



MARWADI UNIVERSITY

Faculty of Technology

Computer Engineering/Information Technology

B.Tech. SEM: 4<sup>th</sup>

MID-SEM. EXAM: I

Enroll. No. \_\_\_\_\_

JAN: 2020

Subject: - (Computer Network) (01IT0401)

Date:- 27-01-2020

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) What is Protocol? How it is important in Computer Network?
- (b) What are the different types of Transmission media? Write brief about each of them.

**Question: 2.**

[12]

- (a) Suppose that two hosts A and B are separated by 25000 km and connected by direct link of  $R = 5$  Mbps. Suppose propagation speed  $s$  over link is  $2.5 * 10^8$  meter/second.
  - (1) Calculate bandwidth delay product e.g.  $R * \text{propagation delay}$ .
  - (2) What is width of bit on the link?
- (b) Draw a layered architecture of OSI reference model and write at least two services provided by each layer of the model.

**OR**

- (b) Draw a layered architecture of TCP/IP model and write at least two protocols of each layer of the model.

**Question: 3.**

[12]

- (a) Explain working of email protocols SMTP, IMAP and POP3 with suitable diagram.
- (b) What is HTTP? Differentiate its persistent and non-persistent types with request-response behavior of HTTP.

**OR**

- (a) Discuss the DNS services in detail. Also briefly explain iterated and recursive query.
- (b) What is FTP? Write at least three FTP commands with their responses.

*---Best of Luck---*

**Sub: Computer Network (01IT0401)**

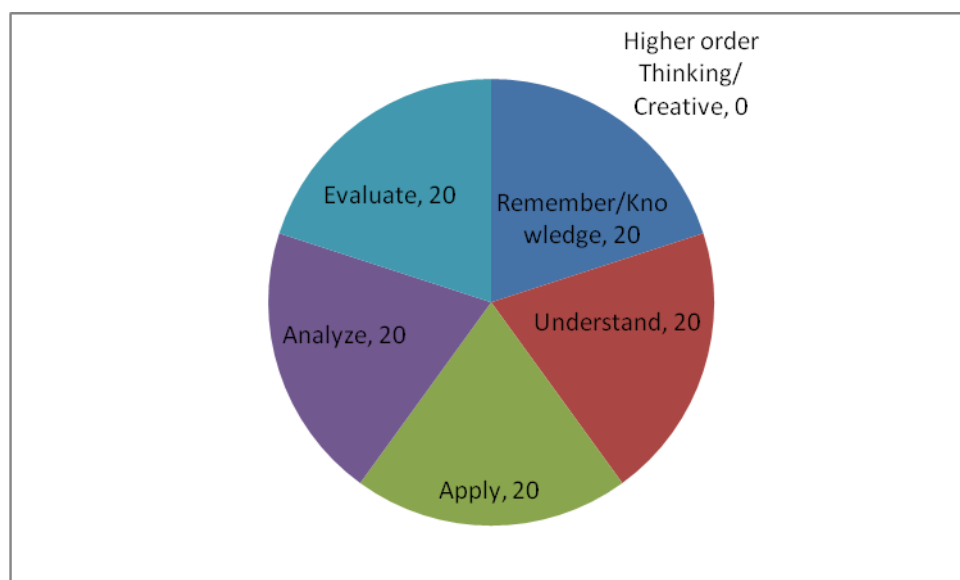
**Sem. 4<sup>th</sup>**

**Branch: Computer Engineering/Information Technology**

### **Que. Paper weightage as per Bloom's Taxonomy**

<b>LEVEL</b>	<b>% of weightage</b>	<b>Question No.</b>	<b>Marks of Que.</b>
Remember/Knowledge	20	Q.1 (a), Q.1(b)	6
Understand	20	Q.3(a), Or Q.3(a)	6
Apply	20	Q.3(b), Or Q.3(b)	6
Analyze	20	Q.2(b), Or Q.2(b)	6
Evaluate	20	Q.2(a)	6
Higher order Thinking/ Creative			

### **Chart/Graph of Bloom's Taxonomy**



## Course Outcome Wise Questions

Subject Code	<b>011T0401</b>	Subject	<b>COMPUTER NETWORK</b>
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CO No.	Course Outcome
<b>CO1</b>	(Remember) Describe the importance of computer networks and various performance metrics.
<b>CO2</b>	(Understand) Distinguish and relate various protocols in layered architecture of computer networks.
<b>CO3</b>	(Apply) Explain various topological and routing strategies for IP based networks.
<b>CO4</b>	(Apply) Prepare client server application using socket programming
<b>CO5</b>	(Analysis) Compare various devices and protocols that builds computer network.
<b>CO6</b>	(Evaluate) Measure of network parameters.

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