

Council for Technical Education and Vocational Training  
**Office of the Controller of Examinations**  
Sanothimi, Bhaktapur  
**Regular/Back Exam - 2074, Falgun/Chaitra**

Program: Diploma in Computer Engineering  
Information Technology  
Year/Part: III/I  
Subject: **Computer Networks**

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Full Marks: 80  
Pass Marks: 32  
Time: 3 hrs

*Candidates are required to give their answers in their own words as far as practicable.  
The figures in the margin indicates full marks.*

**Attempt Any 8 Questions.**

1. Define Computer Network. Explain the application of computer network. [10]
2. What are protocols. Explain about OSI reference model with layered diagram. [2+8]
3. What are guided and unguided transmission media. Explain about fiber-optic and microwave transmission. [2+8]
4. What are flow control? How error control issues are handled by data link layer? [10]
5. Explain the error control issues in DLL with its remedy. [10]
6. Describe about the LAN Standard IEEE 802.4 with its diagram. [10]
7. What is routing? Differentiate between static and dynamic routing. [2+8]
8. What are the various transport layer issues. Explain them.  
What are the differences between TCP and UDP? [5+5]
9. Write short notes on: (Any two) [5+5]
  - a] DHCP
  - b] Digital Signature
  - c] Firewall

**Good Luck!**

*For Educational Materials  
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