ST.JOSEPH’S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

IV SEMESTER **COMMERCE**  Time: 4 Hrs/ Week

COM 4302 (3) **STRUCTURED PROGRAMMING THROUGH ‘C’** Max. MARKS: 100

w.e.f:2017 – 2020 (“17AE”) **SYLLABUS**

## UNIT - I: PROBLEM SOLVING AND ALGORITHMS: The problem solving aspect – Top down design-stepwise refinements-Implementation of algorithms-Efficiency of algorithms-Desirable program characteristics.

**UNIT - II: C PROGRAMMING BASICS:** Importance of ‘C ‘ language-Structure of C language-Variables- Constants-Expression-Operations, Simple I/O functions, and Control statements

**UNIT - III: FUNCTIONS:** Concept of functions-parameter passing-recursion.

**UNIT - IV: ARRAYS AND STRINGS:** Single and multidimensional arrays. Character arrays as a string functions on strings.

**POINTERS:** Definition and usage of Pointers.

**UNIT - V:** **STRUCTURES AND UNIONS:** Declaring and using Structures-Operations on structure, unions, differences between structures and unions-scope of unions.

**DATA FILES**: Opening and closing of files, creating a data file, processing a data file.

**BOOKS RECOMMENDED:**

* Programming with ‘C’ – Schaums outline series- TMH
* Programming with ‘C’ –Balaguruswamy, TMH.

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ST.JOSEPH’S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

III SEMESTER **COMMERCE**  Time: 2 HRS/ WEEK

COM 4352 (2) **STRUCTURED PROGRAMMING THROUGH ‘C’** Max: MARKS: 50

w.e.f:2017 – 2020 (“17AE”) **PRACTICAL** **SYLLABUS**

1. I/O Functions
2. Control Statements
3. Functions
4. Arrays
5. Strings
6. Pointers
7. Structures
8. Unions
9. Files

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