

**C. ABDUL HAKEEM COLLEGE (AUTONOMOUS),**

**MELVISHARAM - 632 509.**

**SEMESTER EXAMINATIONS, NOVEMBER - 2018**

**B.SC., COMPUTER SCIENCE / B.C.A.,**

**SEMESTER III**

**U15MCS301 / U15MCA301 / U14MCS301 / U14MCA301 –**

**PROGRAMMING IN C++**

Time: Three Hours

Maximum: 75 Marks

**SECTION - A (10 X 2 = 20 Marks)**

**Answer ALL Questions.**

1. Define the class.
2. What is a keyword? Give examples.
3. When do we need to use default argument in a function?
4. Write the characteristics of a static member function.
5. What is an abstract class?
6. What is the difference between private and protected visibility modes?
7. When do we make a virtual function "pure"?
8. What is *this* pointer?
9. When should a program throw an exception?
10. How does a string type differ from a c-type string?

**SECTION - B (5 X 5 = 25 Marks)**

**Answer ALL Questions.**

11. a) Explain the advantages of OOP.  
(Or)

b) What are the data types in C++? Explain.

12. a) Explain the various looping statements in C++.

(Or)

b) What is a friend function? Explain.

13. a) Explain the derived constructor by giving examples.

(Or)

b) Explain the single inheritance briefly.

14. a) What are the functions for manipulation of file pointers? Explain.

(Or)

b) Explain write and read functions in C++.

15. a) Explain function templates with an example.

(Or)

b) When do we use multiple catch handlers? Explain briefly.

**SECTION - C (3 X10 = 30 Marks)**

**Answer ANY THREE Questions.**

16. Explain the various operators that are supported by C++ and write its precedence.
17. Explain the copy constructor with an example.
18. How to overload binary operators? Explain with a program.
19. Write a C++ program to illustrate pointers to objects.
20. What are the functions used to access characters of string? Write a program to illustrate these functions.

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