

## D. Y. Patil University, Ambi, Pune School of Engineering and Technology

#### **Department of Information Technology**



# INFORMATION SYSTEM DESIGN LABORATORY:

This Laboratory is used for carrying out Practical's related to Data Structures & Object Oriented programming.Object-oriented programming (OOP) is a programming paradigm based on the concept of *objects*, which are *data structures* that contain data, in the form of fields (or attributes) and code, in the form of procedures, (or methods). A distinguishing feature of objects is that an object's procedures provide access to and modify its fields.

In object-oriented programming, computer programs are designed by making them out of objects that interact with one another. There is significant diversity in object-oriented programming, but most popular languages are class-based, meaning that objects are instances of classes, which typically also determines their type.



#### **OPERATING SYSTEM DESIGN LABORATORY**

This Laboratory is used for carrying out Practical's related to Operating System & SQL Programming.

An operating system (OS) is system software that manages computer hardware, software resources, and provides common services for computer programs.

Time-sharing operating systems schedule tasks for efficient use of the system and may also include accounting software for cost allocation of processor time, mass storage, printing, and other resources. For hardware functions such as input and output and memory allocation, the operating system acts as an intermediary between programs and the computer hardware.



#### PROGRAMMING LABORATORY

To provide hands on training to the students in C programming languages and drafting exercises in Information Technology. To familiarize the students with C and C++ Programming. To perform programs in 'C' and 'C++' such as Arrays string manipulation, Matrix Manipulation – transpose, inverse, triangularisation, Functions and subroutines. Structures, user defined data types, enumeration, Records, File handling – operating, closing, creating, appending of unformatted data files – mark sheet processing, Sorting and searching.



#### **WEB TECHNOLOGY LABORATORY:**

This Laboratory is used for carrying out Practical's related to Programming Lab & Computer Graphics Programming.

It is difficult to display an image of any size on the computer screen. This method is simplified by using Computer graphics Graphics on the computer are produced by using various algorithms and techniques. This lab is having practical describes how a rich visual experience is provided to the user by explaining how all these processed by the computer.Computer-generated model of the physical, financial and economic system is often used as educational aids. Model of physical systems, physiological system, population trends or equipment can help trainees.



#### **NETWORK LABORATORY:**

This Laboratory is used for carrying out Practical's related to Computer Networks Lab and their Mini & Major Projects.

A computer network is a digital telecommunications network for sharing resources between nodes, which are computing devices that use a common telecommunications technology. Data transmission between nodes is supported over data links consisting of physical cable media, such as twisted pair or fiber-optic cables, or by wireless methods, such as Wi-Fi, microwave transmission, or free-space optical communication.





#### **DIGITAL ELECTRONICS & LOGIC DESIGN:**

This Laboratory is used for carrying out Practical's related to Digital Electronics & Logic Design.

Digital electronics, digital technology or digital (electronic) circuits are electronics that operate on digital signals. In contrast, analog circuits manipulate analog signals whose performance is more subject to manufacturing tolerance, signal attenuation and noise. Digital techniques are helpful because it is much easier to get an electronic device to switch into one of a number of known states than to accurately reproduce a continuous range of values.

#### SOFTWARE DEVELOPMENT LABORATORY

This Laboratory is used for carrying out Practical's related to software development.

Software Development Lab offering extends or creates software development capacity support for a single product or entire product line and drives innovation for companies by rapidly setting up a product development center. Through this Software Development Lab can provide clients with full lifecycle R&D and support services, as well as proven processes (Agility RPM) and dedicated engineering teams.



### **PROJECT LAB:**

This Laboratory is used for carrying out Project Activities.

Project Presentations, Demonstration of Project phases and examination related to Project. This Laboratory Specially designed for Project work.

#### **CLASS ROOM:**

Well-equippedClass Room with good seating arrangement. Class Roomis fixed with Projector, and White board



#### SEMINAR HALL:

Well-equipped Seminar Hall with good seating arrangement. Seminar Hall is fixed with PA system, Projector, and White board. This Seminar Hall is utilized for Guest lectures, FDPs, Seminars, Conferences & Departmental events.