

MBA (Sem. - 3<sup>rd</sup>/4<sup>th</sup>)

INTRODUCTION TO COMPUTER NETWORKS

SUBJECT CODE : MB - 685

Paper ID : [C0133]

[Note : Please fill subject code and paper ID on OMR]

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.

Section - A

Q1)

(10 × 2 = 20)

- a) What is the use of FTP Protocol?
- b) How packet switching is different from circuit switching?
- c) List the tasks performed by Data link layer.
- d) How error detection methods are different from error correction methods?
- e) What are important benefits of using multiplexing?
- f) How SDM is different from STDM?
- g) Show the relationship between IP, Port & Socket addresses?
- h) What do you mean by the term Intelligent Network Security?
- i) How analog transmission is different from digital transmission.
- j) What do you understand by the term terminal handling?

Section - B

(4 × 10 = 40)

- Q2) (a) Demonstrate with the help of suitable example how the digital data is suitable for communication purposes than analog data?  
(b) Differentiate between OSI & TCP/IP Model.
- Q3) (a) Four data channels (digital), each transmitting at 1 Mbps, use a satellite channel of 1 MHz. Design an appropriate configuration using FDM.  
(b) Discuss in brief about message switching.
- Q4) (a) Explain in brief about Guided Media used in Networks.  
(b) Calculate the minimum time required to download one million bytes of information using each of the following technologies.  
V.32 modem, V.90 modem.
- Q5) (a) Discuss in brief the major components of an electronic mail system.  
(b) What is the difference between a router and a switch?
- Q6) (a) Explain with the help of suitable examples different classes of IP addresses used in class full addressing.  
(b) Given the dataword 1010011010 and the divisor 10111, show the generation of the codeword at the sender site using binary division.
- Q7) Write short notes on following :  
(a) Facsimile Transmission.  
(b) Network Standardization.

