

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER– III • EXAMINATION – WINTER - 2016

Subject Code: 3630004

Date: 06/01/2017

Subject Name: Programming with C++

Time: 10:30 AM – 1:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Fill in the blanks: **07**
- i) _____ object oriented feature indicates software reusability.
 - ii) _____ keyword is used to access variable in namespace.
 - iii) In C++, we can throw only _____ error at a time.
 - iv) _____ function declarations are always denoted by ‘=0’.
 - v) _____ function is used to enter a string with white spaces.
 - vi) _____ functions can be preferred over macros.
 - vii) `ios::_____` forces a float with an integer value to be printed with its decimal point and trailing zeroes.
- (b)** What do you mean by a reference variable? Also explain pass-by-reference with suitable example. **07**
- Q.2 (a)** Explain prefix ++ and postfix ++ operator. How they can be overloaded? Explain with suitable example. **07**
- (b)** Explain user defined conversion function which converts user-defined object to built-in data type. **07**
- OR**
- (b)** Explain overloading of the = and [] operators using suitable examples. **07**
- Q.3 (a)** Explain the overloading of >> and << operators with suitable example. **07**
- (b)** Explain the exception-handling in C++ with suitable example. **07**
- OR**
- Q.3 (a)** Explain RTTI. What is the role of typeid operator and type_info object? **07**
- (b)** Explain overloading of a template function with suitable example. **07**
- Q.4 (a)** Differentiate between manipulators and ios functions? Discuss any two manipulators. **07**
- (b)** Explain any 7 file input-output functions with syntax and example. **07**
- OR**
- Q.4 (a)** Write a program to input your full name and store it into a file called “name.txt”. Also display the contents from the file. **07**
- (b)** Write a program to read two filenames and copy the contents of first file into the second file. Implement necessary validations. **07**
- Q.5 (a)** Explain STL with suitable example. **07**
- (b)** Explain MIL with suitable example. **07**
- OR**
- Q.5 (a)** Explain inline function with suitable example. Also discuss its advantages and disadvantages. Differentiate between macro and inline function. **07**
- (b)** Explain namespace? Why is required? Can we use cin without “using namespace std” in our program? What is unnamed namespace? **07**
