III YEAR SEM I B.Tech CSE	ELECTIVE	L	T	P	C
Code: CS3502	**Scripting languages**	2	2	0	4

UNIT I – Introduction to Scripting

Scripts and Programs, Origin of Scripting, Scripting Today, Characteristics of Scripting languages, Web Scripting, and the universe of Scripting Languages.

UNIT II – Advanced PERL

Names and values, variables, scalar expressions, Control structures, arrays, list, hashes, strings, pattern and regular expressions, subroutines, file processing, file and directory manipulation.

Finer points of looping, pack and unpack, file system, eval, data structures, packages, modules, objects, interfacing to the operating system, creating internet ware applications, Dirty Hands Internet programming, security issues

Unit III– Introduction to PHP

Features, Embedding PHP code in your web pages, outputting the data to the browser, data types, variables, constants, expressions, string interpolation, control structures, functions, function libraries, arrays, strings and regular expressions, date & time.

Unit IV – Advanced PHP programming

PHP and web forms, files, PHP authentication and methodologies – Hard coded, file based, database based, IP based, login administration, uploading files with PHP, sending email using PHP, PHP encryption functions, the Mcrypt package, building websites for the world.

UNIT V – Introduction to TCL – Tk

TCL structure, syntax, variables and data in TCL, control flow, data structures, input/output, procedures, strings, patterns, files,

UNIT VI – Advanced TCL – Tk

eval, source, exec and up level commands, Name spaces, trapping errors, event driven programs, making applications internet aware, Nuts and Bolts internet programming, Security issues, C interfaceRuby structure, control structures, methods, modules, blocks, arrays, strings, hashes, date & time, ranges, iterators, File I/O, exceptions, Object-oriented, regular expressions, database access, web applications, sending mail, socket programming, web services, multi-threading.

Text Books:

1. David Barron: "The World of Scripting Languages", 1st Edition, Wiley publications, 2009.

2. Jason Gilmore: "Beginning PHP and MySQL", 3rd Edition, Apress Publications (Dream tech.).

3. David Flanagan, Yukihiro Matsumoto: "The Ruby Programming Language", O'Reilly Media, 2008

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Reference Books:

1. J. Lee and B.Ware: "Open Source Web Development with LAMP using Linux, Apache, MySQL, Perl and PHP", 1st Edition, Pearson Education, 2002

2. Julie Meloni and Matt Telles: "PHP 6 Fast and Easy Web Development", 1st Edition, Cengage Learning Publications, 2008.

3. Ellie Quigley: "Perl by Example", 5th Edition, Pearson education, 2014

4. John Ousterhout, Ken Jones: "Tcl and the Tk Toolkit", 2nd Edition, Pearson education, 2009

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Video Reference links:

Title	Expert Name	Details of Expert	Web link
Linux & scripting(Perl, Tcl/Tk)	Mr. Anand Iyer	Director, Calypto Design systems	http://nptel.ac.in/courses/117106113/
Internet Technology, Lecture -21 to 24	Prof. I. Sengupta	Dept. of Computer science and engineering, IIT, Khargpur	http://nptel.ac.in/courses/106105084/21