15ACS82-SCRIPTING LANGUAGES

L T P C 3 1 0 3

Course Objectives

The course demonstrates an in depth understanding of the tools and the scripting languages necessary for design and development of applications dealing with Bio-information/ Blo-data. The instructor is advised to discuss examples in the context of Bio-data/ Bio-information application development.

UNIT--I

Introduction to PERL and Scripting: Scripts and Programs, Origin of Scripting, Scripting Today, Characteristics of Scripting Languages, Uses for Scripting Languages, Web Scripting, and the universe of Scripting Languages. PERL- Names and Values, Variables, Scalar Expressions, Control Structures, arrays, list, hashes, strings, pattern and regular expressions, subroutines.

UNIT — II

Advanced pen: Finer points of looping, pack and unpack, filesystem, eval, data structures, packages, modules, objects, interlacing to the operating system, Creating Internet ware applications, Dirty Hands Internet Programming, security Issues.

PHP: PHP Basics PHP Basics- Features, Embedding PHP Code in your Web pages, Outputting the data to the browser, Datatypes, Variables, Constants, expressions, string interpolation, control structures .Function, Creating a Function, Function Libraries, Arrays, strings and Regular Expressions.

UNIT — III

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 Web sites for the Worki.

UNIT-IV

TCL: TCL Structure, syntax, Variables and Data in TCL, Control Flow, Data Structures, input/output, procedures, strings, patterns, files, Advance TCLeval, source, exec and uplevel commands, Name spaces, trapping errors, event driven programs, making applications Internet aware, Nuts and Bolts Internet Programming, Security Issues, C Interface. Tk-Visual Tool Kits, Fundamental Concepts of Tk, Tk by example, Events and Binding, PerI-Tk.

UNIT-V

Java Script: Introduction to Java Script, Basic Java Script: Values, Varianles and control Flow. Functions, Data Structures: Objects and Arrays.

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Course Outcomes

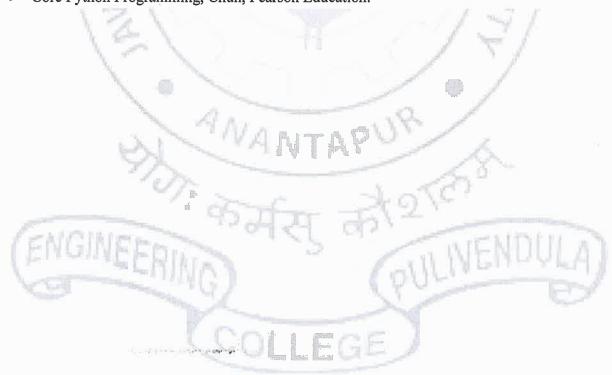
- Ability to understand the differences between scripting languages.
- Ability to apply your knowledge of the weaknesses of scripting languages to select implementation.
- Master an understanding of python especially the object oriented concepts.

TEXTBOOKS:

- The World of Scripting Languages, David Barron, Wiley Publications.
- Python Web Programming, Steve Holden and David Beazley, New Riders Publications.
- Beginning PHP and MySQL, 3rd Edition, Jason Gilmore, Apress Publications (Dream tech.).

REFERENCES:

- Open Source Web Development with LAMP using Linux, Apache, MySQL, Pen and PHP, J.Lee and B.Ware(Addison Wesley) Pearson Education.
- Programming Python, M. Lutz, SPD.
- PHP 6 Fast and Easy Web Development, Julie Meloni and Matt Telles, Cengage Learning Publications.
- PHP 5.1, l.Bayross and S.Shah, The X Team, SPD.
- Core Python Programming, Chun, Pearson Education.



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