Department of CSE

B. Tech. VI Semester

TCS 604: Computer Network 1

Assignment 1

Last date of submission: 03 March 2025

Submission through Google Drive (scanned copy of handwritten Answers)

1. What is a computer network? Describe its applications.
2. Differentiate between Internet and internet.
3. List and explain the functions of all seven layers in OSI reference model.
4. Why are the layers known as protocol stack or protocol suite?
5. List and explain all network devices present in Cisco Packet tracer.
6. List and explain all end devices present in Cisco Packet tracer.
7. List and explain all connections present in Cisco Packet tracer.
8. Starting from 1970s, give a detailed description about history of computer networking.
9. Explain all protocols present in application layer of TCP/IP protocol suite.
10. Describe all types of addresses used in computer networking.
11. What are the terms used for data fragment in each layer of OSI reference model?
12. In what manner many devices simultaneously use a single channel to send their data.
13. What do you understand by Transmission and Propagation delays? Explain with help of examples.
14. Describe the role of protocol in computer networking.
15. Describe role of various connecting devices in computer networking.
16. Header and tailor information is added in each layer at the sender machine in transferring data. What are possible information that is added in each layer and why?
17. Explain in detail (format, number system used [binary, decimal, hexadecimal], notation [(:) colon, - (dash), .(dot)] and range) the following addresses used in computer networks (i) Physical address (MAC), (ii) Logical address (IPv4 and IPv6) , (iii) Port address (16 bit decimal notation) and (iv) Specific address (ex: xyz@example.com)

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