# 0944 -DIPLOMA IN INFORMATION TECHNOLOGY & ENGINEERING SEMESTER -I 094452 VISUAL BASIC

(Common with Computer Engineering)

#### RATIONALE

VB is a programming language, which enables a programmer to write programs and develop application packages to produce solution to live problems. After undergoing this course, the students will be able to understand the principles of Active-X objects and write programs in VB.

### DETAILED CONTENTS

#### 1. Introduction to Visual Basic

Features and applications of VB – concept of integrated development environment (IDE) – project application like standard Exe

#### 2. VB Structure

Variable declaration types – user defined data types – scope and life of a variable – arrays – Constructors – control flow statements – procedures and functions.

#### 3. Designing the User Interface

Design aspects of VB forms – Elements of user Interface – properties of controls – textbox, label, command button, check box, list box, picture, image shape timer – designing forms and displaying messages using above controls – control arrays.

#### 4. Menus and Common Dialogue Control

Creating menus at design time using menu design window – control menus and runtime – create shortest keys for pop up menus – common dialogue control.

#### 5. Display date, time, string type conversion and Printing Information

Data reports and environments – display tabular data in report form– fundamentals of printing – printing with print form method.

#### 6. Data Base Programming

Connecting with database, using DAO, RDO and ADO

7. Working with inbuilt Active X, Windows common control, creating own Active X through Active X control, Active X EXE, difference between EXE and DLL (5 hrs)

#### LIST OF PRACTICALS

- 1) Exercise on opening projects like standard Exe, Active-X EXE and Active-X control
- 2) Exercise on all the menus of opening window of VB
- 3) Exercise on all basic controls
- 4) Exercise on design form like calculators, traffic lights
- 5) Exercise on small application using appropriate commands
- 6) Exercise on menus
- 7) Writing programs using arrays

- 8) Exercise on creating reports
- 9) Exercise on Data base connectivity
- 10) Exercise on creating own active X, component

## **INSTRUCTIONAL STRATEGY**

This subject deals with the programming concept of VB and the subject is having both theory and practical. While imparting instructions to the students, the teacher should stress on the usage of various built in Active-X Controls, DLL files so that with the help of which the students can develop application packages of their own.

## **RECOMMENDED BOOKS**

- 1. Mastering VB, by Evangelous Petroustsos BPB Publications, New Delhi
- 2. Teach Yourself VB by Techmedia Publications, New Delhi
- 3. Microsoft VB Manual by MS Press
- 4. Visual Basic & .Net by Null Dale, Michael Mc Millan, Chip Weems, Mark Headington, Narosa Publishing House Pvt Ltd, Darya Ganj, New Delhi 110002