Reg. No.										

MANIPAL INSTITUTE OF TECHNOLOGY

(A constituent unit of MAHE, Manipal 576104)

V SEMESTER B.TECH. (BME) DEGREE MAKEUP EXAMINATIONS DEC/JAN 2019-20
SUBJECT: OBJECT ORIENTED PROGRAMMING (BME 4006)
(REVISED CREDIT SYSTEM)
Friday, 27th December 2019: 2 PM to 5 PM

TIME: 3 HOURS **MAX. MARKS: 50**

Instructions to Candidates:

1. **Answer all FIVE full questions.**
2. **Draw labeled diagram wherever necessary**

1A.. Explain how class is different from a structure. 03

1B. Write a C++ code for to a class labelled "Student" and create objects of the class. Consider the following members for representing the class specification: 04

Class: Student
Private Data members: • Student name
Public Member functions: • To read Patient Object • To display Patient Object

1C. Differentiate the characteristics of the constructor and destructor. Give the syntax for destructor. 03

2A. How object oriented programming is different from procedure oriented programming? Explain. 03

2B. Explain the characteristics of protected members. Write a C++ code to describe a single inheritance defining a base class "hospital" and a derived class as " a patient". 04

2C. What is inheritance? Explain two types of inheritances. 03

3A. Write a C++ code to describe a single inheritance defining a base class "hospital" and a derived class as "a patient". How the protected members are used in inheritance problems. 03

3B. Write the syntax for overloading an operator. Explain it with an example. 04

3C. Explain two built in functions used in the text mode of graphics. 03

4A.	Explain characteristics of a friend function with an example.	03
4B.	What are the file associated pointers? Explain the mechanism of opening of a file.	04
4C.	With an example explain the visibility of base class members in the derived class when the derivation mode is protected.	03
5A.	What are ‘exceptions’? How it is used. Explain.	04
5B.	Write a c++ code for handling an exception named “TYPE1”.	03
5C.	What is polymorphism? Explain.	03