

B.O.S - 2016 - 17

(With CBCS - I Year Approval)



DEPARTMENT OF COMPUTER SCIENCE GIRRAJ GOVERNMENT COLLEGE (Autonomous)

College with Potential for Excellence Nizamabad – 503001

Girraj Govt. College (Autonomous)

B. Sc. I Year I Semester Syllabus

(Fundamentals of Computers and C Programming)

Max. Marks: 70 (Theory) Internal Assessment: 30

Unit - 1

Chapter 1 Fundamentals of Programming Language:

History of C Language, C Tokens, Constants, Variables, Data Types, Standard input and output functions, Structure C program, Sample program, operators in C language and Type conversion.

Chapter 2 Control Structures:

Introduction to C Control structures, conditional statements: Simple if, ifelse, if-else-if-elsle ladder, switch statement, nested switch, unconditional statements: goto, break and continue statements Loops: loops(Itterative statements): while loop, do-while loop, for loop, Nested Loops etc.,

Unit - II

Chapter 3 Array:

Introduction to arrays, Advantages and disadvantages of arrays. Single Dimensional array, programs on single dimensional array, Bubble sort, Linear search, etc., Strings: String handling functions, character handling functions. Two Dimensional array.

Chapter 4 Functions:

Introduction to functions, Library functions, user defined functions, types of functions, function protyping, Nested and recursive functions. Pointers: Use of pointers. Pass by Value and Pass by Reference.

Unit - III

Chapter 5 Structures:

Introduction to structures, arrays in structures, pointers to structures. Nested structure, Array of Structure, passing structure object in functions: use of Pass by Values and Pass by reference.

Chapter 6 Unions:

Unions: declaration and use of unions, difference between structure and unions. Pre processor directives: Macros, typedef.

Unit-IV

Chapter 7 Enumerated Data types Storage classes

Enumerated data types, storage classes: static storage class, automatic storage class, resister storage class and external storage class. Global and Local Variable declaration.

Chapter 8 Files

Files introduction to files using file handling functions: Creating a file, reading a file, Copying a file, deleting a file. Random Access to the file.

Prescribed Books:

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Department of Computer Science, Girraj Govt. College (A), NIZAMABAD - 503002

Board of Studies

Dept. of Computer Science
Telangana University,
NIZAMABAD.

BOS 2016-17

DEPARTMENT OF COMPUTER SCIENCE

Girraj Govt. College (Autonomous)

B. Sc. I Year I Semester (w.e.f. 2014-2015)

MODEL PAPER

Subject: Fundamentals of Computers and C Programming

Max. Marks: 70 (Theory)

SECTION - A

Answer All Questions

4 X2.5 = 10

Q.1 Unit-I

Q.2 Unit-II

Q.3 Unit-III

Q.4 Unit-IV

SECTION - B

Answer Any Four Questions

 $4 \times 5 = 20$

Q.5 Unit-I

Q.6 Unit-I

Q.7 Unit-II

Q.8 Unit-II

Q.9 Unit-III

O.10 Unit-III

O.11 Unit-IV

O.12 Unit-IV

SECTION - C

Answer all Questions (Internal Choice) 4 X10=40

Q.13 (a). Unit-I

OR

(b) Unit-I

Q.14 (a). Unit-II

OR

(b) Unit-II

Q.15 (a). Unit-III

OR

(b) Unit-III

Q.16 (a). Unit-IV

OR

(b) Unit-IV

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Chairman
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Dept. of Computer Science
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Girraj Govt. College (Autonomous) B. Sc. I Year II Semester Syllabus (Object Oriented Programming with C++)

> Max. Marks: 70 (Theory) Internal Assessment: 30

Unit - I

Chapter 1 Introduction to OOPs:

Basic Concepts of OOPs: Abstraction, Encapsulation, Polymorphism and inheritance. Classes, objects, difference between C and C++, Benefits of OOPs, Applications of OOPs. A look at procedure oriented programming. Object Oriented programming Paradigm.

Chapter 2 Introduction to C++:

A Simple C++ Program using input-output streams, Structure of C++ program, an example with class, Tockens of C++: Keywords, Identifiers (Variables), Constants, Basic Data types: Built-in data types, Derived data types and user defined data types, Operators. Example programs on data types with the use of operators, Type casting.

Unit - II

Chapter 3 Arrays:

Introduction to arrays, types of arrays, use of arrays in C++, programs on arrays using One Dimension: Sorting-Bubble Sort, Searching-Linear Search, Two Dimensional Arrays: Transpose of matrix. Matrix addition & Matrix Multiplication.

Chapter 4 Functions and Classes:

The main function. Function prototype, Pass by Value, Pass by reference & Call by reference. Introduction to classes, creating classes, creating objects, using functions, inline function, friend function, recursive function, constructors: Default constructor, Overloaded constructor, Parameterised Constructor. Copy constructor, destructors. new, delete operators

Unit - III

Chapter 4 Inheritance:

Introduction to Inheritance: Extending classes, Example of Inheritance, Types of Inheritances: Single, Multiple, Multi level, Hierarchical and Hybrid Inheritances. Abstract classes, Virtual Base class.

Chapter 5 Polymorphism:

Introduction to Polymorphism, Definition of polymorphism, Types of Polymorphism: Compile Time Polymorphism (Static binding, static linking, early binding) - Overloading of function, overloading operators, Run Time Polymorphism (Dynamic Binding, Dynamic Linking & Late binding) using Virtual function,

Unit - IV

Introduction to Exceptions, Exceptional handling in C++, use of try, catch and Throw keywords.

new, delete operators

Introduction to Files, Creating file using I/O Streams, reading file. Writing objects into file, reading object from File, Random Access to the File.

