

**VIKRAM UNIVERSITY, UJJAIN**  
**INSTITUTE OF COMPUTER SCIENCE**

**PROGRAMME TITLE:** Certificate Course in Fundamental IT and PC packages

**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 Course in Fundamental IT and PC packages programme is to prepare students for productive careers in the software industry . this courses are aimed at skills development in computers using various technologies and computer operation skills.

The main objectives of the Certificate Course in Fundamental IT and PC packages programme includes:

- Learn Fundamental of Information Technology and basics of computer technology.
- To develop in depth understanding of the key concepts of information Technology to impart knowledge of problem solving techniques, PC package.
- Develop problem solving skills in interdisciplinary domains.
- Focus on development of knowledge and specific skills required in IT organization and office work.
- To develop competent computer professionals with strong ethical values.

**PROGRAMME OUTCOMES (POs)**

At the end of this programme, Certificate Course in Fundamental IT and PC packages student will be able to:

- Prepare presentation and report on computer system.
- Identify the components of a computer system and demonstrate basic proficiency in commonly used applications.
- Create, design, and produce professional documents using word processing software (i.e., MS Word).
- Process, manipulate, and represent numeric data using the basic functions of spreadsheet software (i.e., MS Excel).
- Demonstrate strategies for merging and integrating source data from multiple applications.
- Understanding the key concepts of Information Technology to improvise organizational performance.

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

- Computer Operator.
- Computer Office Job.
- Computer Skilled Employee.

**COURSE NAME:** CERTIFICATE IN FUNDAMENTAL IT AND PC PACKAGES  
**LEVEL OF COURSE:** CERTIFICATE COURSE  
**DURATION:** 6 Months  
**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	150	54	50	28	200
	Training/ Project Work	300		100		400

Code	Topic
<b>Paper- I</b>	COMPUTER FUNDAMENTALS
<b>Paper-II</b>	PC PACKAGES

**Paper- I: COMPUTER FUNDAMENTALS**

**UNIT-1**

Computer Fundamental: Characteristics of Computers, History of Computer, Evolution of Computers, Computer Generations and Types of Computer. Components of a Computer: Registers, instruction Set, Bus Architecture. Computer Hardware: Input Devices, Output Devices. Storage Devices.

**UNIT-2**

Introduction of Programming: Procedure Oriented Programming, Object oriented programming, Concepts used in OOP, Benefits of OOP, Main advantages and disadvantage of OOP, Applications of OOP, OOP vs. POP.

**UNIT-3**

Operating System Overview: Computer System Startup, Computer System Structure, computer system components, operating System classifications, operating System Services, Major Functions of operating system, Process Management, CPU Scheduling, Scheduling Criteria. .

**UNIT-4**

Introduction to DBMS: File System, Traditional File Oriented Approach, DBMS Advantages and Disadvantage, Role of DBMS, Three views of data, DBMS Architecture. Data Models.

**UNIT-5**

Introduction to computer Networks: computer Network Definition, Importance of Networking, Types of Networks, Network Topology, Advantages and Disadvantage of computer Networks. Internet basics.

#### Reference Books:

1. Operating Systems Concepts, A. Silberschaz, P.Galvin, G.Gagne, John Wiley & Sons
2. Object Oriented Programming in C++, Robert Lafore, Galgotia Publication.
3. Data base management systems vol. 1., Date C.J.
4. Fundamental of Computer Science & IT, Singh Umesh Kumar, Jain S., Maheshwari A., SSDN publications New Delhi,
5. Data Communications and Networks, Godbole A, Tata Mccraw-Hill Publications.

### **Paper-II: PC-PACKAGES**

#### UNIT-1

MS windows: Introduction to MS windows; Features of windows; working with windows; My computer & Recycle bin; Desktop, Icons and windows Explorer; Screen description & working styles of windows; Dialog Boxes & Toolbar; working with files & Folders, Simple operations like copy, delete, moving of files and folders from one drive to another.

#### UNIT-2

MS word Basics - Introduction to MS office; introduction to MS- word; Features & area of use, working with MS- word; Menus & commands; Toolbars & Buttons; shortcut Menus, wizards & Templates, creating a New Document; Different page views and Layouts.

#### UNIT-3

Advanced Features of MS- word- Spell check, Thesaurus, Find & Replace; Headers & Footers: Inserting- Page Number, Pictures, Files, Auto texts, Symbols etc.; working with columns, Creation and working with Tables including conversion to and from text.

#### UNIT- 4

MS Excel: Introduction and area of use; working with MS Excel: concept of workbook and worksheet; Using Wizards; Various Data Types; Using different features with Data, Cell and Texts; Inserting, Removing & Resizing of Columns & Rows; Working with Data & Ranges .

#### UNIT-5

MS PowerPoint: Introduction and area of use; Working with MS PowerPoint; Creating a New Presentation; Working with Presentation; Using Wizards; Slides & its Different Views; Inserting, Deleting and Copying of Slides; Working with Notes, Handouts; Columns and Lists.

#### Reference Books:

1. Windows XP Complete Reference. BPB publications
2. MS Office XP complete BPB Publication.

## **Internship/ Industrial Training/Project Work**

1. Working with windows operating system along with file management commands like create, copy, move, delete and rename files and folders, control panel, recycle bin.
2. Design your CV with a covering letter using MS word.
3. Create a Student database of your class.
4. Create Your E-Mail id with sending and receiving of email having attachments.
5. Identify the internal and external hardware/peripheral components.
6. Load any new operating system into your computer.
7. Calculate student grades using his internal and external marks details.
8. Create a pay slip with details of employee salary.
9. Create Water Marking.
10. Create a presentation with animation and sound effects.