2016

M.Sc.

3rd Semester Examination

APPLIED MATHEMATICS WITH OCEANOLOGY AND

COMPUTER PROGRAMMING

PAPER—MTM-306 (Unit-I)

Full Marks : 25

Time : 1 Hour

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

[Object Oriented Programming with C++]

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

1. Answer any *two* questions of the following :   2×2

   (a) What do you mean by object ?

   (b) Explain : data abstraction and encapsulation.

(Turn Over)

(c) What do you mean by polymorphism used in OOP ?

2. (a) Compare procedure oriented programming and object oriented programming.   4

   (b) What do you mean by constructor and destructor ? Explain constractor with an example.   4

3. (a) Write a program in C++ using operator overloading to find first n Fibonacci numbers.   4

   (b) Why inheritance is used in C++ ? What are the advantages of it ? Explain multilevel inheritance.   4

4. (a) Write a program in C++ which will convert all characters of a file into uppercase alphabets. The resultant file will be stored into a new file. The file names must be supplied from command line.   4

   (b) Explain the following functions used in file processing in C++ : fail ( ) and good ( ).   4

(Internal Assessment : 5 Marks)

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