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Girraj Govt. College (Autonomous)

B. Sc. I Year II Semester MODEL PAPER

(OOPS With C++ Programming)

			0		
		ECTION		Max. Marks:	70 (Theory)
	Answer All Questions	ECTION – A	$4 \times 2.5 = 10$		
1.	mower im Questions		$4 \times 2.3 - 10$		
2.					
3.					
4.					
		SECTION -	В		
	Answ <mark>er All Q</mark>	uestions	$4 \times 5 = 2$	0	
5	(a).				
	OR				
	(b)				
6	(a).				
	OR				
	(b)				
7	(a).				
	OR				
200.00	(b)				
8	(a).				
	OR				
	(b)	ION C			
		ION – C	4 X10=40		
_	Answer All Questions		4710-40		
5	(a).				
200	OR				
	(b)				
6	(a).				
	OR				
	(b)				
7	(a).				
	OR				
	(b)				
8	(a).				
	OR				
	(b)				

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Dept. of Computer Science Telangana University,

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Girraj Govt. College (Autonomous)

B. Sc. I Year II Semester INTERNAL ASSESMENT

(OOPs with C++ Programming)

(OOPs with C++ Pro	
The 20 med 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Max. Marks: (20+10)
The 30 marks internal assessment is divided into two s	segments as follows
Segment – I Internal Exam (20 Marks) (Each semester two internal exams are conducted and	average of two is considered)
Segment – II Seminar and Assignments ($5 + 5 = 10 \text{ M}$	Iarks)
Segment – I Internal Exam Paper Pattern:	,
•	5 X1=5
SECTION – A: Multiple Choice Questions	
Q.1 Q.2	
Q.3	
Q.4	
Q.5	
	5 X1 =5
SECTION – B: Fill in the Blanks	
Q.1	
Q.2	
Q.3	
Q.4	
Q.5	- 774 . 5
SECTION - C: Match the Following	5 X1=5
Q.1	
Q.2	
Q.3	
Q.4	
Q.5	
ECTION - D : One word Answers	5 X1=5
ECTION - D: One word rans	
Q.1	
Q.1 Q.2	
Q.3	
Q.4	
Q.5	
egment – II:	1 X5=5
egment – II:) Seminars Every student has to present a seminar and submit a	hard copy of the same to the dept.)
Every student has to present a seminar and	1 X5=5
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Chairman	
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Dept. of Computer Science Telangana University, NIZAMABAD.

NIZAMABAD - 503002

DEPRTMENT OF COMPUTER SCIENCE

Girraj Govt. College (Autonomous)

B. Sc. I Year I Semester (w.e.f. 2014-15)

INTERNAL ASSESSMENT (Model Paper) Subject: Fundamental of Computers & C Programming

Max. Marks: 30 SECTION - A **Multiple Choice Questions** 5 X1 = 5Q.1 Q.2 Q.3 Q.4 Q.5 SECTION - B Fill in the Blanks 5 X1 = 5Q.1 Q.2 Q.3 Q.4 Q.5 SECTION - C Match the Following 5 X1 = 5Q.1 Q.2 Q.3 Q.4 Q.5 SECTION - D One word Answers 5 X1=5 Q.1 Q.2 Q.3 Q.4 Q.5 SECTION - E Seminars 1 X5=5 SECTION - E 1 X5 = 5Assignment Department of Computer Science, **Board of Studies** Girraj Govt. College (A), Dept. of Computer Science

Telangana University, NIZAMABAD.

Girraj Govt. College (Autonomous)
B. Sc. I Year (I & II Semester)
PRACTICAL EXAM MODEL

Max. Marks: 50 (Theory)

Semester - I

C Programming

50 Marks

(To be conducted at end of the semester)

Semester - II

C++ Programming

50 Marks

(To be conducted at end of the semester)

Exam Pattern:

SECTION - A

Answer All Questions

 $2 \times 10 = 20$

1. 2.

SECTION - B

VIVA

 $10 \times 2 = 20$

SECTION - C

RECORD BOOK

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Order.

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B.O.S - 2016 - 17

(With CBCS - II Year Ratification)



DEPARTMENT OF COMPUTER SCIENCE GIRRAI GOVERNMENT COLLEGE (Autonomous) Chilege with Potential for Excellence

Nizamabad - 503001

Board of Studies Dept. of Computer Science Telangana University, NIZAMABAD.

Girraj Govt. College (Autonomous) B. Sc. II Year III Semester Syllabus (OOP's with Java Programming)

Max. Marks: 70 (Theory) Internal Assessment: 30

Unit - I

Chapter1: OOPs Fundamentals: Features of Object Oriented Programming: Abstraction, Encapsulation Polymorphism and Inheritance (Four Pillars of OOPs), Applications of OOPs. JAVA Fundamentals: Features of java, Difference between C & C++, Java and Internet, Application

Programming Interface (API / ISDL)

Chapter2 Overview of Java: Java program structure, Compiling and Executing Java program, Java Tokens - Java Virtual Machine (JVM), command line arguments. Constants Variables and Data Types: Constants, variables and datatype, declaration of variables and data types, giving values to variable, Scope of variable. Type casting

Unit - II

Chapter3: Java Operators and Expressions: Arithmetic operators - Relational operators, logical operators, assignment operators - increment and decrement operators, bitwise operators, conditional operators (?:)

Chapter 4 Decision making and Branching: Decision making with if statement, simple if statement,

if - else - if ladder, nested if, Switch statement.

Decision making looping statements: while loop, do-while, for loops, nested for loop, Jump statement (Break and Continue)

Unit - III

Chapter 5 Arrays Strings and Vectors: Array: Definition of array, creation of array, initialization of array and array length, double dimensional array. Vector Class and its methods

String: String methods and String Buffer Class and methods. Wrapper classes and enumerated

Chapter 6 Java Classes and Objects: Definitions of Class, object and method, defining classes, fields declaration, methods, Method declaration, reading objects, Accessing class members, Visibility control, method and nested methods. Constructors: Definition, initialization and types of constructors, Method Overloading and method overriding.

Static classes and Methods: Accessing of static data members and methods. Inheritance: Definition and types of Inheritance, sub class constructor (this and super). Final classes: final variable, final method and final classes.

