

TE / comp / sem-V / CBCGS / R-19 / c-scheme / CN / SH-2024

Duration: 3hrs

[Max Marks: 80]

QP-10064609

- N.B. : (1) Question No 1 is Compulsory.  
 (2) Attempt any three questions out of the remaining five.  
 (3) All questions carry equal marks.  
 (4) Assume suitable data, if required and state it clearly.

- 1 Attempt any FOUR [20]**
- A Explain with examples the classification of IPv4 addresses. 5  
 B Create 7-bit hamming code for the message bit 1110 with even parity. 5  
 C List the advantages of fiber optics as a communication Medium. 5  
 D What are sockets and its different types? 5  
 E What is the use of DNS in networking? 5
- 2 Attempt the following**
- A For the class C network 193.160.10.0 having subnet mask 255.255.255.192 finds the number of subnet created and Number of host per subnet. 10  
 B What is network traffic congestion? How congestion is controlled? 10
- 3 Attempt the following**
- A Explain different framing methods? What is the advantage of variable length frame over fixed layer frame? 10  
 B How collision is controlled at MAC layer using CSMA/CD? 10
- 4 Attempt the following**
- A What is use of ARP protocol? And also discuss header structure for ARP packet. 10  
 B Which algorithms are useful for dynamic routing? 10
- 5 Attempt the following**
- A Explain the process of connection management at TCP layer. 10  
 B With the help TCP segment header structure, discuss importance of sequencing. 10
- 6 Attempt the following**
- A Compare FTP and Telnet. 10  
 B What are the benefits of Selective repeat ARQ protocol over Go-back N ARQ protocol? 10

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