Code No. SICOS/S

Faculty of Science

B.Sc. (Computer Science) I Year, CBCS - I Semester Examination, July 2017

Paper-I (Object Oriented Programming with C++)

Time: 3 h Max Marks: 80

Section-A

I. Answer any **Five** of the following questions. (5x4=20 Marks)

1. Explain in detail about different generations of programming languages.
2. Differentiate type casting and type conversion with suitable examples.
3. What is Function prototyping? Illustrate the advantages of Function Prototypes in C++ with example? How does it differ from function definition?
4. Define Pointer? Explain the concept of Generic Pointer in C++ with suitable example?
5. Differentiate between Constructors and Destructors with suitable example. Explain about different types of Constructors in C++?
6. What is Friend keyword? Explain the purpose of "this" pointer in C++ with an example program?
7. Explain about the concept of dynamic polymorphism in C++ via Virtual Functions?
8. Demonstrate about the concept of Abstract Base Classes in C++ with a suitable program?

Section-B

II. Answer all of the following questions. (4x15=60 Marks)

9. (a) Briefly demonstrate about different Iterative Statements in C++ with suitable examples?

(OR)

(b) What is an Operator? Explain in detail about different operators in C++ along with syntax and example.

10.(a) Elaborate about parameter passing mechanisms available in C++ with an example?

(OR)

(b) Demonstrate about the concept of Arrays and Array Management in C++ with a program.

11.(a) Explain about the following:

1. Nested Classes
2. Default Arguments
3. Typedef Declaration

(OR)

(b) Define Structure? Define Union? How are structures different from unions? Elaborate with an example program?

12.(a) Explain with suitable example to overload Unary, Binary and Special operators.

(OR)

(b) What is Inheritance? Explain in detail about different Inheritance types available in C++ with suitable programs?

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