Unit-IV

Chapter 7: Abstract classes: Abstract methods and data members.

Interfaces: Defining Interfaces, implementing interfaces, implementing interfaces with classes,

Extending interfaces, implementing multiple inheritances with interfaces.

Chapter 8: Packages: Defining a package, types of packages: user defined packages and predefined packages, importing packages, multiple classes in a single package, hiding packages. Accessing packages.

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Girraj Govt. College (Autonomous) B. Sc. II Year III Semester MODEL PAPER

(00P's with Java Programming)

Max. Marks: 70 (Theory)

SECTION - A

Answer All Questions

4 X2.5 = 10

(Compulsory one question from each unit)

- Q.1 Unit-I
- Q.2 Unit-II
- Q.3 Unit-III
- Q.4 Unit-IV

SECTION - B

Answer Any Four Questions $4 \times 5 = 20$ (Compulsory TWO question from each unit open choice questions)

- Q.5 Unit-I
- Q.6 Unit-I
- Q.7 Unit-II
- Q.8 Unit-II
- Q.9 Unit-III
- Q.10 Unit-III
- Q.11 Unit-IV
- Q.12 Unit-IV

SECTION - C

Answer all Questions (Internal Choice) 4 X10=40 (Compulsory TWO question from each unit internal choice question)

Q.13 (a). Unit-I

OR

(b) Unit-I

O.14 (a). Unit-II

OR

(b) Unit-II

Q.15 (a). Unit-III

OR

(b) Unit-III

Q.16 (a). Unit-IV

OR

(b) Unit-IV

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Girraj Govt. College (Autonomous)

B. Sc. II Year IV Semester INTERNAL ASSESMENT

(00P's with Java Programming)

(OUT S WICH Java 110	gramming)
The 30 marks internal assessment is divided to	Max. Marks: (20+10)
The 30 marks internal assessment is divided into two s Segment – I Internal Exam (20 Marks)	segments as follows
(Each semester two internal exams are conducted and Segment – II Somingrand Assis	Cromp on a fit was 's a series to
Segment – II Seminar and Assignments $(5 + 5 = 10 \text{ M})$	Tarks)
Segment – I Internal Exam Paper Pattern:	tarks)
SECTION - A: Multiple Choice Questions	5 V.1 . 5
Q.1	5 X1=5
Q.2	
Q.3	
Q.4	
Q.5	
SECTION – B: Fill in the Blanks	5 X1 =5
Q.1	
Q.2	
Q.3	
Q.4	
Q.5	
SECTION - C: Match the Following	5 X1=5
Q.1	
Q.2	
Q.3	
Q.4	
Q.5	
SECTION - D : One word Answers	5 X1=5
Q.1	
Q.2	
Q.3	
Q.4	
Q.5	
Segment – II:	1 X5=5
a) Seminars	hard copy of the same to the dept.)
a) Seminars (Every student has to present a seminar and submit a	1 X5=5
b) Assignments (Every student has to prepare assignment and submit	to the lecturer concerned)
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B. Sc. II Year IV Semester Syllabus

(Paper-IV: Java Programming with Data Structures)

Max. Marks: 70 (Theory) Internal Assessment: 30

Unit - I

Chapter 1 Multi Threaded Programming:

Defining and creating thread, use of threads in java - Extending Thread Class - stopping and blocking a thread - Life Cycle of a Thread - using Thread methods - Thread Exceptions Thread Priority and Synchronization of threads.

Chapter 2 Exceptional Handling: Types of errors-Exception types ,use of try, catch, throw and throws-Multiple catch statement using finally statement and user defined exception.

Unit - II

Chapter 3 Java Applets:

Applet Programming: What is applet, Definition and use of applet, How applet differ from applications - preparing to write applet, building applet code - Applet Life Cycle - Creating an executable applet - Designing a web page. Applet Tag, adding Applet to HTML File.

Chapter 4: Running the applet, applet tag and its attributes, passing parameters to an applet, Display numerical values and getting input from the user. Creating object (line, circle, rectangle and square) within an Applet

Chapter 5 AWT: Introduction to Abstract Window Toolkit, AWT Controls: Labels, Buttons,

Radio buttons, Text Area, text Fields, Lists, Layout Managers.

Chapter6: Event handling: Mouse Event handling, keyboard event handling, Event classes and event Listener Interfaces. Adapter classes, inner classes, anonymous class.

Chapter Data Structures: Sorting: Bubble Sort, Selection Sort, Insertion Sort, Quick Sort.

Stacks and queues: Introduction to stacks and methods.

Queues: Queues and methods, types of queue: circular queues, priority queues.

Chapter 8: Linked List: Introduction to Linked List, types of linked Lists (Single Linked List and double linked list)

Trees: Introduction to Binary tree, finding a node and inserting a node, Tree traversing.

Prescribed Books:

1. Programming in Java by E Baluguru Swamy.

2. Data Structures With JavaTM 1st Edition by John R. Hubbard, Huray Anita

Publisher: Phi Learning Pvt. Ltd. (2009)

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Girraj Govt. College (Autonomous) B. Sc. II Year IV Semester MODEL PAPER

(Paper-IV: Java Programming with Data Structures)

Max. Marks: 70 (Theory)

SECTION - A

Answer All Questions

4 X2.5 = 10

(Compulsory one question from each unit)

- Q.1 Unit-I
- Q.2 Unit-II
- Q.3 Unit-III
- Q.4 Unit-IV

SECTION - B

Answer Any Four Questions 4 X 5 = 20 (Compulsory TWO question from each unit open choice questions)

- O.5 Unit-I
- Q.6 Unit-I
- Q.7 Unit-II
- Q.8 Unit-II
- Q.9 Unit-III
- Q.10 Unit-III
- O.11 Unit-IV
- Q.12 Unit-IV

SECTION - C

Answer all Questions (Internal Choice)

4 X10=40

(Compulsory TWO question from each unit internal choice question)

