

Roll No. ....

2715

B. E. 8th Sem. (I. T.)

Examination - May, 2009

NETWORK TECHNOLOGY

Paper : IT-465-E

Time : Three hours ] [ Maximum Marks : 100

*Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

Note : Attempt any five questions. All questions carry equal marks.

1. (a) What is Network Management ? List its five functions. 8
- (b) What is SMI & MIB ? Discuss these terms in reference to SNMP with its complete Format packet 12
2. (a) How is an ATM virtual connection identified ? List the ATM layers with their functions. 10
- (b) Discuss the key features of Data buffer block of 8251 A. 10

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- 8. (a) What is Remote Procedure Call? Discuss its basic functional model. 10
- (b) Discuss the principle and key features of transmitter and receiver for IBASE5 10

5 x 4

- 3. Differentiate between:
  - (a) Synchronous and asynchronous modems
  - (b) WWW and internet
  - (c) Substitution ciphers and Transposition ciphers
  - (d) Serial and parallel communication

- 4. What are Error correcting codes ? How are they different from error detection codes ? Discuss CRC in detail. What is the remainder obtained by dividing  $x^7 + x^5 + 1$  by the generator polynomial  $x^3 + 1$ . 20

- 5. (a) What are the various tools available on the internet for searching ? Explain Archie and Mosaic. 10

- (b) What are scripts ? Discuss their usage. Write a Java Script statement that

- (i) performs the addition of a variable a and a variable b to variable c.
- (ii) display the message "Hello" using a window object-

- 6. (a) Describe basic Ethernet frame format. Discuss the limitations of Ethernet. Also differentiate between half duplex and full duplex frame transmitter. 12
- (b) What are the services provided by the ISDN? Discuss its architecture. 8

- 7. What are the various issues for designing the TCP/IP layers and what are the reasons for using layered architecture ? Discuss the TCP/IP reference model in detail. 20