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G.R. No.	
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Paper Code - U218-146 (T2)

SEPTEMBER 2018 / IN - SEM (T2)

S. Y. B.TECH. (Information Technology) (SEMESTER - I)

**COURSE NAME: PROBLEM SOLVING AND OBJECT
ORIENTED PROGRAMMING**

COURSE CODE : ITUA21176

(2017 PATTERN)

Time: [1 Hour]

[Max. Marks: 30]

(*) Instructions to candidates:

- 1) Answer Q.1 OR Q.2, Q.3 OR Q.4
- 2) Figures to the right indicate full marks.
- 3) Use suitable data where ever required

Q 1) a) Differentiate between object oriented and Procedural oriented language. [6]

b) Create an employee class; the member data should comprise an int for storing the employee number and a float for storing the employee's compensation. Member functions should allow the user to enter this data and display it. Write a main() that allows the user to enter data for three employees and display it. [6]

c) What are the rules for default argument? [4]

OR

Q2) a) Define constructor and destructor. Demonstrate dynamic constructor and destructor through example. [6]

b) Write a program in C++ to enter P, T, R and calculate Simple Interest. [6]

c) What is Constructor? How many types of constructors are there in C++ ? [4]

Q3) a) Write a program to swap values using friend function [6]

b) Discuss the concept of virtual base class. [4]

c) Which operators cannot be overloaded? [4]

OR

Q4) a) Write program to overload unary minus (-) operator using friend function. [6]

b) List down type conversion supported by C++. How it is achieved? [4]

c) Explain need and use of inheritance in C++. [4]