J. B. INSTITUTE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

ACADEMIC YEAR **2015 - 16**

http://www.jbiet.edu.in

	COURSE PLAN	2015 - 16
		Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering

COURSE DETAILS::

Name Of The Programme:: B. Tech Batch:: 2015 - 19
Designation:: Assistant Professor
Year :: First Semester :: I
Department:: Computer Science and Engineering
Title of The Subject :: Computer Programming Subject Code ::
No of Students

	COURSE PLAN	2015 – 16
		Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering

1. TARGET

   a) Percentage Pass :: 100%

   b) Percentage I class :: 80 %

2. COURSE PLAN

(Please write how you intend to cover the contents: i.e., coverage of Units by lectures, guest lectures, design exercises, solving numerical problems, demonstration of models, model preparation, or by assignments, etc.)

3. METHOD OF EVALUATION

   3.1. ☐ Continuous Assessment Examinations (CAE 1, CAE 2)

   3.2. ☐ Assignments / Seminars

   3.3. ☐ Mini Projects

   3.4. ☐ Quiz

   3.5. ☐ Term End Examination

   3.6. ☐ Others

4. List out any new topic(s) or any innovation you would like to introduce in teaching the subject in this Semester.

Signature of HOD
Date:

Signature of Faculty
Date:

	GUIDELINES TO STUDY THE SUBJECT	2015 - 16
		Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI

Designation:: Assistant Professor

Department:: Computer Science and Engineering

Guidelines for Preparing the Course:

Course Description:
This course provides students with a comprehensive study of the C programming language. Classroom lectures stress the strengths of C, which provide programmers with the means of writing efficient, maintainable, and portable code.

Course Objectives:
1. Understand the basic terminology used in computer programming. 2. Write, compile and debug programs in C language. 3. Use different data types in a computer program. 4. Design programs involving decision structures, loops and functions. 5. Explain the difference between call by value and call by reference 6. Understand the dynamics of memory by the use of pointers. 7. Use different data structures and create/update basic data files.

Learning Outcomes:
Learn how to program in C - Learn about program flow - Learn about functions, methods and routines - How to use arguments and return values - How to run a simple C program - Understand how numbers are encoded as characters in ASCII - Learn about the connection between function return values and variables - Learn about variables when programming in C; - Understand the use of arrays and pointers;- Understand the concept of control flow; - Learn more about the use of statements and logic in C programming; - Understand the mechanisms for controlling flow statements; - Learn how to implement simple statements in C; - Learn more about logical operators such as OR, GOTO and the While loop;- Using pointers for direct memory access and manipulation in C; - How to change the memory address contained within a pointer; - Understand why you need to learn pointers; - Learn more about the char pointer; - Introduce constants and string literals in C; - Introduce the character string as an array of characters in C. *Use* different data structures and create/update basic data files.

	COURSE OBJECTIVES	2015 - 16
		Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
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On completion of this Subject / Course the student shall be able to:

S.No.	Objectives	Outcome
1.	Explain the basic concepts of problem solving.	
2.	List the steps involved in program development.	
3.	List the advantages of top down programming.	
4.	Explain the evolution and Features of C language.	
5.	Explain the basic elements of c language	
6.	Describe the structure of c program	
7.	Explain the syntaxes of selection statement, control statement	
8.	Explain the functions concept and various string handling functions	
9.	Explain the Significance of Structures Programming	
10.	Explaining the Working of Files.	

Signature of Faculty
Date:

Note: For each of the OBJECTIVE indicate the appropriate OUTCOMES to be achieved.
Kindly refer Page 16, to know the illustrative verbs that can be used to state the objectives.

	COURSE OUTCOMES	2015 - 16
		Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering

The expected outcomes of the Course / Subject are:

S.No.	General Categories of Outcomes	Specific Outcomes of the Course
A.	An ability to apply knowledge of mathematics, science, and engineering	
B.	An ability to design and conduct experiments, as well as to analyze and interpret data	
C.	An ability to design a system, component, or process to meet desired needs within realistic Constraints such as economic, environmental, social, political, ethical, health and safety, Manufacturability and sustainability	
D.	An ability to function on multi-disciplinary teams	
E.	An ability to identify, formulate, and solve engineering problems	
F.	An understanding of professional and ethical responsibility	
G.	An ability to communicate effectively	
H.	The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	
I.	A recognition of the need for, and an ability to engage in life-long learning	
J.	A knowledge of contemporary issues	
K.	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	

Objectives – Outcome Relationship Matrix (Indicate the relationships by □ mark)**.**

