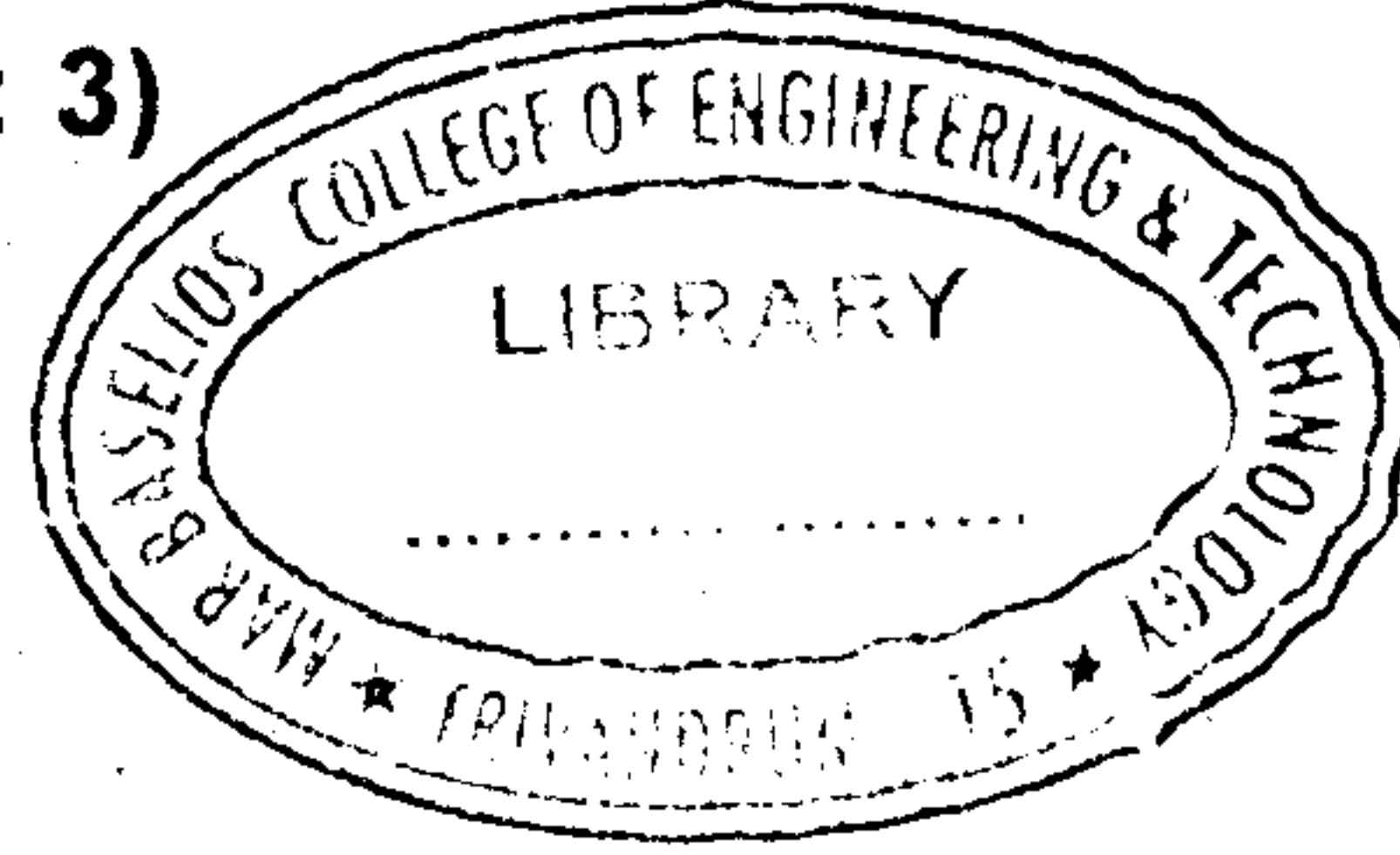


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G – 3624

Reg. No. :

Name :



Fourth Semester B.Tech. Degree Examination, June 2019
(2013 Scheme)

13.403 : OBJECT ORIENTED TECHNIQUES (FR)

Time : 3 Hours

Max. Marks : 100

PART – A

All questions are compulsory. Each question carries 4 marks.

1. Differentiate between procedure oriented and object oriented programming.
2. What is operator overloading? Which all operators cannot be overloaded in C++?
3. In control structure switch-case what is the purpose of default statement? What is the effect of absence of break in switch case in C++?
4. What is the significance of "this" pointer in C++?
5. How is an exception handled in C++?

PART – B

Answer one questions from each Module. Each question carries 20 marks.

Module – I

6. (a) State the difference between *class* and *struct* and illustrate with an example. 8
- (b) Explain object oriented system design process. 12

P.T.O.

7. What are in-line functions? Explain advantages of using in-line functions. Mention situations wherein-line functions cannot be used. 20

Module II

8. (a) What are friend functions? Illustrate with an example. 8
- (b) Write a program to perform addition of time in hour-minute-second format. Use objects as function arguments. 12
9. Create a class vector to hold an array of integers and perform the following operations using constructor for dynamic allocation of array based on size given as argument. 20
- (a) Create two vectors using constructor.
- (b) Add the vectors and return the resultant vector.
- (c) Multiply all elements in the vector by a given number X and display the resultant vector.

Module III

10. (a) With a sample C++ program explain overloading of unary operators. 10
- (b) Write a C++ program to illustrate the concept of polymorphism by creating derived classes that define their own operation in virtual functions. A base class contains a pure virtual function but the actual function definitions are contained in the individual derived class function. 10
11. With sample C++ program, explain the various types of inheritance. 20

Module – IV

12. Define a function template giving its syntax. Write a C++ program to implement array representation of a stack for integers, characters and floating point numbers using class template. 20

13. (a) Describe the various classes available for file operations.

10

(b) Write a C++ file program to store the details of 10 employees in a file called *emp.dat*. Read the contents of the file and generate a pay roll for employees.

10

