



**GIRRAJ GOVT COLLEGE (A), NIZAMABAD**  
(COLLEGE WITH POTENTIAL FOR EXCELLENCE)

**B.O.S-2021-2022**



B.Sc.

**DEPARTMENT OF COMPUTER SCIENCE**

PROCEEDINGS OF THE PRINCIPAL, GIRRAJ GOVT.COLLEGE(A)

Present: Sri Dr. E.Laxminarayana

Lr. No. / GGC-Nzb. / Comp. Science & Data Science / BOS - 2021-2022 / Dated 20-11-2021

Sub.: constitution Board of studies members for the Dept.of Computer Science & Data Science- Girraj Govt. College (A), Nizamabad.


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**ORDERS:**

The following persons from Telangana University, Girraj govt.College are included as members for the Board of Studies in the department of computer science, Girraj Govt College(A), Nizamabad .The constitution of the BOS Members from this academic year i.e. 2021-22 .

1. Sri Dr. Md.Atheeq Sultan Ghori

Asst Prof. Comp. Science Dept &  
Chair person B.O.S., (University Nominee)  
Telangana University,  
Dichpally, Nizamabad.

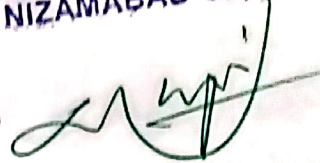
  
Chairperson  
Board of Studies  
Dept. of Computer Science & Eng  
TELANGANA UNIVERSITY  
NIZAMABAD-503 322

2 Sri . Dr. Rama

Asst. Prof. Comp. Science Dept  
Kakatiya University , Warangal


3. Sri N. Raja

Asst Professor of Physics &  
Chairman B.O.S., Comp.Sci Department,  
Girraj Govt.College(A), Nizamabad.



4. Sri Ch.Arjun

Asst. Professor of Physics &  
chairman B.O.S .Data Science.  
Girraj Govt.College(A), Nizamabad.



5. Sri T.Devanna

Asst Professor of History &  
Chairman B.O.S.-B.A.(CA)  
Girraj Govt.College(A), Nizamabad.

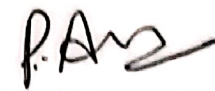
6.. Sri V.Subhash

Lecturer & HOD of Comp.Sci  
Goutami Degree College, Nizamabad.



7. Sri P. Anand Kumar

CEO Indur Solutions  
SAP support & Services  
Plotno:104/141 , Vaishali Nagar, Madinaguda  
Hyderabad..



8. All Faculty members of Computer Science

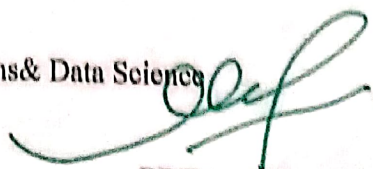
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1. Chairperson BOS, Telangana University, Nizamabad

2. Chairperson BOS, Girraj.Govt. College(A), Nizamabad.

3. Individual

4. All Members, Dept .of. Computer Science & Applications & Data Science



PRINCIPAL  
Girraj Govt. College (Autonomous)  
Nizamabad  
Principal  
Girraj Govt. College (A)  
Nizamabad

# GIRRAJ GOVT.COLLEGE (A)

TELANGANA UNIVERSITY

**B.Sc. (Computer Science)**


**CBCS Pattern with Effect from the Academic Year 2019-2020**

## Structure of Curriculum

Course Title	Hours/Week		Credits
	Theory	Practical	
<b>Semester -I</b>			
Programming in C	4	3	4+1 = 5
<b>Semester -II</b>			
Programming in C++	4	3	4+1 = 5
<b>Semester -III</b>			
Data Structures using C++	4	3	4+1 = 5
<b>Semester -IV</b>			
Data Base Management Systems (DBMS)	4	3	4+1 = 5
<b>Semester -V</b>			
Programming in Java	4	3	4+1 = 5
<b>Semester -VI</b>			
Web Technologies	4	3	4+1 = 5