Outcomes / Objectives	A	B	C	D	E	F	G	H	I	J	K
1.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
8.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
9.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
10.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	COURSE SCHEDULE	2015 - 16
		Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering
The Schedule for the whole Course/ Subject is::

S. No.	Description	Duration (Date)		Total No. of Periods
		From	To	
1.	Computer Fundamentals and Introduction to C			10
2.	Selection Statements and Arrays			12
3.	Introduction to Structured Programming and Strings			14
4.	Derived Types and Pointers			14
5.	Introduction Using Files in C			15

Total No. of Instructional periods available for the course: Hours / Periods 65

	SCHEDULE OF INSTRUCTIONS **UNIT - I**	**2015 - 16** **Regulation: R14**

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering

The Schedule for the whole Course / Subject is::

Sl. No.	**Date**	**No. of Periods**	**Topics / Sub - Topics**	**Objectives & Outcome Nos.**	**References (Text Book, Journal…) Page No___ to ___**
1		1	**Computer Fundamentals** – Hardware, Software, Computer Languages		
2		1	Translators, Compiler, Interpreter, Loader And Linker		
3		1	Program Development Steps – Algorithms, Pseudo Code		
4		1	Flow Charts, Specifications For Converting Algorithms Into Program Basic.		
5		1	**Introduction To The C Language** – History, Simple C Program.		
6		1	Structure Of C Program, Identifiers,		
7		1	Basic Data Types, User Defined Data Types, Variables, Constants		
8		1	Type Qualifiers, Managing Input / Output		
9		1	Operators, Expressions, Precedence And Associativity, Expression Evaluation		
10		1	Type Conversions, Simple C Program Examples.		

Signature of Faculty
Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.
2.ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**.
3.MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	SCHEDULE OF INSTRUCTIONS UNIT - II	2015 - 16 Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering
The Schedule for the whole Course / Subject is::

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal…) Page No___ to ___
1		1	**Selection Statements –** If And Switch Statements		
2		1	Repetitive Statements – While, Do – While Statements		
3		1	Repetitive Statements – For, C Programming Examples,		
4		1	Other Statements Related To Looping –Break, Continue, Goto , C Program Examples.		
5		1	**Arrays** – Basic Concepts		
6		1	One – Dimensional Arrays		
7		1	Two – Dimensional Arrays, Multidimensional Arrays		
8		2	C Programming Examples.		

Signature of Faculty
Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.
2. ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**. MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	SCHEDULE OF INSTRUCTIONS UNIT - III	2015 - 16 Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering

The Schedule for the whole Course / Subject is::

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal…) Page No___ to ___
1		2	**Functions**-Basics, User Defined Functions, Inter Function Communication, Standard Functions,		
2		1	Storage Classes-Auto, Register, Static, Extern, Scope Rules,		
3		1	Arrays to Functions,		
4		2	Recursive Functions, Example C Programs		
5		1	Command Line Arguments		
6		2	**Strings** – Basic Concepts, String Input / Output Functions,		
7		2	Arrays Of Strings,		
8		2	String Handling Functions, Strings to Functions,		

Signature of Faculty
Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.
2. ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**. MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	SCHEDULE OF INSTRUCTIONS UNIT - IV	2015 - 16 Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering
The Schedule for the whole Course / Subject is::

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal…) Page No___ to ___
1		2	**Derived Types** – Structures – Basic Concepts		
2		2	Nested Structures, Array of Structures		
3		2	Structures and Functions		
4		2	Union, Bit Fields, C Programming Examples.		
5		2	**Pointers –** Basic Concept, Pointers and Functions		
6		2	Pointers and Strings, Pointers and Arrays, Pointers and Structures		
7		2	Self – Referential Structures, Example C Programs.		

Signature of Faculty
Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.
2. ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**. MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	SCHEDULE OF INSTRUCTIONS UNIT - V	2015 - 16 Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering

The Schedule for the whole Course / Subject is::

SI. No.	Date	No. of Periods	Topics / Sub - Topics	Objectives & Outcome Nos.	References (Text Book, Journal…) Page No___ to ___
1		3	**Introduction using Files in C –** Declaration of a File Pointer, Opening a File, Closing and Flushing of Files.		
2		3	Working with Text Files, Character Input and Output, End of File(EOF),		
3		2	Creating header file and using in the C Program		
4		3	Working With Binary Files, Direct File Input and Output, Sequential Versus Random File Access,		
5		3	Files of Records, Working with Files of Records, Random Access to Filesof Records,		
6		3	Other File Management Functions, Delecting a File, Renaming a File. Low Level I/O.		
7		2	Working with C Graphics Functions		

Signature of Faculty
Date

Note: 1. ENSURE THAT ALL TOPICS SPECIFIED IN THE COURSE ARE MENTIONED.
2. ADDITIONAL TOPICS COVERED, IF ANY, MAY ALSO BE SPECIFIED **BOLDLY**. MENTION THE CORRESPONDING COURSE OBJECTIVE AND OUT COME NUMBERS AGAINST EACH TOPIC.

