VIKRAM UNIVERSITY, UJJAIN

INSTITUTE OF COMPUTER SCIENCE

PROGRAMME TITLE: Certificate Course in PHP Programming Language

DURATION OF COURSE: 6 Months

SCOPE: This certification course will be run only at the Institute of Computer science. The main objective of this course is to make students self dependent (आत्मनिर्भर) in computer programming and computer technology, so that students can make their career in computer technology field.

PROGRAMME OBJECTIVES:

The objective of the Certificate in PHP Programming Language programme is to prepare students for productive careers in the software industry and computer programming job. Certification courses are aimed at skills development in computers using Programming Language skills.

The main objectives of the Certification in Python Programming Language programme includes:

- To develop in depth understanding of the key concepts of Python Programming Language to impart knowledge of problem solving techniques.
- Focus on development of knowledge and specific skills required in Programming Language with PHP.
- To develop competent computer professionals with strong ethical values.

PROGRAMME OUTCOMES (POs)

At the end of this Certification in Python Programming Language programme, student will be able to:

- Prepare software's and Application on computer system.
- Gain understanding of the key programming language skills.
- Understanding the key concepts of Programming Language to improvise organizational performance.

After Completion of the programme students are able to work as-

- **Language Programmer.**
- **Web Designer**
- **Web Designer**

COURSE NAME: **PHP PROGRAMMING LANGUAGE**

LEVEL OF COURSE: CERTIFICATE COURSE

DURATION: 6 MONTH

ELIGIBILITY: 10+2

FEE: 3000/-

SCHEME OF EXAMINATION

Paper code	Title of Paper	Theory External Marks	Min.Pass Marks	Internal Mark	Min.Pass Marks	Total
	Paper-I	75	27	25	9	100
	Paper-II	75	27	25	9	100
	Internship/ Industrial Training/ Project Work	150 ------- 300 ---------	54 ------- -------	50 ------- 100 -------	28 ------- -------	200 ------- 400 -------

Code	Topic
Paper- I	WEB DEVELOPMENT WITH PHP
Paper-II	DBMS

WEB DEVELOPMENT WITH PHP

UNIT-I

HTML and Graphics : HTML Tag Reference, Global Attributes, Event Handlers, Document Structure Tags, Formatting Tags, Text Level formatting, Block Level formatting, List Tags, Hyperlink tags, Image and Image maps, Table tags, Form Tags, Frame Tags, Executable content tags. **Imagemaps :** What are Imagemaps? Client-side Imagemaps, Server-side Imagemaps, Using Server-side and Client-side Imagempas together, alternative text for Imagemaps.

UNIT-II

Tables : Introduction to HTML tables and their structure, The table tags, Alignment, Aligning Entire Table, Alignment within a row, Alignment within a cell, Attributes, Content Summary, Background color, Adding a Caption, Setting the width, Adding a border, Spacing within a cell, Spacing between the cells, spanning multiple rows or columns, Elements that can be placed in a table, Table Sections and column properties, Tables as a design tool. **Frames :** Introduction to Frames, Applications, Frames document, The <FRAMESET> tag, Nesting<FRAMESET> tag, Placing content in frames with the <FRAM> tag, Targeting named frames, Creating floating frames, Using Hidden frames,

Unit-III

Forms: Creating Forms, The <FORM> tag ,Named Input fields, the input <INPUT> tag, Multiple lines text windows, Drop down and list boxes, Hidden, Text, Text Area, Password, File Upload, Button, Submit, Reset, Radio, Checkbox, Select, Option, Forms and Scripting, Action Buttons, Labelling input files, Grouping related fields, Disabled and read-only fields, Form field event handlers, Passing form data.

Unit-IV

PHP : Why PHP and MySQL?, Server-side web scripting, Installing PHP, Adding PHP to HTML, Syntax and Variables, Passing information between pages, Strings, Arrays and Array Functions, Numbers, Basic PHP errors / problems.

Unit-V

Advanced PHP and MySQL : PHP/MySQL Functions, Displaying queries in tables, Building Forms from queries, String and Regular Expressions, Sessions, Cookies and HTTP, Type and Type Conversions, E-Mail.

XML : Introduction to XML, Anatomy of an XML, document, Creating XML Documents, Creating XML DTDs, XML Schemas, XSL.

REFERENCES:

1. Web Design The complete Reference, Thomas Powell, Tata McGrawHill
2. HTML and XHTML The complete Reference, Thomas Powell, Tata McGrawHill
3. JavaScript 2.0 : The Complete Reference, Second Edition by Thomas Powell and Fritz Schneider
4. PHP : The Complete Reference By Steven Holzner, Tata McGrawHill

Database Management System

UNIT-1

DBMS Concepts and architecture Introduction, Review of file organization techniques, Database approach v/s Traditional tile accessing approach, Advantages of database systems, Data models, Schemas and instances, Data independence, Functions of DBA and designer. Entities and attributes, Entity types, Value, Sets, Key attributes, Relationships, Defining the E-R diagram of database, **Various data models:** Basic concepts of Hierarchical data model. Network data model, and Relational data model, Comparison between the three types of models.

UNIT-2

Relational Data models: Domains, Tuples, Attributes, Relations, Characteristics of relations, Keys, Key attributes of relation, Relational database, Schemas, Integrity constraints, Intension and Extension, **Relational Query languages:** Relational algebra and relational calculus, Relational algebra operations like select, Project, Join, Division, outer union etc.

UNIT-3

Types of relational calculus i.e. Tuple oriented and domain oriented relational calculus and its operations. SQL: Data definition in SQL, update statements and views in SQL QUEL & QBE: Data storage and definitions. Data retrieval queries and update statements etc.

UNIT-4

Data Base Design: Introduction to normalization, Normal forms, Functional dependency, Decomposition, Dependency preservation and losslessjoin, problems with null valued and dangling tuples, multivalued dependencies. Distributed databases, protection, security and integrity constraints, concurrent operation on databases, recovery, transaction processing, basic concepts of object oriented data base system and design.

UNIT-5

Case study of relational database management systems: Oracle and Microsoft access, Oracle tools.

Reference Books:

1. Data Base Management System by C.J. Date
2. Data Base Management System by Ullman
3. Fundamental of database system byElmasri/Navathe the Benjamin / Cunnings Publishing company inc.
4. Data base design by GioWiederhold, McGraw Hill
5. Fundamental of Data Base Management System by Leon & Leon, Vikas Publishing House Pvt. Ltd.

Internship/ Industrial Training/Project Work