



**K18U 0093**

Reg. No. : .....

Name : .....

**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.**

**(8×0.5=4)**

- a) What is the maximum number of IP addresses that can be assigned to hosts on a local subnet that uses the 255.255.255.224 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.

**(7×2=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 ?

**P.T.O.**



- 8. What is ipconfig ?
- 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.