- Q.13 (a). Unit-I OR (b) Unit-I
- Q.14 (a). Unit-II OR (b) Unit-II
- Q.15 (a). Unit-III OR (b) Unit-III
- Q.16 (a). Unit-IV OR (b) Unit-IV

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B. Sc. II Year IV Semester

INTERNAL ASSESMENT (Structure)

(Paper-IV Java Programming with Data Structures)

Max. Marks: (20+10) The 30 marks internal assessment is divided into two segments as follows Segment - I Internal Exam (20 Marks) (Each semester two internal exams are conducted and average of two is considered) Segment – II Seminar and Assignments (5 + 5 = 10 Marks)Segment - I Internal Exam Paper Pattern: 5 X1=5 **SECTION – A : Multiple Choice Questions** 0.1 Q.2 Q.3 0.4 5 X1 =5 SECTION - B: Fill in the Blanks Q.1 Q.2 Q.3 Q.4 SECTION - C: Match the Following 5 X1=5 Q.1 Q.2 0.3 Q.5 5 X1=5 SECTION - D : One word Answers Q.1Q.2 Q.3 Q.4 Segment - II: 1 X5=5 (Every student has to present a seminar and submit a hard copy of the same to the dept.) (Every student has to prepare assignment and submit to the lecturer concerned) b) Assignments Department of Computer Science, Girraj Govt. College (A), NIZAMABAD - 503002

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Telangana University,

Girraj Govt. College (Autonomous) B. Sc. I Year I Semester (w.e.f. 2014-15) INTERNAL

Subject: OOPs with Java and Data Structures (Paper-IV)

Max. Marks: 30 SECTION - A **Multiple Choice Questions** 5 X1=5 Q.1 Q.2 Q.3Q.4 Q.5 SECTION - B Fill in the Blanks 5 X1 = 5Q.1 **Q.2** Q.3 Q.4 Q.5 SECTION - C Match the Following 5 X1 = 5Q.1 Q.2 Q.3 Q.4 Q.5 SECTION - D One word Answers 5 X1 = 5Q.1 Q.2 Q.3 Q.4 Q.5 SECTION - E 1 X5 = 5Seminars SECTION - E 1 X5 = 5Assignments Department of Computer Science, Girraj Govt. College (A). **Board of Studies** NIZAMABAD - 503002 Dept. of Computer Science

Telangana Universita

Girraj Govt. College (Autonomous) B. Sc. II Year ANNUAL PROJECTS

(Java Programming & Data Structures)

The students at the end of the second year (IV Semester) has to complete a Project work (Mini - Project). The students can use tools and technologies studied during second year or either from I Year. However the project work can be accomplished individually or in group of four members shall be decided by board members at the time of Board of studies meeting. The students after the successful completion of the project work will be awarded with Grades and credits

Project Work (Mini Project) Guideline:

- The project should be carried out in a team of four members. a)
- The provisional selection of the project work will be done by the department b) and the lecturer concerned.
- Every student team should submit the following details regarding the project c)
 - i) Title of the Project
 - ii) Abstract of the project
 - Scope of the project iii)
 - Tools & Technologies used iv)
 - Applications & Use of the project v)
- After the provisional selection of the project the department will assign a d) guide to the student and allow the student to carry out the project work in the department.
- The student should complete the project as per Guide's directions and submit e) the copy in duplicate to the department.

Board of Studies

Dept. of Computer Science Telangana Unior

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Girraj Govt. College (Autonomous) B. Sc. III Year V Semester Syllabus

(Paper-V Modern Data Base Management System)

Max. Marks: 70 (Theory) Internal Assessment: 30

UNIT - I

Chapter 1: Database System: Introducing the database and DBMS, File Processing System: Disadvantages of file processing system, Data Management System, advantages of DBMS, Components of DBMS, Components of database environment, DBA, functions of DBA.

Chapter 2: The importance of Data Models. Basic building blocks of data models, business rules, the evaluation of Data models, Data abstraction and Degree of Data abstraction.

Unit - II

Chapter 3 - The relational database Model: Charecticks of Relational table, keys, integrity rules, relation set operators, The Data dictionary and the System catalog, relationships with in a relationship. Indexes, Codd's relational database rules.

Chapter - 4 E- R Model: The ER Model, Entity: Entity types: Strong Entity, Weak Entity, Associative Entity. Attributes. Types of Attributes: Single & Multi Valued Attributes. Based & Derived attributes. Simple & Composite Attributes. Developing ER Diagrams. Degree of relationship, cardinality constraints, Developing of ER diagrams,

Unit - III

Chapter - 5 Advanced Data Modeling: The Extended Entity Relationship Model, Specialization and Generalization. Entity Clustering. Defining and operational constraints. Chapter - 6 Normalization: Normalization of database tables, The Normalization Process:

INF, 2NF, 3NF, Boyce Codd Normal Form, 4NF and 5NF. De-Normalization.

Unit - IV

Chapter - 7: Introduction to SQL: Data types of SQL, DDL, DML, TCL & DCL. Select queries, Coloumn constraints, Order by, groupby, having and Where clauses. Types of joins Database Tables.

Chapter - 8 Advance SQL: Relation Set Operators, Nested Queries, sub queries, SQL Functions: Single row functions and grouped functions, working with is operator, in operator. Views, Indexes, Clusters and Oracle Sequences.

Prescribed Text Book:

1. Peter Rob, Carlos - Database System Design, Implementation & Management Seventh Edition (Thomsons Edition 2007)

Board of Studies Dept. of Computer Science Telangana University, NIZAMABAD.