	COURSE COMPLETION STATUS	2015 - 16
		Regulation: R14

FACULTY DETAILS:
Name of the Faculty:: SREEKANTH BANDI
Subject:: Computer Programming Subject Code
Department:: Computer Science and Engineering
Actual Date of Completion & Remarks, if any

Units	Remarks	Nos. of Objectives Achieved
Unit 1		
Unit 2		
Unit 3		
Unit 4		
Unit 5		

Signature of Dean of School
Date:

Signature of Faculty
Date:

NOTE: AFTER THE COMPLETION OF EACH UNIT MENTION THE NUMBER OF OBJECTIVES ACHIEVED.

	TUTORIAL SHEETS - I	2015 - 16
		Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering
The Schedule for the whole Course / Subject is::

Date:

This Tutorial corresponds to Unit Nos. Time:

Q1. Explain the interaction between the various computer components?

Q2. Explain briefly the program development steps and Covert an Algorithm to a Simple C Program with Flow Chart.

Q3. Explain All Statements with Syntax and Examples?

Q4. Define an Array and Illustrate with example One Dimensional Array.

Q5. Illustrate with example Multi - Dimensional Array.

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School
Date:

Signature of Faculty
Date:

	TUTORIAL SHEETS - II	2015 - 16
		Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Information T echnology
The Schedule for the whole Course / Subject is::

Date:

This Tutorial corresponds to Unit Nos. Time:

Q1. Define Function. What is a Recursive Function? Illustrate with an Example.

Q2. What is a String? Explain the String Handling Functions?

Q3. Define Structure. Illustrate with an example nested structure?

Q4. Define Pointer. Illustrate pointer function with an example.

Q5. Explain Self-referential structures with example.

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School
Date:

Signature of Faculty
Date:

	TUTORIAL SHEETS - III	2015 - 16
		Regulation: R14

FACULTY DETAILS:

Name of the Faculty:: SREEKANTH BANDI
Designation: Assistant Professor
Department:: Computer Science and Engineering

Date:

This Tutorial corresponds to Unit Nos. Time:

Q1. Declare a File Pointer. Explain with an example opening and closing of a file.

Q2. Illustrate the Random Access to Files of Records.

Q3. Write a C Program for Deleting a File

Q4. Write a C Program for Renaming a File

Q5. Write a C Program to Demonstrate End of File (EOF).

Please write the Questions / Problems / Exercises which you would like to give to the students and also mention the objectives to which these questions / Problems are related.

Signature of Dean of School
Date:

Signature of Faculty
Date:

	ILLUSTRATIVE VERBS FOR STATING INSTRUCTIONAL OBJECTIVES	2015 - 16 Regulation: R14

These verbs can also be used while framing questions for Continuous Assessment Examinations as well as for End – Semester (final) Examinations.

ILLUSTRATIVE VERBS FOR STATING **GENERAL OBJECTIVES**

Know Comprehend	Understand Apply	Analyze Design	Generate Evaluate

ILLUSTRATIVE VERBS FOR STATING **SPECIFIC OBJECTIVES:**

A. Cognitive Domain

1	2	3	4	5	6
Knowledge	**Comprehension Understanding**	**Application** of knowledge & comprehension	**Analysis** of whole w.r.t. its constituents	**Synthesis** combination of ideas/constituents	**Evaluation** judgement
Define Identify Label List Match Reproduce Select State	Convert Defend Describe (a procedure) Distinguish Estimate Explain why/how Extend Generalize Give examples Illustrate Infer Summarize	Change Compute Demonstrate Deduce Manipulate Modify Predict Prepare Relate Show Solve	Breakdown Differentiate Discriminate Distinguish Separate Subdivide	Categorize Combine Compile Compose Create Devise Design Generate Organize Plan Rearrange Reconstruct Reorganize Revise	Appraise Compare Conclude Contrast Criticize Justify Interpret Support

B. Affective Domain			C. Psychomotor Domain (skill development)			
Adhere	Resolve	Bend	Dissect	Insert	Perform	Straighten
Assist	Select	Calibrate	Draw	Keep	Prepare	Strengthen
Attend	Serve	Compress	Extend	Elongate	Remove	Time
Change	Share	Conduct	Feed	Limit	Replace	Transfer
Develop		Connect	File	Manipulate	Report	Type
Help		Convert	Grow	Move precisely	Reset	Weigh
Influence		Decrease	Handle	Operate	Run	
Initiate		Demonstrate	Increase	Paint	Set	