AECC			
	Hours/Week		Credits
	Theory		
Fundamentals of Computers	2		2
<b>SEC</b>			
<b>Semester -III</b>			
Communication Skills(or) Professional Skills (Sec-I)	2		2
Python -I (Sec -II)	2		2
<b>Semester -IV</b>			
Leadership & Management Skill (or) (Sec-III) Universal Human Values	2		2
Python -II (Sec -IV)	2		2
<b>Generic Elective (GE)</b>			
Information Technologies	4		4
<b>Project/Optional</b>			
<b>Semester -VI</b>			
PHP with MY SQL	Theory 3	Practical 3	3+1=4



  
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# GIRRAJ GOVT.COLLEGE (A)

TELANGANA UNIVERSITY

**B.Sc. (Computer Science)**

**CBCS Pattern with Effect from the Academic Year 2019-2020**

## Structure of Curriculum

Course Title	Hours/Week		Credits
	Theory	Practical	
<b>Semester –I</b>			
Programming in C	4	3	4+1 = 5
<b>Semester –II</b>			
Programming in C++	4	3	4+1 = 5
<b>Semester –III</b>			
Data Structures using C++	4	3	4+1 = 5
<b>Semester –IV</b>			
Data Base Management Systems (DBMS)	4	3	4+1 = 5
<b>Semester –V</b>			
Programming in Java	4	3	4+1 = 5
<b>Semester –VI</b>			
Web Technologies	4	3	4+1 = 5

AECC			
	Hours/Week		Credits
	Theory		
Fundamentals of Computers	2		2
<b>SEC</b>			
<b>Semester –III</b>			
Communication Skills(or) Professional Skills (Sec –I)	2		2
Python –I (Sec –II)	2		2
<b>Semester –IV</b>			
Leadership & Management Skill (or) Universal Human Values (Sec –III)	2		2
Python –II (Sec –IV)	2		2
<b>Generic Elective (GE)</b>			
Information Technologies	4		4
<b>Project/Optional</b>			
<b>Semester –VI</b>			
PHP with MY SQL	Theory 3	Practical 3	3+1=4

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5522/012/21-22

DEPARTMENT OF COMPUTER SCIENCE  
Girraj Govt. College (Autonomous)  
B.Sc. III Year V Semester Syllabus  
**Core-PAPER-V: Java Programming**  
( w.e.f from 2021-2022)

	<b>Max. Marks: 70(Theory)</b>	
	<b>Internal Assessment:30</b>	
<b>Theory</b>	<b>4Hrs/Week</b>	<b>4Credits</b>
<b>Practical</b>	<b>3Hrs/Week</b>	<b>1Credit</b>

**UNIT-I**

**Chapter-I:**

Java History, Basic concepts of object oriented programming, Java features, How java differs from C and C++,Java and Internet ,Java and WWW, Web browsers, Java Environment, Simple java program, Use of math functions,An application with two classes, Java program structure, Java Tokens,Java Statements, Implementation of Java Program,JVM,Command line arguments.

**Chapter-II:**

Constants,Variables,Datatypes,Declaration of variables,Giving values to variables, Scope of variables,Type casting,Operators of java:Arithmetic Expressions,Evaluation of Expression,precedence of Arithmetic Operators,Mathematical Functions.

**UNIT-II**

**Chapter-I:**

Decision making and branching:if-statement,if else,else if ladder,nested if switch,Loop:while,do-while,for,nested loops,Jumps in loops:break,continue,labeled loops.Classes,objects and methods:Designing a class,field declaration,method declaration,creating objects,Accessing class members,constructors:Default Constructor,Parameterized constructors,Method Overloading,Static Members,Nesting Methods.

**Chapter-II**

Inheritance:Extending a class,Overriding Method,final variables and methods,Final Classes,Finalizer Methods,Abstract Methods and Classes.


**UNIT III**

**Chapter I**

Arrays:One Dimensional Arrays,Two Dimentional Arrays,Strings, Vectors, Wrapper Classes,Enumerated Types.Interfaces:Designing interfaces,Extending Interfaces,implementing Interfaces,Accessing interface variables

**Chapter-II:**

Packages:Java API Packages,Using System Packages,Naming Conventions,Creating Packages,Accessing a Package,Using Package.

