Enroll. No._____

MARWADI EDUCATION FOUNDATION

Faculty of Engineering/Technology/PG Studies

COMPUTER ENGINEERING/INFORMATION TECHNOLOGY

B.E. SEM: 4 MID-SEM. EXAM: I MARCH: 2016

Subject: - (Computer Network) (2140709) **Date: - 11 – 03 - 2016**

Total Marks:-30 **Time: - 75 Minutes**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Question: 1. [6]

(a) Why web caching concept is used in internet?

(b) Compare circuit switching, Virtual circuit packet switching and data gram packet switching.

Question: 2. [12]

(a) Describe Internet protocol stack in details.

(b) Give Answers for Following:

(I) Differentiate types of DNS Query with suitable figures.

(II) Why TCP is not suitable protocol for DNS service?

OR

(b) Give Answers for Following:

(I) Describe propagation delay and transmission delay with suitable example.

(II) Compare SMTP, POP3 and IMAP.

Question: 3. [12]

(a) Define HTTP & Describe types of HTTP Connections with suitable Example

(b) Describe types of DNS server in terms of distributed hierarchy of DNS.

OR

(a) Consider two hosts, A and B, Connected by a single link of Rate Rbps. Suppose that two hosts are separated by m meters and propagation speed along the link is s m/s . Host A is to send a packet of size L bits to Host B then

A. Express propagation delay d_{prop} in terms of m and s.

B. Determine transmission delay d_{trans} in terms of L and R.

C. Obtain End to end Delay.

D. Suppose Host A start transmission at t = 0 at time t = d_{trans} where is last bit of packet?

E. If d_{prop} is greater than d_{trans} , at time t = d_{trans} , where is first bit of packet ?

F. If d_{prop} is less than d_{trans} , at time t = d_{trans} , where is first bit of packet ?

(b) Match correct answers:

1. Encapsulation	a. Telephone Communication
2. Datagram packet switching	b. LAN Connection
3. Twisted Pair Cable	c. Adding a header
4. Domain Name System	d. Satellite communication
5. Circuit Switching	e. TV Channel Connection
6. Microwave	f. Internet
7. Virtual Circuit Switching	g. Host Aliasing & Mail Aliasing
8. Co – Axial Cable	h. ATM

---Best of Luck---

Course Outcome Wise Questions

Subject Code	**2140709**	Subject	**COMPUTRER NETWORKS**

CO No.	Course Outcome
CO1	Describe the importance of computer networks and various performance metrics.
CO2	Distinguish and relate various protocols in layered architecture of computer networks.
CO3	Explain various topological and routing strategies for IP based networks.
CO4	Prepare program with Socket to demonstrate data communication.
CO5	Simulate static and dynamic routing protocols through simulation tools.
CO6	Compare various devices and protocols that builds computer network.

Blooms Taxonomy	Question List
Remember / Knowledge	
Understand	
Apply	
Analyze	
Evaluate	
Higher order Thinking / Creative	