

(Following Paper ID and Roll No. to be filled in your Answer Book)

<b>PAPER ID : 7072</b>	Roll No.
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**M. B. A.**

**(SEM. IV) EXAMINATION, 2006-07**

**DATA COMMUNICATION & NETWORK**

**I.T. - 3**

*Time : 3 Hours]*

*[Total Marks : 100*

**Note :** *Attempt all questions.*

- 1** Attempt any **two** parts of the following : **2x10**
  - (a) Explain any one of the following Data Compression techniques :
    - (i) Encoding a Finite Set of Equally Likely Symbols.
    - (ii) Frequency Dependent Coding,
    - (iii) Context Dependent Encoding.
  - (b) Explain CDMA signal. How is it different from SDMA?
  - (c) Compare FM and AM Signals with applications.
- 2** Attempt any **two** parts of the following : **2x10**
  - (a) What are the components of a typical LAN? What are the functions of each component?
  - (b) What are the differences between a "thick Ethernet" and a "thin Ethernet"? With the help of a diagram show the usual configuration for Ethernet.
  - (c) What is ISDN? Why it is becoming important in today's competitive business environment?

- 3 Attempt any **four** parts of the following : **4x5**
- (a) What are the principles that were applied to arrive at the seven layers of an OSI model?
  - (b) What is the significance of a protocol in a computer network?
  - (c) Define and describe Virtual Private Network (VPN).
  - (d) What is the main difference between a Point-to-Point channel and a Broadcast channel? Describe any one of them.
  - (e) What are the advantages of using asynchronous transfer mode (ATM)?
  - (f) Explain the relation between Services and Protocols.
- 4 Attempt any **four** parts of the following : **4x5**
- (a) Describe the directory structure of the UNIX file system. What are pipes and filters? What is a pipeline?
  - (b) Why is Linux known as an open-source software? What are its main features?
  - (c) Why is mobile communication becoming important? Give at least one example of mobile communication.
  - (d) What is the difference between mobile communication and wireless communication? Explain with the help of an example.
  - (e) What do you understand by Wireless Application Protocol (WAP)? How is it helping the business world?
  - (f) What are XML and XML Script? Compare their capabilities? Why are they becoming important?