Girraj Govt. College (Autonomous) B. Sc. III Year V Semester MODEL PAPER

(Paper-V Modern Data Base Management System)

Max. Marks: 70 (Theory)

SECTION - A

Answer All Questions

4 X2.5 = 10

(Compulsory one question from each unit)

- Q.1 Unit-I
- Q.2 Unit-II
- Q.3 Unit-III
- Q.4 Unit-IV

SECTION - B

Answer Any Four Questions $4 \times 5 = 20$ (Compulsory TWO question from each unit open choice questions)

- Q.5 Unit-I
- Q.6 Unit-I
- Q.7 Unit-II
- O.8 Unit-II
- Q.9 Unit-III
- O.10 Unit-III
- Q.11 Unit-IV
- O.12 Unit-IV

SECTION - C

Answer all Questions (Internal Choice) 4 X10=40 (Compulsory TWO question from each unit internal choice question)

Q.13 (a). Unit-I

- OR
- (b) Unit-I

Q.14 (a). Unit-II

- OR
- (b) Unit-II

- Q.15 (a). Unit-III
- OR
- (b) Unit-III

- Q.16 (a). Unit-IV
- OR
- (b) Unit-IV

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Girraj Govt. College (Autonomous) B. Sc. III Year VI Semester Syllabus

(Paper-VII Modern Data Base Management System)

Max. Marks: 70 (Theory) Internal Assessment: 30

UNIT-I

Chapter 1 - Database Design: The Information System, System Development Life Cycle (SDLC), The Database Development Life Cycle (DDLC), Database Design strategies, Centralized Vs Decentralized design.

Chapter 2 - Transaction Management & Concurrency Control: What is transaction, database Transaction properties. What is Concurrency control, Concurrency control with Locking Methods, Concurrency control with Time stamping methods, Concurrency control with optimistic methods, Database recovery management.

Unit - II

Chapter - 3 Distributed Database management System: The evolution of Distributed database management System, DDBMS advantages and Disadvantages of distributed database Management system

Chapter - 4: Distributed Data Processing: Distribution processing and distribution databases. Characteristics of Distributed Database Management System, DDBMS Components.

Unit - III

Chapter - 5 Advance DDBMS: Levels of data and Process Distribution, Distributed database transparency Features, Distributed transparency, Transaction transparency, and performance Transparency and Query optimization

Chapter - 6 Distributed Database Design: Designing the distributed database system: Datafragamentation, Data Replication, Data Allocation. Client Server Vs DDBMS.

Unit-IV

Chapter - 7 Data Ware Housing: The need for data analysis, Decision support System(DSS). and The Data ware House, Online analytical processing(OLAP), Star Schemas, Data Mining. SQL extension for OLAP. Database Administration: Data as a corporate asset, the need for role of database in an organization, The evolution of the database administration function, the database environment's Human Component.

Chapter 8 Database administration tools: The DBA and DBM, the DBA at work: using

Oracle for database administration.

Introduction to PL/SQL, Structure of PL/SQL, Simple program, Conditional statements, Loops and Exception Handling: User defined and predefined. Cursors, stored procedures, stored functions and triggers.

Prescribed Text Book:

1. Peter Rob, Carlos - Database System Design, Implementation & Management Seventh Edition (Thomsons Edition 2007)

Board of Studies

Girraj Govt. College (Autonomous) B. Sc. III Year VI Semester MODEL PAPER

(Paper-VII Modern Data Base Management System)

Max. Marks: 70 (Theory)

SECTION - A

Answer All Questions

4 X2.5 = 10

(Compulsory one question from each unit)

- Q.1 Unit-I
- Q.2 Unit-lI
- Q.3 Unit-III
- Q.4 Unit-IV

SECTION - B

Answer Any Four Questions

 $4 \times 5 = 20$

(Compulsory TWO question from each unit open choice questions)

- Q.5 Unit-I
- Q.6 Unit-I
- Q.7 Unit-II
- O.8 Unit-II
- Q.9 Unit-III
- Q.10 Unit-III
- Q.11 Unit-IV
- Q.12 Unit-IV

SECTION - C

Answer all Questions (Internal Choice) 4 X10=40 (Compulsory TWO question from each unit internal choice question)

Q.13 (a). Unit-I

OR

(b) Unit-I

Q.14 (a). Unit-II

OR

(b) Unit-II

O.15 (a). Unit-III

OR

(b) Unit-III

Q.16 (a). Unit-IV

OR

(b) Unit-IV

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Girraj Govt. College (Autonomous)

B. Sc. III Year VI Semester INTERNAL ASSESMENT

(Paper-VII Modern Data Base Management System)

	Max. Marks: (20+10)
The 30 marks internal assessment is divided into two seg-	ments as follows
Segment - I Internal Exam (20 Marks)	
(Each semester two internal exams are conducted and avo	erage of two is considered)
Segment – II Seminar and Assignments (5 + 5 = 10 Mar	ks)
Segment - I Internal Exam Paper Pattern:	
SECTION - A: Multiple Choice Questions	5 X1=5
Q.1	2
Q.2	
Q.3	
Q.4	
Q.5	
SECTION - B: Fill in the Blanks	5 X1 =5
Q.1	
Q.2	
Q.3	
Q.4	
Q.5	
SECTION - C : Match the Following	5 X1=5
Q.1	
Q.2	
Q.3	
Q.4	
Q.5	
SECTION - D : One word Answers	5 X1=5
Q.1	
Q.2	
Q.3	
Q.4	
Q.5	
Segment – II:	
a) Seminars	X5=5
Every student has to present a seminar and submit a har	d copy of the same to the dept.)
	X5=5
Every student has to prepare assignment and submit to	the lecturer concerned)
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B. Sc. III Year

ANNUAL PRACTICAL QUESTION BANK

Modern Data Base Management System (Paper-III)

Max. Marks: (100)

- Create Employee, Dept table and apply the column constraints. 1.
- Deletion, modification of tables and implementing of DDL Commands. 2
- Use DML, Statements for database tables. 3.
- Create Queries using ordered by, group by clauses 4.
- Create Queries using aggregate functions. 5.
- Create Queries using set operators. 6
- Create Nested Queries. 7.
- Create views and indexes clusters. 8.
- Create Queries on multiple tables. 9.
- Create Queries on relational operators, arithmetic operators. 10.
- Create Queries on logical operators. 11.
- Create Queries on NULL, IN and BETWEEN operators. 12.

