

## Bachelor of Business Administration B.B.A (ITM) Semester – III

Course Code	UM03IDBBI03	Title of the Course	Computer Networks
Total Credits of the Course		Hours per Week	

Course Objectives:	1. To develop and understand computer networking basics
	2. To develop understanding of different components of computer networks,
	protocols, modern technology and their applications.

Course	Course Content		
Unit	Description	Weightage*(%)	
1.	Basics of Networking Introduction of networking (Definition), Advantages and Disadvantages of Networking, LAN, MAN, WAN, LAN Components, OSI model	25%	
2.	<b>Transmission Technology</b> Digital and Analog Transmission, Transmission mode (Half Duplex and Full Duplex Transmission), Serial Transmission, Parallel Transmission, Synchronous & Asynchronous Transmission, Transmission Impairment (Attenuation, distortion, Noise)	25%	
3.	<b>Topology and Protocols</b> LAN Topologies (Bus, Star, Ring, Tree, Mesh, Intersecting Rings), Protocols (Definition), Need of Protocols, Protocols (CSMA/CD, CSMA/CA)	25%	
4.	Networking Media and Devices Types of transmission media, Guided Media, (Twisted pair cables, Coaxial Cables, Optical fibers), Devices, Hubs, Switches, Bridges, Routers, Gateways, Modems		

Teaching- Learning	Information and Communication Technology (ICT) in education is the mode of education that use information and communications technology to support, enhance, and optimize the delivery of information
Methodology	enhance, and optimize the delivery of information.





## SARDAR PATEL UNIVERSITY Vallabh Vidyanagar, Gujarat (Reaccredited with 'A' Grade by NAAC (CGPA 3.11) Syllabus with effect from the Academic Year 2024-2025

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / MCQ (As per CBCS R.6.8.3)	25%
2.	Internal Continuous Assessment in the form of Practical, Viva- voce, Quiz, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	25%
3.	University Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Share data over various networks.
2.	Evaluate the challenges in building networks and solutions to those.
3.	Discuss the key technological components of the networks.

Suggested References:	
Sr. No.	References
1.	B. A. Forouzan: Data Communications and Networking 2nd Edition, TMH
2.	Andrew S Tannenbaum: Computer Networks, 3rd Ed., Pearson-Prentice Hall
3.	B. A. Forouzan: Local Area Networks, TMH

On-line resources to be used if available as references material:

On-line resources:

https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxza21pbmh8Z3g6NjQxMTI2MmYxMTAwZmNjZQ

 $https://www.tutorialspoint.com/data\_communication\_computer\_network/data\_communication\_computer\_network\_tutorial.pdf$ 

http://indexof.co.uk/Networking/Networking%20The%20Complete%20Reference,%20Third%20Edition%20-%20Bobbi%20Sandberg.pdf

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