

(Applicable to the batch of students admitted in the academic year 2016-17 and onwards)

M.Com. (CBCS)

FACULTY OF COMMERCE, OU

SEMESTER II: SPECIALISATION : COMPUTER APPLICATIONS

OBJECT ORIENTED PROGRAMMING THROUGH C⁺⁺

PAPER CODE: COM 10 CA :
THPW: 5 ; Credits : 5

Total Marks: 50T+15IA+35LPE=100
ESED: 3 HRS

OBJECTIVE: The course emphasizes a strategic problem solving approach to programming. The fundamental constructs of the paradigm - identification, creation and use of high level classes are explained. Algorithmic constructs are introduced as means to support class implementation.

UNIT-I:

Introduction to computers and programming languages: Algorithms - Top down design Stepwise Refinement - Flow Charts - Data types - Variables - Operators - Expressions Evaluation of Expressions -Introduction to Objects and Classes - Simple Programs.

UNIT-II:

Structural Constructs - Grouping - Selection - Repetition - Programs using control structures - Arrays and Pointers.

UNIT-III:

Functions - Parameter passing - Storage classes – References - Macros and Pre-processor – Classes – Attributes - Member Functions - Object Instantiation – Constructors - Scope Resolution.

UNIT-IV:

Overloading – Inheritance Visibility Modifiers - Abstract Classes and Methods – Runtime Polymorphism.

UNIT-V:

Exception Handling – Templates - Standard Library - File I/O Operations.

SUGGESTED READINGS:

1. Dietel & Dietel, C++ How to Program, Pearson.
2. Herbet Schildt, "The complete Reference C++" - Tata McGraw Hill.
3. Bronson, A First Book on C++ - Thomson.
4. Malik, C++ Programming from Program Analysis to Program Design – Thomson.
5. Forarzan, Computer Science A Structured Approach C++ - Thomson.