PROGRAMMING IN VISUAL BASIC
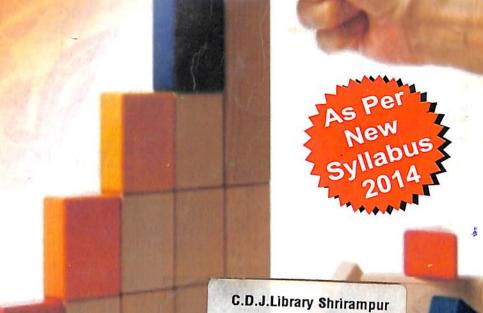
- Prof. Gauri Khire
- Prof. Kashinath Gunjal
- Prof. Yogiraj V. Chandratre
- Prof. Mrs. Pranita P. Raskar

B.C.A. (Sem-IV)

With CD

As Per New Syllabus 2014

SUCCESS PUBLICATIONS

Prof. Gauri Khire
B.C.S., M.C.A.
Modern College of Arts, Science & Commerce, Shivajinagar, Pune.

Prof. Gauri Khire is having almost 6 years of teaching experience and currently she is working as Senior Lecturer at Modern College of Arts, Science & Commerce, Shivajinagar, Pune. She is skilled with various programming languages like C, C++, VB, VB.Net and SQL. She has also showed her active participation in Paper Presentation at International Level.

Prof. Yogiraj V. Chandratre
B.C.S., M.C.M., B.A., M.C.A.
C.D.Jain College of Commerce, Shrirampur, Ahmednagar.

Prof. Yogiraj V. Chandratre has an excellent academic background. He has almost 19 years of teaching experience. He is currently working as Assistant Professor and HOD of Computer Department at C.D.Jain College of Commerce, Shrirampur, Ahmednagar. He has attended many Seminars/Conference at National Level and State Level. He also showed his massive contribution in Paper Presentation and many of them get published too. He also worked as 'Master Trainer' in two phases of Census 2011. He is also working as 'Technical Co-ordinator in Rayat Shikshan Sanstha's School Level Computer Program.

Prof. Kashinath Gunjal
B.Sc. (Chemistry), M.C.M., M.C.A.
Agasti Arts, Commerce & Dadasaheb Rupwate Science College, Akole.

Prof. Kashinath Gunjal has almost 12 years of teaching experience. He is currently working as HOD of Computer Science Department at Agasti Arts, Commerce & Dadasaheb Rupwate Science College, Akole. He is skilled with various Operating Systems, Programming Languages, Front End Tools and Packages. He has developed and implemented many software's like 'Admission Process System and Result System', Payroll System' and 'Online Exam System'. He is also working as VLC (Virtual Learning Class Room) Coordinator of YCMOU, MPSC/UPSC programme run by YCMOU, Nashik and Chanakya Mandal, Pune.

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Prof. Mrs. Pranita P. Raskar is currently working as lecturer at Marathwada Mitramandal's College of Commerce, Pune. She has 4 years of academic experience. She also worked as lecturer at Abhinav College and Suryadatta Group of Institutes, Pune. She is skilled with various Programming Languages and Software testing tools. She also worked as administrative manager at Shravan Medisales Pvt. Ltd., Pune. She also presented paper on 'Green Computing for sustainable future' at Abeda Inamdar College, Pune.

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This Reference Book of Programming in Visual Basic is useful for Pune University and Other Universities of Maharashtra as well as competitive exams.

Programming in Visual Basic

Course Code : 402
B.C.A. (Sem. - IV)

Prof. Gauri Khire

Modern College of Arts, Science & Commerce, Shivajinagar, Pune.

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Syllabus

B.C.A. (Sem. - IV)

Programming in Visual Basic (402)

Unit No.	Topic	No. of Lectures
1.	**Getting started with V. B.**	3
	1.1 Object Oriented Concept	
	1.2 Event Driven Programming Language	
	1.3 Working with properties	
	1.3.1 Studying the Events of a Form	
	1.3.2 Working code for events	
	1.3.3 Planning the Design	
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	2.2 Data Types	
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	2.2.2 User defined data types	
	2.3 Variables	
	2.4 Operators	
	2.5 Control Structures	
	2.5.1 If	
	2.5.2 If....Else	
	2.5.3 Nested If....Else	
	2.5.4 Select Case	
	2.6 Looping	
	2.6.1 Do Loop	
	2.6.2 While Loop	
	2.6.3 Until Loop	
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	2.6.5 With Statement	
	2.7 Array	
	2.7.1 Single Dimensional Array	
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	2.8 Functions(Built in and user defined)	
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	4.1 Adding controls on form	
	4.2 Working with Properties and Methods of each Controls	
	4.3 Creating an application	
	4.4 Creating MDI application	
	4.4.1 Working with Multiple Forms	