  
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## UNIT IV

### Chapter I

Multithreading Programming: Creating Threads, Extending the thread class, Stopping and blocking a thread, Life Cycle of a thread, Using Thread Methods, Thread Exception, Thread Priority, Synchronization, Implementing the Runnable Interface.

### Chapter II

Managing Errors and Exceptions: Types of Errors, Exceptions, Syntax of Exception Handling Code, Multiple Catch Statements. Applet Programming: How applets Differ from applications, Preparing to write applets, Building applet Code, Applet Life Cycle, Creating an Executable Applet, Designing a web page, Applet Tag, Adding Applet to HTML file, Running the Applet, More about Applet Tag, Passing Parameters to Applets, Aligning the Display, More about HTML tag, Displaying Numeric values, Getting I/O from User.

**Textbooks:** Sachin Malhotra, Saurabh Choudhary, *Programming in Java (2e)*  
Bruce Eckel, *Thinking in Java (4e)*

**References:** Herbert Schildt, *Java: The Complete Reference (9e)*

Y. Daniel Liang, *Introduction to Java Programming (10e)*

Paul Deitel, Harvey Deitel, *Java: How To Program (10e)*



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**GIRRAJ GOVERNMENT COLLEGE (A), NIZAMABAD**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**BSC COMPUTER SCIENCE**  
**SEMESTER-V**

**Paper-V: Java Programming**  
**CBCS (With effect from 2021-2022)**

**Time: 3:00 Hrs**

**External Examination**

**Max.Marks:-70**

**PART- A**

**Marks: 6x5=30**

**I. Answer any Six of the following Questions.**

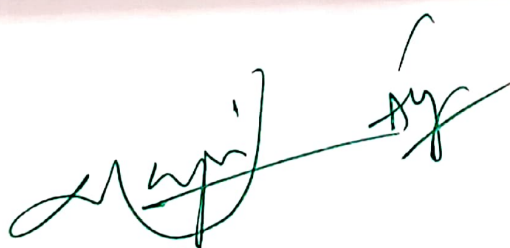
- |          |      |           |
|----------|------|-----------|
| Q. 1 & 2 | from | .Unit-I   |
| Q. 3 & 4 | from | .Unit-II  |
| Q. 5 & 6 | from | .Unit-III |
| Q. 7 & 8 | from | .Unit-IV  |

**PART-B**

**Marks: 4x10=40**

**II Answer All the Questions.**

- Q. 9 (a or b) from unit- I  
Q. 10 (a or b) from unit- II  
Q. 11 (a or b) from unit- III  
Q. 12 (a or b) from unit- IV



  
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**GIRRAJ GOVERNMENT COLLEGE (A), NIZAMABAD**  
**DEPARTMENT OF COMPUTERS SCIENCE**  
**B.Sc. III Year VI Semester**  
**Core-PAPER-VI-Web Technologies**  
**CBCS (With effect from 2021-2022)**

**Time: 1Hr**

**Internal Examination**

**Max.Marks: 30**

**I. Multiple choice questions**


**10x1=10**

**II. Fill in the Blanks**

**15x1=15**

**III. Assignment:**

**Marks: 05**



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**Dept. of Computer Science & Engg.**  
**TELANGANA UNIVERSITY**  
**NIZAMABAD-503 322**



DEPARTMENT OF COMPUTER SCIENCE  
Girraj Govt. College (Autonomous)  
B.Sc. III Year VI Semester Syllabus  
Core-PAPER-VI-Web Technologies  
( w.e.f from 2021-2022)

	Max. Marks: 70(Theory)
	Internal Assessment: 30
Theory	4Hrs/Week      4Credits
Practical	3Hrs/Week      1Credit

**Unit – I**

**Chapter-I:**

**HTML Basics:**

Introduction to HTML and XHTML, Basic structure, Elements and Attributes HTML, Text Formatting tags, Types of tags, Lists, Navigation: Basic Links, Creating Links with the <a> Element, Advanced E- mail Links.

