



Subject	Data Communication												17CS46		
<b>COURSE OUTCOMES</b>															
CO No.	On completion of this course, students will be able to:												Cognitive Level		
17CS46.1	Understand the importance of data communication, the Layered architecture of Open System Interconnection (OSI) and Transmission Control Protocol / Internet Protocol (TCP/IP) models.												L2		
17CS46.2	Understand conversion of signals from Digital to Digital, Analog to Digital & Digital to Analog conversion, bandwidth utilization techniques.												L2		
17CS46.3	Understand Error detection and correction techniques, Flow control & error control and DLC services.												L2		
17CS46.4	Understand operations of Channelization protocols, Random Access protocols and Wired & Wireless LAN.												L2		
17CS46.5	Understand the working of 802.11, Cellular Telephony, Bluetooth, IPv4 and IPv6 Addresses.												L2		
<b>CO-PO-PSO MAPPING</b>															
CO No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
17CS46.1	1	1	-	-	-	-	-	-	-	-	-	2	-	-	2
17CS46.2	1	2	-	-	-	-	-	-	-	-	-	2	-	-	2
17CS46.3	2	2	-	-	-	-	-	-	-	-	-	2	-	-	2
17CS46.4	1	1	-	-	-	-	-	-	-	-	-	2	-	-	2
17CS46.5	1	1	-	-	-	-	-	-	-	-	-	2	-	-	2
<b>17CS46</b>	2.0	1.0	-	-	-	-	-	-	-	-	-	1.0	-	-	2.0

## **CO-PO-PS JUSTIFICATION**

<b>CO No.</b>	<b>PO/PSO</b>	<b>CL</b>	<b>Justification</b>
17CS46.1	PO1	1	Slightly mapped as students understand the fundamentals of data communication, layered architecture and Digital Transmission.
	PO2	1	Slightly mapped as students Identify Networks Models to solve the problems.
	PO12	2	Moderately mapped as students recognize the need and be able to clearly explain why data communications is vitally important to keep current regarding new developments in computer networking.
	PSO3	2	Moderately mapped as students gain the knowledge protocol layering architectures and digital transmission.
17CS46.2	PO1	1	Slightly mapped as students understand the fundamentals of conversion of signals from Digital to Digital, Analog to Digital & Digital to Analog conversion, bandwidth utilization techniques.
	PO2	2	Moderately mapped as students Compare and contrast alternative solution processes to select the best process in signal conversion.
	PO12	2	Moderately mapped as students engage in independent and life-long learning in the broadest context of technological change in signal conversion mechanism.
	PSO3	2	Moderately mapped as students gain the knowledge of digital signal conversions.
17CS46.3	PO1	2	Moderately mapped as students Understand the Error detection and correction techniques, Flow control & error control and DLC services
	PO2	2	Moderately mapped as students analyze and Compare and contrast alternative solution processes to select the best process Error detection and correction techniques, Flow control & error control and DLC services in computer networks.
	PO12	2	Moderately mapped as students continuously learn the Error detection and correction techniques, Flow control & error control and DLC services in computer networks.
	PSO3	2	Moderately mapped as students gain the knowledge of Error detection and correction techniques, Flow control & error control and DLC services
17CS46.4	PO1	1	Slightly mapped as students operations of Channelization protocols, Random Access protocols and Wired & Wireless LAN.
	PO2	1	Slightly mapped as students identify the operations of Channelization protocols, Random Access protocols and Wired & Wireless LAN.

	PO12	2	Moderately mapped as students continuously learn the improvisation In operations of Channelization protocols, Random Access protocols and Wired & Wirless LAN.
	PSO3	2	Moderately mapped as students gain the knowledge of Channelization protocols, Random Access protocols and Wired & Wirless LAN.
17CS46.5	PO1	1	Slightly mapped as students Understand the working of 802.11, Cellular Telephony, Bluetooth, IPv4 and IPv6 Addresses in computer networking.
	PO2	1	Slightly mapped as students gain the knowledge of the working of 802.11, Cellular Telephony, Bluetooth, IPv4 and IPv6 Addresses in computer networking.
	PO12	2	Moderately mapped as students continuously update their knowledge on media access control and wireless networks and next generation IP.
	PSO3	2	Moderately mapped as students gain the knowledge of working of 802.11, Cellular Telephony, Bluetooth, IPv4 and IPv6 Addresses in computer networking.

**Prepared by:**

**Approved by:**

**(Mamatha C R / Noor Basha /Jagadamba A)**

**(H.o.D)**