

Roll No. 

Total No. of Pages : 02

Total No. of Questions : 09

**M.Sc.(IT) (2015 Onwards) (Sem.-2)**  
**DATA COMMUNICATION AND NETWORKS**  
Subject Code : MSIT-201  
Paper ID : [72728]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students has to attempt any ONE question from each SECTION.
2. SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.
3. Any missing data may be assumed appropriately.

**SECTION-A**

- Q1 a) Write a short note on Multiplexing.  
b) What are the components of digital communication?
- Q2 a) Write a short note on Network hardware.  
b) What do you know about Wireless Networks?

**SECTION-B**

- Q3 Explain the role and importance of error detection and correction in data communication.
- Q4 What is the functionality of Medium Access protocol? Explain.

**SECTION-C**

- Q5 Name different congestion control algorithms and write a note on any of one.
- Q6 Discuss the IP address frame format. What is subnet masking?

### SECTION-D

Q7 What are responsibilities of transport layer in Internet Model?

Q8 a) Write a short note on HTTP.

b) Discuss network security issues.

### SECTION-E

**Q9 Answer briefly :**

a) Define Internetworking.

b) Give the introduction to ATM.

c) Discuss the role of RARP.

d) Explain WAN with example.

e) Write in short IEEE standard 802.4.

f) What is the use of IPconfig?

g) Define CSMA/CA.

h) Differentiate Routers and Gateways.

i) Discuss network standards.

j) Differentiate TCP and UDP.