M.Sc 3rd Semester Examination, 2011

APPLIED MATHEMATICS WITH OCEANOLOGY AND COMPUTER PROGRAMMING

PAPER—MTM-304

(*Object Oriented Programming with* C++)

Full Marks : 25

Time : 1 hour

Answer **Q. No. 1** and any **two** from the rest

The figures in the right-hand margin indicate marks

1. Answer any *two* questions :   2 × 2

   (*a*) What do you mean by class and object ?

   (*b*) What do you mean by inline functions ?

   (*c*) Explain the functions setw ( ) and setfill ( ) in C++.

2. What are the differences between object oriented programming and procedural oriented programming ? What are the important features of object oriented programming language ?   5 + 3

3. What do you mean by operator overloading in C++ ? List the advantages of this feature. What are the limitations of operator overloading ? Write a program to generate Fibonacci sequence using overloading of increment operator. $2 + 2 + 1 + 3$

4. (a) What do you mean by a file ? How a file can be opened in C++ ? Write the necessary statements. What are the necessary functions used to read and write a character from (to) the file ?

   (b) Write a command line program to read a file from memory and write it to another file in C++. Both the file names are to be supplied from command line. $(1 + 1 + 2) + 4$

[*Internal Assessment* : 5 Marks]