MARIS STELLA COLLEGE, VIJAYAWADA-8

(An autonomous college affiliated to Krishna University)

DEPARTMENT OF COMPUTER SCIENCE

B.Com (Computer Applications)

Academic Year 2019 - 2020

Title : Programming in C **Semester : III**

Paper Code: COMPC061

Course Outcomes: Upon successful completion of the course, a student will be able to:

CO1. To reproduce any problem statement in the form of an algorithm and flowchart.

CO2. To discover the basic syntax of c.

CO3. To observe the working of control structures and write programs to solve simple problems.

CO4. Examine the concept of functions, arrays, structures, unions, pointers and files.

CO5. Construct and compile the C programs.

SYLLABUS

Unit-I **-10 Hrs**

Introduction to Programming –High level languages, flowcharts – algorithms – Language Interpreters – Compiling, running, and understanding first program – comments, declaration - C – Language – History - Character set – variables – constants – keywords - Data types - Operators.- declaration of variables, printf function and scanf function.

Unit-II **-8 Hrs**

Control Structures-Decision making – the if – statement – the if else construct - Nested if statement – the else if construct, the Switch statement – Goto -Break-Continue-Looping control structures - for, while and do while.

Unit-III **-14 Hrs**

Arrays - single dimensional - double dimensional array – multi dimensional array– Strings - string functions - strlen( ) - strcpy( ) - Strcat( ) - strcmp( ) –strrev().

Unit-IV **-8 Hrs**

Functions – Defining a function – types of functions – recursion in functions - automatic, extern, static and register storage classes.

Structures – Initialization of structures – Array of structures - Unions – declaration – usage.

Unit-V **-10 Hrs**

Pointers – definition – declaration – Pointers and functions, pointers and arrays , Files – types of files – file operations – input and output operations in files, the # define statement – the # include statement – preprocessor directives.

Prescribed books

1**.** Reema Thareja, Programming in 'C', Oxford university press. (Chapters: 1 to 10)

2. Stephen G. Kochan, Programming in C, Third Edition, Pearson Education [2007]

(Chapters: 1 to 14, 16, 17)

Reference Books:

1. Beyron S Gottfried, Programming with C, Second Edition, Tata McGraw Hill (2007).
2. Ashok N. Kamathane, Programming with ANSI and Turbo C, Pearson Education (2008).
3. Balaguruswamy.E, Fundamentals of computing, TMH (2008).

MARIS STELLA COLLEGE, VIJAYAWADA-8

(An autonomous college affiliated to Krishna University)

DEPARTMENT OF COMPUTERS

B.Com (Computer Applications)

BLUE PRINT OF MODEL PAPER

- The paper consists of three sections.

- All questions are compulsory from all parts.

SECTION – A

- Consists of **SIX** very short answer type questions from five units, out of which **FOUR** are to be answered.

- Each question carries **3 Marks.**

SECTION – B

- Consists of **THREE** short answer type questions from five units**,** out of which **TWO** are to be answered.

- Each question carries **6 Marks.**

SECTION – C

- Consists of **FIVE** essay answer type questions from five units**,** out of which **THREE** are to be answered.

- Each question carries **12 Marks.**

MARIS STELLA COLLEGE, VIJAYAWADA-8

(An autonomous college affiliated to Krishna University)

DEPARTMENT OF COMPUTERS

B.Com (Computer Applications)

Model Question Paper

Title : Programming in C **Time: 3 Hrs**

Paper Code : COMPC061 **Max. Marks: 60**

Semester : III

SECTION-A

Answer any FOUR of the following. **4*3=12M**

1. List out the data types available in C giving their memory requirements.
2. What is a keyword? List out the various keywords in C.
3. What is a conditional operator?
4. Write about break statement.
5. Define structure. Write the syntax and example for structure.
6. What is a function? How to call a function?

SECTION-B

Answer Any TWO of the following **2*6=12M**

7. Explain in detail about printf and scanf functions.
8. Explain in detail about looping statements.
9. Explain different string functions in C.

SECTION-C

Answer Any THREE of the following **3*12=36M**

10. Explain the structure of C program.

11. What is an operator? Discuss various operators in C.

12. What is an array and explain different types of arrays.

13. Explain in detail about storage classes in C.

14. Explain in detail about File operations in C.