PL / SQL:

- Write a PL / SQL Program to accept radius of circle, Compute and display Area, 1. circumference of circle.
- Write a PL / SQL program to display the student result base on the following 2. conduction,
 - M 100 --- Invalid.
 - 80 100 --- Distinction.
 - 60 70 ---- Ist Class.
 - 50 59 ---- II Class.
 - 35 49 ---- III Class.
 - < 35 ---- Fail.
- Write a PL / SQL Program to add 5% Interest on due amount to a selected Customer 3. from a customer table (Cust code, Cust name, Cust addr, due amount).
- Write a PL / SQL Program to add 10 grace marks to every student who secured the 4. total marks <250 and >255 (s_ame, id, total).
- Write a Program to accept three no's and display Maximum of three numbers. 5.
- Write a program to accept number and determine whether it is prime no. or not. 6.
- Write a PL / SQL program using stored procedure. 7.
- Write a PL / SQL program using Cursors. 8.
- Write a PL / SQL program on for loop. 9.
- Write a PL / SQL program on while loop. 10.
- Write program to accept three sides of triangle and determine whether its area. 11.
- Write a PL / SQL program on stored Function, 12.

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B. Sc. III Year V Semester Syllabus

Elective - I; (Paper -VI (A); Web Technologies)

70 (Theory) Max. Marks: Internal Assessment: 30 (20+19)

UNIT-1:

HTML Basics

Introduction: HTML, XML, and the World Wide Web.

HTML: Basic Structure HTML, Type of HTML tags, Formatting tags , Hyperlinks, img tags, Lists.

Tables, Using colors, Image Elements, .

UNIT-2 Advance HTML

Frames, Forms and its controls, XHTML - an evolutionary markup language.

Introduction to DHTML:

Cascading Style Sheets: Introduction, Using styles: Simple examples, Properties and values in styles. Defining your own styles(Class and Id in styles), Formatting blocks of information (Div and Span elements), Layers,

Event handling in DHTML: Mouse Events and Keyboard Events

UNIT-3: Introduction to Java Scripts

Introduction to JAVA Script:

The basic structure of JavaScript, Variables declaration, operators and control structures,

UNIT-IV

Introduction to arrays and Functions in java script: Array object, Types functions string manipulation functions, Mathematical functions and date functions

Prescribed Books:

- 1. Web Programming Chris Bates
- 2. Black Book HTML

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B. Sc. III Year V Semester INTERNAL ASSESMENT

Elective - I: (Paper -VI (A): Web Technologies)

Max. Marks: (20+10) The 30 marks internal assessment is divided into two segments as follows Segment - I Internal Exam (20 Marks) (Each semester two internal exams are conducted and average of two is considered) Segment – II Seminar and Assignments (5 + 5 = 10 Marks)Segment - I Internal Exam Paper Pattern: SECTION - A: Multiple Choice Questions 5 X1=5 **Q**.1 0.2 Q.3 Q.4 **Q.5** SECTION - B: Fill in the Blanks 5 X1 = 50.1 Q.2 Q.3 Q.4 0.5 **SECTION – C : Match the Following** 5 X1=5 Q.1Q.2 Q.3 Q.4 Q.5 5 X1=5 SECTION - D: One word Answers Q.1Q.2 Q.3 Q.4 0.5 1 X5=5 a) Seminars

Segment - II:

(Every student has to present a seminar and submit a hard copy of the same to the dept.)

b) Assignments

1 X5=5

(Every student has to prepare assignment and submit to the lecturer concerned)

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Girraj Govt. College (Autonomous) B. Sc. III Year VI Semester Syllabus

Elective – I (Paper –VIII(B): Web Technologies)

Max. Marks: 70 (Theory)

Internal Assessment: 30 (20+10)

UNIT-1

Chapter-I

Objects in Java Script:

Objects in Java Script, Regular expressions, Exception Handling, Built in objects.

Multimedia Objects:

Multimedia Objects, including Audio and video formats and Object element.

Chapter-II

DHTML with Java Script: Data validation, window object, Messages and Confirmations, The status bar, Rollover buttons, images., A text-only menu system, Floating logos.

UNIT-II

Chapter-I

ASP and XML: Active Server Pages, advantages, ASP Objects.

Chapter-II

XML:Basic structure of XML, Document type definition(DTD), XML schema, Document Object Model(XMLDOM.).

UNIT-III

Chapter-I

Good Design Principles: Tables versus Frames, Internationalization.

Chapter-II

Useful Software's: Web browsers, Perl, Web servers, Mod_perl, Accessing your ISP

UNIT-IV

Chapter-I

Protocols and types of Protocols, IP and TCP, TCP/IP, Hypertext Transfer **Protocols:** Protocol(HTTP),

Common Gateway Interface: CGI Structure of CGI and working of CGI.

Document Object Model: DOM Structure of Document Object Model with HTML.

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Girraj Govt. College (Autonomous) B. Sc. III Year V Semester

MODEL PAPER

Elective - I (Paper -VIII (B): Web Technologies)

Max. Marks: 70 (Theory)

SECTION - A

Answer All Questions

4 X2.5 = 10

(Compulsory one question from each unit)

- Q.1 Unit-I
- Q.2 Unit-II
- Q.3 Unit-III
- O.4 Unit-IV

SECTION - B

Answer Any Four Questions 4 X 5 = 20 (Compulsory TWO question from each unit open choice questions)

- Q.5 Unit-I
- Q.6 Unit-I
- Q.7 Unit-II
- Q.8 Unit-II
- Q.9 Unit-III
- Q.10 Unit-III
- Q.11 Unit-IV
- Q.12 Unit-IV

SECTION - C

Answer all Questions (Internal Choice)

4 X10=40

(Compulsory TWO question from each unit internal choice question)

Q.13 (a). Unit-I

- OR
- (b) Unit-I

Q.14 (a). Unit-II

- OR
- (b) Unit-II

- Q.15 (a). Unit-III
- OR
- (b) Unit-III

- Q.16 (a). Unit-IV
- OR
- (b) Unit-IV

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Department of Computer Science.