	LESSON PLAN **Unit - I**	2015 - 16
		Regulation: R14

Name of the Faculty: SREEKANTH BANDI

Subject: Computer Programming Subject Code:

Unit: I

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	**Computer Fundamentals** – Hardware, Software, Computer Languages	**50 min**	**TB1**	**Chalk and Talk**
2	Translators, Compiler, Interpreter, Loader And Linker,	**50 min**	**TB1**	**Chalk and Talk**
3	Program Development Steps – Algorithms, Pseudo Code, Flow Charts,	**50 min**	**TB1**	**Chalk and Talk**
4	Specifications For Converting Algorithms Into Program Basic	**50 min**	**TB1**	**Chalk and Talk**
5	**Introduction To The C Language** – History, Simple C Program, Structure Of C Program,	**50 min**	**TB1**	**Chalk and Talk**
6	Identifiers, Basic Data Types, User Defined Data Types, Variables, Constants, Type Qualifiers,	**50 min**	**TB1**	**Chalk and Talk**
7	Managing Input / Output, Operators, Expressions, Precedence And Associativity, Expression Evaluation,	**50 min**	**TB1**	**Chalk and Talk**
8	Type Conversions, Simple C Program Examples.	**50 min**	**TB1**	**Chalk and Talk**

On completion of this lesson the student shall be able to (Outcomes)

1. Understand the Computer Fundamentals
2. Illustrate the Program Development Steps – Algorithms, Flow Chart.
3. Know the C History
4. Identify C Tokens
5. Illustrate Various Operators and Precedence and Associativity

	ASSIGNMENT **Unit-I**	2015 - 16
		Regulation: R14

Assignment / Questions

Q1. Explain the interaction between the various computer components?

Q2. Explain the Features of various programming languages?

Q3. Explain briefly the program development steps and Covert an Algorithm to a Simple C Program with Flow Chart.

Q4. Explain the Structure of a C Program.

Q5. Explain C Tokens and Mention Various C Operators.

Signature of Faculty

Note: Mention for each question the relevant objectives and outcomes.

	LESSON PLAN **Unit-II**	2015 - 16
		Regulation: R14

Name of the Faculty: SREEKANTH BANDI
Subject: Computer Programming Subject Code:
Unit: II

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	**Selection Statements –** If And Switch Statements	50 min	TB1	Chalk and Talk
2	Repetitive Statements – While, Do – While Statements	50 min	TB1	Chalk and Talk
3	Repetitive Statements – For, C Programming Examples,	50 min	TB1	Chalk and Talk
4	Other Statements Related To Looping –Break, Continue, Goto , C Program Examples.	50 min	TB1	Chalk and Talk
5	**Arrays** – Basic Concepts	50 min	TB1	Chalk and Talk
6	One – Dimensional Arrays	50 min	TB1	Chalk and Talk
7	Two – Dimensional Arrays, Multidimensional Arrays	50 min	TB1	Chalk and Talk
8	C Programming Examples.	50 min	TB1	Chalk and Talk

On completion of this lesson the student shall be able to

1. Illustrate and Work with the Various Selection and Control Statements.
2. Understand the Concept of Arrays
3. Differentiate between One Dimensional Array and the Multi Dimensional Arrays.

	ASSIGNMENT **Unit-II**	2015 - 16
		Regulation: R14

Assignment / Questions

Q1. Explain Selection Statements with Syntax and Examples?

Q2. Explain Control Statements with Syntax and Examples?

Q3. Explain Goto, Break, continue Statements with Syntax and Examples?

Q4. Define an Array and Illustrate with example One Dimensional Array.

Q5. Illustrate with example Multi - Dimensional Array.

Signature of Faculty

Note: Mention for each question the relevant objectives and outcomes.

