

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Question Paper Code : 21357**

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2014.

Sixth Semester

Electronics and Communication Engineering

CS 1302 A — COMPUTER NETWORKS

(Regulation 2008)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Identify the five components of a Data communication network.
2. How many lines are required to direct connect 256 nodes in a mesh system?
3. List the services provided by LLC.
4. What is NIC? What is its main purpose?
5. What is the access method in wireless LAN?
6. What are the functions of Network layer?
7. Mention the features of TCP.
8. What are the frame relay congestion control techniques?
9. Find the value of 'd' in RSA algorithm if  $n = 77$  and  $e = 13$ .
10. Expand MIME and SNMP.

PART B — (5 × 16 = 80 marks)

11. (a) Discuss in detail the ISO-OSI model and explain the functions of various layers.

Or

- (b) What are the requirements of reliable transmission? Discuss about the linear block codes with illustration.

12. (a) Explain the need for MAC sublayer. Compare different network topologies in detail.

Or

- (b) Discuss the architectures, characteristics of wireless LAN.
13. (a) What is the need for switching techniques? Discuss about different types of switching techniques.

Or

- (b) What is Routing? Explain about different routing algorithms.
14. (a) Explain TCP and UDP with a neat diagram.

Or

- (b) What are the different congestion avoidance mechanisms? Explain in detail.
15. (a) Write short note on SMTP, MIME, FTP. What is HTTP? Explain its various versions.

Or

- (b) List various security services. Explain the structure of data encryption standard.
-