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DEPARTMENT OF COMPUTER SCIENCE

Girraj Govt. College (Autonomous)

B. Sc. III Year V Semester INTERNAL ASSESMENT

Elective - I (Paper -VIII(B): Web Technologies Max. Marks: (20+10) The 30 marks internal assessment is divided into two segments as follows Segment - I Internal Exam (20 Marks) (Each semester two internal exams are conducted and average of two is considered) Segment – II Seminar and Assignments (5 + 5 = 10 Marks)Segment - I Internal Exam Paper Pattern: SECTION - A: Multiple Choice Questions 0.2 0.3 0.4 Q.5 5 X1 = 5SECTION - B: Fill in the Blanks Q.1 0.2 0.3 0.4 0.5 5 X1=5 SECTION - C: Match the Following Q.1 0.2 Q.3 Q.4 0.5 5 X1=5 SECTION - D: One word Answers Q.1 0.20.3 0.4 0.5 Segment - II: 1 X5=5 a) Seminars (Every student has to present a seminar and submit a hard copy of the same to the dept.) 1 X5=5

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b) Assignments

DEPARTMENT OF COMPLITER SCIENCE, Girraj Govt, College (Autonomous) B. Sc. III Year V Semester PRACTICAL OUTSTION RANK Elective - I (Paper - IV-A Web Technologies)

Max Market (1997)

- 1. Create HTML Page to test a) Headers b) Text formatting.
- 2. Create HTML Page to test a) Linking Images (a) Images (ank
- 3. Create HTML code to demonstrate ordered list and unordered list.
- Create HTML code to demonstrate unordered list and definition list.
 Create HTML code to demonstrate links with ordered list.
- 6. Create HTML code to demonstrate nested list.
- 7. Create HTML code to demonstrate table related tags (by color)
- 8. Create a Web page to holding an image as hyperlink.
- 9. Write an HTML code display an image (V space and H space attribute)
- 10. Create HTML table using cell padding, cell spacing and caption
- 11. Create HTML Web page as following format (back ground image)

COURSES / GROUPS	
B,Se,	B,Com
Sub I	Sub I
Sub 2	Sub 2
Suh 2	Sub 2

- 12. Create HTML code to demonstrate frames.
- 13. Create HTML code to demonstrate target frames.
- 14. Create HTML code to demonstrate forms.
- 15 Create HTML code to students registration form
- 16. Write a program to demonstrate external style sheet,
- 17. Write a program to demonstrate inline style sheets.
- 18. Write a program to demonstrate embedded style sheets.
- 19. Write a program to demonstrate Class and Id.
- 20. Write a program to change contents and colors of text hox by moving mouse over using DHTML.
- 21. Write a program for aligning text and setting hox dimensions using cascading style sheets.
- 22. Write a program in Java Script to display n natural numbers.
- 23. Write a program Java Script to calculate Square, Cube of number using functions
- 24. Write a Java Script to display result of examination.
- 25. Write a Java Script to students registration form with following validations.

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Department of Computer Science, Girraj Govt. College (k); Stylesh & Belling

Girraj Govt. College (Autonomous) B. Sc. III Year V Semester Syllabus Elective – II: (Paper –VI-B: Visual Basics)

Max. Marks: 70 (Theory) Internal Assessment: 30 (20+10)

UNIT-1:

Chapter -1 Introduction to Visual Basic:

Introduction Graphical User Interface (GUI), Programming Language (Procedural, Object Oriented, Event Driven), The Visual Basic Environment, How to use VB complier to compile / debug and run the programs.

Chapter - 2 Introductions to VB Controls:

Textboxes, Frames, Check Boxes, Option Buttons, Images, Setting a Border & Styles, The Shape Control, The line Control, Working with multiple controls and their properties, Designing the User Interface, Keyboard access, tab controls, Default & Cancel property, Coding for controls.

UNIT-II

Chapter- 3 Variables, Constants, and Calculations:

Variables, Variables Public, Private, Static, Constants, Data Types, Naming rules/conventions, Constants, Named & intrinsic, Declaring variables, Scope of variables, Val Function, Arithmetic Operations, Formatting Data.

Chapter -4: Decision & Conditions:

Statement. If ?then-else Statement, Comparing Strings, Compound Conditions(And, Or, Not), Nested If Statements, Case Structure , Using If statements with Option Buttons & Check Boxes, Displaying Message in Message Box, Testing whether Input is valid or not. Using Call Statement to call a procedure.

UNIT-III

Chapter 5 Menus, Sub-Procedures and Sub-functions:

Defining / Creating and Modifying a Menu, Using common dialog box, Creating a new sub-procedure, Passing Variables to Procedures, Passing Argument ByVal or ByRef, Writing a Function Procedure

Chapter 6 Multiple Forms:

Creating, adding, removing Forms in project, Hide, Show Method, Load, Unload Statement, Me Keyword, Referring to Objects on a Different Forms,

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Girraj Govt. College (Autonomous) B. Sc. III Year V Semester MODEL PAPER

Elective - II: (Paper -VI-B: Visual Basics) Max. Marks: 70 (Theory) SECTION - A **Answer All Questions** 4 X2.5 = 10(Compulsory one question from each unit) Q.1 Unit-I Q.2Unit-II Q.3 Unit-III Q.4 Unit-IV SECTION - B $4 \times 5 = 20$ **Answer Any Four Questions** (Compulsory TWO question from each unit open choice questions) Unit-I Q.5 Unit-I Q.6Q.7Unit-II Unit-II Q.80.9 Unit-III Q.10 Unit-III Q.11 Unit-IV Q.12 Unit-IV SECTION - C 4 X10=40 Answer all Questions (Internal Choice) (Compulsory TWO question from each unit internal choice question) (b) Unit-I OR Q.13 (a). Unit-I (b) Unit-II OR Q.14 (a). Unit-II (b) Unit-III Q.15 (a). Unit-III OR (b) Unit-IV OR Q.16 (a). Unit-IV