**Images tags and attributes:** Adding Images Using the <img> Element, Using Images as Links Image Maps, Choosing the Right Image Format, Adding Flash, Video and Audio to your web pages.

**Chapter-II:**

**Tables:** Introducing Tables, Nested Tables.

**Forms:** Introducing Forms, Form Controls

**Frames:** Introducing Frameset, <frame> Element, Creating Links between Frames, Setting a Default Target Frame Using <base> Element, Nested Framesets, Inline or Floating Frames with <iframe>.

**Unit – II**

**Chapter-I:**

**Introduction to DHTML:**

**Cascading Style Sheets:** Introducing CSS, Types of CSS..

**CSS Properties:** Controlling Text, Text Formatting, Selectors (Class and Id), Length, .

**More Cascading Style Sheets:** Embedded style sheet, Inline Style sheet, External style sheet. Links using external CSS.

**Chapter-II:**

Introducing the Box Model.

**Events in DHTML:** Mouse Events and keyboard handling in DHTML

**Unit – III**

**Chapter-I:**

**Introduction To JavaScript:** Advantages of JavaScript, How to Add Script to Your Pages, basic structure of JavaScript, Variables, Operators,

**Chapter-II:**

**Control Statements:** conditional statements, Looping statements, Arrays , Functions.

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**Unit – IV**  
**Chapter-I:**

**Built- In Objects:** String Objects, Math Objects, Date and Time objects, Document Object Model (HTMLDOM), Form Validations.

**Exceptional Handling in JavaScript:** try, catch, throw and final statements.

**Chapter-II**

**Introduction to XML:** Advantages of XML, basic structure of xml.

**Document Type Definition (DTD):** Introduction to Internal and external DTDs.

**Text:** Jon Duckett, *Beginning HTML, XHTML, CSS and JavaScript*

**References** Chris Bates, *Web Programming*  
M. Srinivasan, *Web Technology: Theory and Practice*  
Achyut S. Godbole, Atul Kahate, *Web Technologies*  
Kogent Learning Solutions Inc, *Web Technologies Black Book*  
Ralph Moseley and M. T. Savaliya, *Developing Web Applications*  
P.J. Deitel & H.M. Deitel, *Internet and World Wide Web How to program*



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**TELANGANA UNIVERSITY**  
**NIZAMABAD-503 322**

**GIRRAJ GOVERNMENT COLLEGE (A), NIZAMABAD**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**BSC COMPUTER SCIENCE SEMESTER-V**  
**Core-PAPER-V: Java Programming**  
**CBCS (With effect from 2021-2022)**

**Time: 1Hr**

**Internal Examination**

**Max.Marks:30**

**I. Multiple choice questions**

**10x1=10**

**II. Fill in the Blanks**

**15x1=15**

**III. Assignment:**

**Marks: 05**



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**GIRRAJ GOVERNMENT COLLEGE (A), NIZAMABAD**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**BSC COMPUTER SCIENCE**  
**SEMESTER-VI**

**Paper-VI: Web Technologies**  
**CBCS (With effect from 2021-2022)**

**Time: 3:00 Hrs**

**External Examination**

**Max.Marks:-70**

**PART- A**

**Marks: 6x5=30**

**I. Answer any Six of the following Questions.**

- |          |      |           |
|----------|------|-----------|
| Q. 1 & 2 | from | .Unit-I   |
| Q. 3 & 4 | from | .Unit-II  |
| Q. 5 & 6 | from | .Unit-III |
| Q. 7 & 8 | from | .Unit-IV  |

**PART-B**

**Marks: 4x10=40**

**II Answer All the Questions.**

- Q. 9 (a or b) from unit- I  
Q. 10 (a or b) from unit- II  
Q. 11 (a or b) from unit- III  
Q. 12 (a or b) from unit- IV



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TELANGANA UNIVERSITY  
NIZAMABAD-503 322

## DEPARTMENT OF COMPUTERS SCIENCE

Girraj Govt College(Autonomous)  
B.Sc.III Year VI Semester Syllabus  
PHP with MY SQL

(PROJECT/OPTIONAL)

