

Internet Technologies

Unit	Topic	Primary reference
1	Network address translation	https://www.ciscopress.com/articles/article.asp?p=25273
	Subnet Masking	https://www.ciscopress.com/articles/article.asp?p=330807&seqNum=2
	Difference between Intranet and Internet, Working of Internet	R1 Chapter 1
	Dynamic and Static Routing	https://www.ciscopress.com/articles/article.asp?p=2180209&seqNum=3 https://www.ciscopress.com/articles/article.asp?p=2180209&seqNum=4
	Domain Name Server	https://www.ciscopress.com/articles/article.asp?p=2446655
	Networking tools - ipconfig, ping, netstat, tracer	https://www.ciscopress.com/articles/article.asp?p=2420613
2	Introduction to Internet Protocols: HTTP, HTTPS, FTP, SMTP, IMAP, POP3, VoIP	https://www.ciscopress.com/articles/article.asp?p=1687881
3	Web Servers: Introduction, Working, Configuring, Hosting and Managing a Web server, Client-side Technologies, Server-side Technologies, and hybrid technologies	R1 Chapter 1-2
	Proxy Servers: Introduction, Working, Type of Proxies, setting up and managing a proxy server	https://www.varonis.com/blog/what-is-a-proxy-server/ (Up to Proxy server risks)
4	Combining Web Applications and Mobile Applications	R3 Lesson 11 (Up to page 246)
	Introduction to forums, blogging, portfolio, developing a responsive website JavaScript, jQuery, JSON	https://imtips.co/blog-or-forum.html (Except Common FAQ's on Forums and Blogs) R2 Chapter 2,3,4 Complete R2 Chapter 5 up to page 236 (Except 228-235) R2 Chapter 6 up to page 270 (Except 258-259,264) R2 Chapter 7 up to page 357 (Except 330-341, 346-353) R2 Chapter 8 up page 396 (Except 375, 380-381, 383-387)
	NODE.js	https://nodejs.dev/learn/introduction-to-nodejs https://nodejs.dev/learn/differences-

		between-nodejs-and-the-browser https://nodejs.dev/learn/run-nodejs-scripts-from-the-command-line https://nodejs.dev/learn/how-to-exit-from-a-nodejs-program https://nodejs.dev/learn/build-an-http-server https://nodejs.dev/learn/reading-files-with-nodejs https://www.w3schools.com/nodejs/nodejs_mysql.asp
	BOOTSTRAP	https://www.w3schools.com/bootstrap/bootstrap_get_started.asp https://www.w3schools.com/bootstrap/bootstrap_grid_system.asp
5	Search Engines - components, working, optimization, Crawling, BOTS	https://developers.google.com/search/docs/beginner/how-search-works
6	Introduction to cookies and sessions. Introduction to e-commerce websites and e-carts	R1 Chapter 13 (Page 301-303 except Setting a cookie, Page 312-Using Sessions)

Primary References:

- R1.** Learning PHP, MySQL, JavaScript, CSS & HTML5, (Robin Nixon), 3rd Edition , O'Reilly Media
- R2.** JavaScript and JQuery Interactive Front-end Web Development, (Jon Duckett), John Wiley and Sons, Inc.
- R3.** Web Design with HTML and CSS Digital Classroom, (Jeremy Osborn, Jemmifer Smith and AGI Creative Team), Wiley Publishing, Inc.

Secondary References:

- C1.** Network Fundamentals, CCNA Exploration Companion Guide, (Mark A. Dye, Rick McDonald, Antoon W. Ruff), Cisco Press
- C2.** <https://api.jquery.com/>
- C3.** <https://www.json.org/>