

K18U 0093

Reg. No.: .....

VI Semester B.Sc. Degree (CBCSS – Reg./Supple./Imp.)

Examination, May 2018

Core Course in Computer Science

6B14 CSC: DATA COMMUNICATION AND NETWORKS

(2014 Admn. Onwards)

Time: 3 Hours

Marks: 40

## SECTION - A

1. One word answer.

 $(8 \times 0.5 = 4)$ 

- a) What is the maximum number of IP addresses that can be assigned to hosts on a local subnet that uses the 255.255.254 subnet mask?
- b) How long is an IPv6 address?
- c) What protocol does PPP use to identify the Network layer protocol?
- d) Which protocol does DHCP use at the Transport layer?
- e) Where is a hub specified in the OSI model?
- f) A default Frame Relay WAN is classified as what type of physical network?
- g) Acknowledgments, sequencing and flow control are characteristics of which OSI layer?
- h) The entire hostname has a maximum of \_\_\_\_\_ characters.

## SECTION - B

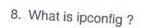
Write short notes on any seven of the following questions.

 $(7 \times 2 = 14)$ 

- 2. What do you mean by E-mail?
- 3. What is the importance of the OSI Physical Layer?
- 4. What is NOS ?
- 5. What is SLIP?
- 6. What is netstat?
- 7. What is peer to peer?

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- 9. What is client/server?
- 10. What is SMTP?
- 11. How are IP addresses arranged and displayed?

SECTION - C

Answer any four of the following questions.

(4×3=12)

- 12. What do you mean by Network Topology? Which are the different Network Topologies?
- 13. What are the functions of the Data Link Layer?
- 14. Name the important IEEE-802 standards and give their applications.
- 15. Explain TCP/IP reference model. Explain the function of each layer.
- 16. What is data framing? Which are the methods used for data framing?
- 17. Explain ISO-OSI reference model.

SECTION - D

Answer any two of the following questions.

(2×5=10)

- 18. Briefly explain Packet switching and its characteristics.
- 19. Differentiate between error detection and error correction.
- 20. Briefly explain the Token ring standard.
- 21. Explain elementary protocols used in DLL.