. Define Anthe term noise.
- 11. What do you mean by coding violation ?

### SECTION - C

Write short notes on any four of the following.

12. Write short note on framing techniques.

13. Explain various line configuration techniques.

- 14. Explain how network security can be achieved.
- 15. Write short note on functions of presentation layer.
- 16. Draw a diagram to show various layers of ISO OSI reference model.
- 17. Compare point to point and multi-cast networks.

#### SECTION - D

Write short notes on any two of the following.

- 18. Explain two secret key algorithms.
- 19. Explain various congestion control algorithms.
- 20. Write notes on the protocols TCP and UDP.
- 21. Write notes on various network topologies.

### $(4 \times 3 = 12)$

 $(2 \times 5 = 10)$