Department of Computer Science, Shri Pundlik Maharaj Mahavidyalaya Nandura (Rly)
Syllabus
Class- B.Sc-III, Sem-VI

Subject- Computer Science.

Advanced java and VB.net

Unit I : **Eception Handling and Multithreading** : Eception Handling: Concept of Exception handling, Type of Exception, Try, Catch, and Finally. Multiple Catch blocks, Nested Try Statements, throw, throws. Multithreading: Multithreading concept, life cycle, creating and running thread, thread priority.

Unit II : Applet: Introduction to Applet, Applet life cycle, HTML applet tag with all attributes, Running the applet, Passing parameters to applets, Displaying using applet viewer, get Document Base() and get Code Base() methods, Applet context, Applet vs Application, Graphics introduction, Graphic class, draw lines, circle, rectangle, ellipse.

Unit III: Event Handling and AWT: Introduction, Event delegation model, Java AWT event description, sources of event, Event listener interfaces, Adapter classes, Inner classes. AWT (Abstract Window Toolkit): Introduction, AWT Controls Label, Button, Checkboxes, Lists, Scrollbar, Text Field, Text Area, Layout manager.

Unit IV: **Windows Applications**: Forms: Adding Controls to Forms, Handling Events, MsgBox, Input Box , Working with Multiple Forms, Setting the Startup Form, SDI & MDI Forms, Handling Mouse & Keyboard Events, Common controls: Text Boxes, Rich Text Boxes, Labels, Buttons, Checkboxes, Radio Buttons, Group Boxes, List Boxes, Checked List Boxes, Combo Boxes, Picture Boxes, Scroll Bars, Tool Tips, Timers, properties – methods

UNIT V: **Object Oriented Programming**: Classes and Objects: Class definition, Creating objects, Defining Member functions, Methods and Events, Attaching a class with form, Delegates. Exceptions Handling: Exception classes in .net

framework, Structured and Unstructured exceptions, tracing errors, breakpoints, watch, Quick watch.

UNIT VI: Data Access with ADO.Net, accessing data with Server Explorer, Accessing Data with data Adaptors and Data sets, Creating a new data connection, creating and populating Data set, displaying data in Data Grid, selecting a data provider, Data accessing using Data adapter Control, Binding Data to Controls.

Books Recommended:

1. Steven Holzner, Visual Basic .NET Black Book

2. Rebecca Riordan, VB.NET for Developers, Keith Franklin, SAMS

3. Jason Beres, Sams Teach Yourself Visual Studio .NET 2005 in 21 Days,

4. Jesse Liberty, Learning Visual Basic

5.The Complete Reference JAVA2 by Herbert Schildt (Tata McGraw)

6.The Complete Reference JAVA by Patrik Noughton

7.Programming with JAVA - A Primer : By E.Balguruswamy (Tata McGraw)

8.Programming in JAVA : By S.S.Khandare (S.Chand)

9.Teach Yourself 'Java' in 2 Hrs : By Sams.

10.Java for You : By P. Koparkar Practical : Minimum

Practical base on
A: Unit I , Unit II and Unit. III (Minimum 8 practical)
B: Unit IV, Unit V and Unit VI (Minimum 8 practical)

The Examination in Computer Science of Sixth Semester shall comprise of one theory paper of 80 Marks of three hours duration and internal assessment of 20 Marks.

Department of Computer Science, Shri Pundlik Maharaj Mahavidyalaya Nandura (Rly)

Syllabus

The practical examination will be of 4 Hrs. duration and carry 50 Marks.

The distribution of mars for practical examination is as under:

1. Program based on Computer lab I : 15 Marks

2. Program based on Computer lab II : 15 Marks

3. Practical record :   10 Marks

4. Viva Voce (based on lab I & lab II) : 10 Marks

                       Total 50 Marks