



Reg. No. :

Name :

**Seventh Semester B.Tech. Degree Examination, May 2014
(2008 Scheme)**

08.703 : COMPUTER NETWORKS (R)

Time : 3 Hours

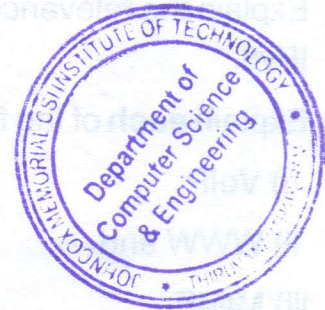
Max. Marks : 100

PART – A

Answer **all** questions.

(10×4=40 Marks)

1. Compare LAN, MAN and WAN.
2. What is the main motivation in designing the internet using a layered approach ?
3. Which layer of OSI model does repeaters, switches, routers, gateways and bridges operate ?
4. What are the functions of Media Access Control ?
5. Explain hidden and exposed terminal problems.
6. What is the use of bridge ? Explain the types of bridges.
7. Distinguish between iterative and recursive DNS queries.
8. Draw ARP format and explain.
9. Explain IP addressing methods.
10. How to map logical address into physical address ?



PART – B

Answer **one** question from **each** Module.

(3×20=60 Marks)

11. A) Explain in detail the data transmission in OSI reference model. State the functions each layer. 12
- B) Briefly explain stop-and-wait and selective repeat ARQ method of flow control. 8

OR

12. A) Briefly explain the High Level Data Link Control (HDLC) protocol with neat labelled diagrams. 12
- B) Write short notes on network hardware and network software. 8



13. A) Compare distance vector routing and link state routing. Discuss how these routing techniques work. 12

B) Explain the frame format of IEEE 802.3 and 802.5 in detail. 8

OR

14. A) Briefly explain the collision avoidance mechanism used in 802.11 wireless LAN. 8

B) Discuss RIP and OSPF routing algorithms in brief. 12

15. A) List and discuss various transport layer services. 11

B) Write short note on :

i) BOOTP

ii) IGMP and

iii) PGP. 9

OR

16. A) Explain the relevance of IPv6. Explain advantages and disadvantages of IPv6. 11

B) Explain **each** of the following in detail :

i) VoIP

ii) WWW and

iii) MIME. 9