	LESSON PLAN **Unit-III**	2015 - 16
		Regulation: R14

Name of the Faculty: SREEKANTH BANDI

Subject: Computer Programming Subject Code:

Unit: III

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	**Functions**-Basics, User Defined Functions, Inter Function Communication, Standard Functions,	50 min	TB1	Chalk and Talk
2	Storage Classes-Auto, Register, Static, Extern, Scope Rules,	50 min	TB1	Chalk and Talk
3	Arrays to Functions,	50 min	TB1	Chalk and Talk
4	Recursive Functions, Example C Programs	50 min	TB1	Chalk and Talk
5	Command Line Arguments in C	50 min	TB1	Chalk and Talk
5	**Strings** – Basic Concepts, String Input / Output Functions,	50 min	TB1	Chalk and Talk
6	Arrays Of Strings,	50 min	TB1	Chalk and Talk
7	String Handling Functions, Strings to Functions,	50 min	TB1	Chalk and Talk

On completion of this lesson the student shall be able to (Outcomes)

1. Understand the Concept of Function.
2. Would be able to Work with User-Defined and Standard Functions.
3. Understand the concept of Recursion and its Purpose.
4. Understand the Strings Concepts and Array of Strings.
5. Illustrate the String Handling Functions.

	ASSIGNMENT **Unit-III**	2015 - 16
		Regulation: R14

Assignment / Questions

Q1. Define Function. What is a Recursive Function? Illustrate with an Example.

Q2. What is a String? Explain the String Handling Functions?

Q3. Explain Storage Classes and Scope Rules?

Q4. Demonstrate String Input/ Output Functions with Syntax and Example.

Q5. Write a C Program to Demonstrate Array of Strings and Strings of functions

Signature of Faculty

Note: Mention for each question the relevant objectives and outcomes.

	LESSON PLAN **Unit-IV**	2015 - 16
		Regulation: R14

Name of the Faculty: SREEKANTH BANDI

Subject: Computer Programming Subject Code:

Unit: IV

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	**Derived Types** – Structures – Basic Concepts	50 min	TB1	Chalk and Talk
2	Nested Structures, Array of Structures	50 min	TB1	Chalk and Talk
3	Structures and Functions	50 min	TB1	Chalk and Talk
4	Union, Bit Fields, C Programming Examples.	50 min	TB1	Chalk and Talk
5	**Pointers –** Basic Concept, Pointers and Functions	50 min	TB1	Chalk and Talk
6	Pointers and Strings, Pointers and Arrays, Pointers and Structures	50 min	TB1	Chalk and Talk
7	Self – Referential Structures, Example C Programs.	50 min	TB1	Chalk and Talk

On completion of this lesson the student shall be able to (Outcomes)

1. Understand the Concept of Derived Types – Structures and Unions.
2. Ability to Work With Nested Structures, Array of Structures
3. Understand the Purpose of Pointers.
4. Ability to Work with Pointers Arrays, Pointer Strings.

	ASSIGNMENT **Unit-IV**	2015 - 16
		Regulation: R14

Assignment / Questions

Q1. Define Structure. Illustrate with an example nested structure?

Q2. Define Pointer. Illustrate pointer function with an example.

Q3. Explain Self-referential structures with example.

Q4. Write a C Program to demonstrate pointer Arrays.

Q5. Explain the Pointer Structure concept with example.

Signature of Faculty

Note: Mention for each question the relevant objectives and outcomes.

	LESSON PLAN Unit-V	2015 - 16
		Regulation: R14

Name of the Faculty: SREEKANTH BANDI

Subject: Computer Programming Subject Code :

Unit: V

INSTRUCTIONAL OBJECTIVES:

Session No	Topics to be covered	Time	Ref	Teaching Method
1	**Introduction using Files in C –** Declaration of a File Pointer, Opening a File, Closing and Flushing of Files.	50 min	TB1	Chalk and Talk
2	Working with Text Files, Character Input and Output, End of File(EOF),	50 min	TB1	Chalk and Talk
3	Creating header file and using in C	50 min	TB1	Chalk and Talk
4	Working With Binary Files, Direct File Input and Output, Sequential Versus Random File Access,	50 min	TB1	Chalk and Talk
5	Files of Records, Working with Files of Records, Random Access to Filesof Records,	50 min	TB1	Chalk and Talk
6	Other File Management Functions, Delecting a File, Renaming a File. Low Level I/O.	50 min	TB1	Chalk and Talk
7	Working with C Graphics Functions	50 min	TB1	Chalk and Talk

On completion of this lesson the student shall be able to (Outcomes)

1. The concept of File opening, closing.
2. Working with various file types.
3. Managing of Records.
4. Management of File Functions.
5. Graphics in C

	ASSIGNMENT **Unit-V**	2015 - 16
		Regulation: R14

Assignment / Questions

Q1. Declare a File Pointer. Explain with an example opening and closing of a file.

Q2. Illustrate the Random Access to Files of Records.

Q3. Write a C Program for Deleting a File

Q4. Write a C Program for Renaming a File

Q5. Write a C Program to Demonstrate End of File (EOF).

Signature of Faculty

Note: Mention for each question the relevant objectives and outcomes.