Theory  
Practical

3 Hours/Week 3 Credit  
3 Hours/Week 1 Credit

Internal marks = 15  
External Marks = 60

### Unit – I

Introducing PHP – What is PHP? Why use PHP? Evolution of PHP, Installing PHP, Other ways to run PHP, Creating your first script. PHP Language Basics – Using variables, Understanding Data Types, Operators and Expressions, Constants. Decisions and Loops – Making Decisions, Doing Repetitive Tasks with Looping, Mixing Decisions and Looping with HTML. Strings – Creating and Accessing Strings, Searching Strings, Replacing Text with Strings, Dealing with Upper and Lowercase, Formatting Strings. Arrays – Creating Arrays, Accessing Array Elements, Looping through Arrays with for-each, Creating Function, Reading Data in Web pages: setting up web pages to communicate with PHP, Handling Text Fields, Text Areas, Checkboxes, Radio Buttons, List Boxes, Password Controls, Image Maps, File Uploads, Buttons, and PHP Browser.

### Unit – II

Object oriented programming: creating Classes and objects, setting access to properties and methods, constructors, destructors, Inheritance, overriding and overloading methods, auto loading classes. Advanced OOP: Static members and inheritance, Abstract classes, Interfaces, object iteration, comparing objects, class constants, final keyword, reflection. File Handling: fopen, feof, fgets, closing a file, fgets, file\_get\_contents, reading a file into an array with file, file\_exists, filesize, fread, fscanf, parse\_ini\_file, stat, fseek, copy, unlink, fwrite, reading and writing binary files, appending a file, file\_put\_contents, locking files

### Unit – III

Introducing Databases and SQL – Deciding How to Store Data, Understanding Relational Databases, Setting Up MySQL, A Quick Play with MySQL, Connecting MySQL from PHP. Retrieving Data from MySQL with PHP, Retrieving Data with SELECT, Creating a Member Record Viewer. Manipulating MySQL Data with PHP – Inserting, Updating, and Deleting Records, Building a Member Registration Application. Sessions, Cookies and FTP.

### Text Books:

1. Steven Holzner, "PHP: The Complete Reference Paperback", McGraw Hill Education (India), 2007.
2. Timothy Boronczyk, Martin E. Psinas, "PHP and MYSQL (Create-Modify-Reuse)", WileyIndia Private Limited, 2008.

Girraj Govt College(Autonomous)  
B.Sc.III Year VI Semester Syllabus  
PHP with MY SQL

(PROJECT/OPTIONAL)

Theory  
Practical

3 Hours/Week 3 Credit  
3 Hours/Week 1 Credit

Internal marks = 15  
External Marks = 60

**Unit – I**

Introducing PHP – What is PHP? Why use PHP? Evolution of PHP, Installing PHP, Other ways to run PHP, Creating your first script. PHP Language Basics – Using variables, Understanding Data Types, Operators and Expressions, Constants. Decisions and Loops – Making Decisions, Doing Repetitive Tasks with Looping, Mixing Decisions and Looping with HTML. Strings – Creating and Accessing Strings, Searching Strings, Replacing Text with Strings, Dealing with Upper and Lowercase, Formatting Strings. Arrays – Creating Arrays, Accessing Array Elements, Looping through Arrays with for-each, Creating Function, Reading Data in Web pages: setting up web pages to communicate with PHP, Handling Text Fields, Text Areas, Checkboxes, Radio Buttons, List Boxes, Password Controls, Image Maps, File Uploads, Buttons, and PHP Browser.

**Unit – II**

Object oriented programming: creating Classes and objects, setting access to properties and methods, constructors, destructors, Inheritance, overriding and overloading methods, auto loading classes. Advanced OOP: Static members and inheritance, Abstract classes, Interfaces, object iteration, comparing objects, class constants, final keyword, reflection. File Handling: fopen, feof, fgets, closing a file, fgetc, file\_get\_contents, reading a file into an array with file, file\_exists, filesize, fread, fscanf, parse\_ini\_file, stat, fseek, copy, unlink, fwrite, reading and writing binary files, appending a file, file\_put\_contents, locking files

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