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B. Sc. III Year V Semester INTERNAL ASSESMENT

Elective - II: (Paper -VI-B: Visual Basics)

The 30 marks internal assessment is divided into two segments as follows Max. Markes (20+10) Segment - 1 Internal Exam (20 Marks) (Each semester two internal exams are conducted and average of two is considered) Segment – II Seminar and Assignments (5 + 5 = 10 Marks)Segment - I Internal Exam Paper Patterns SECTION - A: Multiple Choice Questions 5 X1=5 0.1 0.2 Q.3 0.4 0.5 SECTION - B: Fill in the Blanks $5 \times 1 = 5$ 0.1 0.2 0,3 0.4 0.5 **SECTION - C**: Match the Following 5 X1=5 0.1 Q.2 Q.30.4 0.5 SECTION - D: One word Answers 0.1 Q.2Q.3 0,4 0.5

Segment - II:

1 X5=5

a) Seminars

(Every student has to present a seminar and submit a hard copy of the same to the dept.) 1 X5=5

b) Assignments

(Every student has to prepare assignment and submit to the lecturer concerned)

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Girraj Govt. College (Autonomous) B. Sc. III Year VI Semester Syllabus Elective - II: (Paper -VIII-B VB-Script)

70 (Theory) Max. Marks: Internal Assessment: 30 (20+10)

Chapter 1 List

List Boxes & Combo Boxes, Filling the List using Property window / AddItem Method, Clear Method, List box Properties, Removing an item from a list, List Box/ Combo Box,

Chapter 2 Loops and Printing

Do/Loops, For/Next Loops, Using Message Box Function, Using String Function, Printing to printer using Print Method,

Chapter 3 Array:

Arrays Single-Dimension Arrays, Initializing an Array using for Each, User-Defined Data Types, Accessing Information with User-Defined Data Types, Using List Boxes with Array, Two dimensional arrays.

Chapter 4 OOP in VB

Classes, Creating a new Class, Creating a new object using a class, choosing when to create New Terminate Initialize Objects,

Chapter 5 Data Files

Opening and Closing Data Files, The Free File Function, Viewing the data in a file, Sequential File Organization (Writing Data to a sequential Disk File, Creating a sequential data file, Reading the Data in a sequential file, Finding the end of a Data file, Locating a file).

Chapter 6 Advance Data Files:

Trapping Program Errors, The Err Object, Random Data File Opening a random file, Reading and writing a random file (Get, Put, LOF, Seek).

Chapter 7 Accessing Database File

Creating the database files for use by Visual Basic (Using MS-Access), Using the Data Control, Data Using property. object using the movenext, its setting database in code (the recordset movepreviouse, movefirst & movelast methods, checking for BOF & EOF, using listboxes & comboboxes as data bound controls, updating a database file (adding, deleting records).

Chapter 8 Advanced data handling:

Displaying data in grids (grid control, properties of grid), displaying the record no & record count, opening the database, validation & error trappings (locking text boxes, trap errors with On Error, file open errors) , Recordset , searching for a specific record (findfirst, findnext, findlast, findprevious,), seek method, working with database fields, creating a new dynaset.

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Board of Studies Dept. of Computer Science Telangana University,

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B. Sc. III Year V Semester MODEL PAPER

Elective - II: (Paper -VIII-B VB-Script)

Max. Marks: 70 (Theory)

SECTION - A

Answer All Questions

 $4 \times 2, 5 = 10$

(Compulsory one question from each unit)

- Q.1 Unit-I
- Q.2 Unit-II
- Q.3 Unit-III
- O.4 Unit-IV

SECTION - B

Answer Any Four Questions $4 \times 5 = 20$ (Compulsory TWO question from each unit open choice questions)

- Q.5 Unit-I
- O.6 Unit-I
- O.7 Unit-II
- Q.8 Unit-II
- Q.9 Unit-III
- Q.10 Unit-III
- Q.11 Unit-IV
- Q.12 Unit-IV

SECTION - C

Answer all Questions (Internal Choice) 4 X10=40
(Compulsory TWO question from each unit internal choice question)

Q.13 (a), Unit-I

- OR
- (b) Unit-I

Q.14 (a). Unit-II

- OR
- (b) Unit-II

- Q.15 (a). Unit-III
- OR
- (b) Unit-III

- Q.16 (a), Unit-IV
- OR
- (b) Unit-IV

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Girraj Govt, College (Autonomous) B. Sc. III Year VI Semester

INTERNAL ASSESMENT

Elective - II: (Paper -VIII-B VB Script)

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The 30 ma Segment -	rks interna - I Internal	al assessment is I Exam (20 Mar	divided <mark>into two</mark> ks)	segments as follows	Max, Mark	(20110)
Segment -	- II Semina	Diama	ire conducted and	average of two is ed larks)	nsidered)	
SECTION	- A : Mu	iltiple Choice (merni .			
	Q.1	mibie Cuotee C	Questions	5 % I	-6	
	Q.2			/		
	Q.3					
	Q.4					
	Q.5					
SECTION	-B : Fill	in the Blanks				
		in the Dianks		5 X I	-5	
	Q.1					
	Q.2 Q.3					
	Q.4					
	Q.5	17				
SECTION						
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4	Q.1			0 141	.,,	
	Q.2					
	Q.3					
	Q.4					
	Q.5					
SECTION	-D : One	word Answer	s			
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	Q.1 Q.2					
	Q.3					
	Q.4					
	Q.5				1	
Segment – II						
) Seminars				1 VE-E		
Every stude	ent has to n	resent a semina	ar and submit a be	1 X5=5 ard copy of the same		
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