Unit No.	Topic	No. of Lectures
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	4.4.4 Creating forms in Code	
	4.4.5 Using the MDI	
	4.4.6 Arranging MDI Child Window	
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	4.4.8 Creating Properties in a form	
	4.4.9 Creating a method in a form	
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	4.4.1 Adding and Deleting Images with code	
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	4.5.1 Creating new Menu Item	
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	4.5.3 Adding Access Characters	
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	4.5.5 Creating Sub Menus	
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	4.6.1 Creating pop-up menu	
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	5.1.2 Connectivity with MS-Access	
	5.1.3 Operations of database through coding	
	5.2 ADO Data Control	
	5.2.1 Advantages of ADODC over DC	
	5.2.2 Studying the properties and Methods of ADODC	
	5.2.3 Connectivity with MS-Access	
	5.2.4 Connectivity with Oracle	
	5.2.5 Report Generation	
	5.3 Developing ADO application through ADODC and coding	
	5.4 Report Generation	
	Total No. of Lectures	48

Getting Started With V. B.

Unit 1

1.1 Visual Basic
1.2 Installing of Visual Basic
1.3 Object Oriented Concept
1.4 Event Driven Programming Language
1.5 Basic Forms and Controls
1.6 Working With Properties

Introduction:

VISUAL BASIC is a high level programming language evolved from the earlier DOS version called BASIC. BASIC stands for Beginners' All-purpose Symbolic Instruction Code. The program codes in Visual Basic resemble the English language. Different software companies produce different versions of BASIC, such as Microsoft OBASIC, QUICKBASIC, GWBASIC, and IBM BASICA and so on. Visual Basic is a fairly easy programming language to learn and it is for anybody who is interested in programming but lack professional training in software engineering. Learning VB will help young children to improve their logical thinking skills and develop their minds. You can choose to program in VB purely for fun and enjoyment or you can create more advanced applications such as educational courseware and commercial software.

1.1 Visual Basic:

VISUAL BASIC is a high level programming language which evolved from the earlier DOS version called BASIC. BASIC means Beginners' All-purpose Symbolic Instruction Code. It is a very easy programming language to learn. The code looks a lot like English Language. Different software companies produced different versions of BASIC, such as Microsoft QBASIC, QUICKBASIC, GWBASIC ,IBM BASICA and so on. However, people prefer to use Microsoft Visual Basic today, as it is a well developed programming language and supporting resources are available everywhere. Now, there are many versions of VB exist in the market, the most popular one and still widely used by many VB programmers is none other than Visual Basic 6. We also have VB.net,

VB2005, VB2008 and the latest VB2010. Both Vb2008 and VB2010 are fully object oriented programming (OOP) language.

1.1.1 Concept of Visual Basic:

VISUAL BASIC is a VISUAL and events driven Programming Language. These are the main divergence from the old BASIC. In BASIC, programming is done in a text-only environment and the program is executed sequentially. In VB, programming is done in a graphical environment. In the old BASIC, you have to write program code for each graphical object you wish to display it on screen, including its position and its color. However, In VB , you just need to drag and drop any graphical object anywhere on the form, and you can change its color any time using the properties windows. On the other hand, because the user may click on a certain object randomly, so each object has to be programmed independently to be able to response to those actions (events). Therefore, a VB Program is made up of many subprograms, each has its own program code, and each can be executed independently and at the same time each can be linked together in one way or another.

1.1.2 History of Visual Basic:

Earlier versions of VB (1.0 & 2.0) were considered as "Hobbyist's language" had limited features and dismal performance compared to applications written in other languages like C.

1) VB 3.0 became much more database friendly and MS Jet engine was introduced along with MS Access Databases.
2) VB 4.0 supported 32-bit programs; OCX or ActiveX and DLL were introduced along with more powerful Jet engine.
3) VB 5.0 was the first version of VB, which provides a native code compiler. i.e. generates Machine code. It also supports ActiveX Documents, ActiveX DLL's.

1.1.3 Features of Visual Basic:

1) The Visual Basic programming language is not unique to Visual Basic.
2) The Visual Basic programming system, Applications Edition included in Microsoft Excel, Microsoft Access and many other Windows applications uses the same language.
3) The Visual Basic Scripting Edition (VBScript) is a widely used scripting language and a subset of the Visual Basic language.
   a) **Data access:**
      These features allow you to create databases, front-end applications and scalable server-side components for most popular database formats including Microsoft SQL Server and other enterprise-level databases.