Government College of Engineering, Aurangabad

(An Autonomous Institute of Government of Maharashtra)

FYMCA Examination

End semester examination 2011-12, semester-2

MCA110: Object Oriented Programming and System

Time: Three Hours Max. Marks.60

"Verify the course code and check whether you have got the correct question paper"

N.B:-

- 1. All questions are compulsory
- 2. Figures to the right indicate full marks
- 3. Assume suitable data if necessary and state it clearly

Q1. Attempt any two

[Marks 12]

- A. Write a program to accept a string and convert all characters in a string from lowercase to uppercase.
- B. Write short note on- passing arguments to function.
- C. What is the difference between global variables and local variables? Give an example to illustrate the same.

Q2. Attempt any two

[Marks 12]

- A. Write a program to find gross salary of 20 employees if allowance is 10% on basics of declaring member function inside the class.
- B. Illustrate with an example the concept of array of objects.
- C. Explain how friend function acts as bridge between 2 classes.

Q3. Attempt any two:

[Marks 12]

- A. What is operator overloading? Explain rule for overloading operator? Give an example of overloading unary operator?
- B. How to overload Unary and binary operator using friend functions?
- C. Write a program to concatenate two strings using operator overloading concept.

Q4. Attempt any two

[Marks 12]

- A. Illustrate the need for virtual base class with an example
- B. What is visibility mode? Explain the different visibility modes supported by C++
- C. What is containership? Explain with an example.

Q.5 Attempt any two

[Marks 12]

- A. Describe the following manipulators- setw(), precision(), fill()
- B. Write a program to compare two text files for similarity.
- C. Briefly describe the class hierarchy provided by C++ for stream handling.