Total No. of Questions – [8]   Total No. of Printed Pages [2]

G.R. No.	

Paper Code - V218-146 (BE-FF)

May 2019/ENDSEM

S. Y. B. TECH. (I. T.) (SEMESTER - I)

COURSE NAME: Problem Solving and Object Oriented Programming

COURSE CODE: ITUA21176

(PATTERN 2017)

Time: [**2 Hours**]   [Max. Marks: **50**]

(*) Instructions to candidates:
1)   Answer Q.1, Q.2, Q.3, Q.4, Q.5 OR Q.6, Q.7 OR Q.8
2)   Figures to the right indicate full marks.
3)   Use of scientific calculator is allowed
4)   Use suitable data whereever required

Q.1) Draw a flowchart and write an algorithm to find addition of digits.

[6 marks]

OR

b) Explain primitive data types with example.   [6 marks]

Q.2) a) Explain in detail loop logic structure with diagram.   [6 marks]
OR

b) Explain recursive procedure. What do you have to do to stop the continued recalling of a recursive procedure?   [6 marks]

Q.3) a)Define constructor and destructor. Demonstrate dynamic constructer and destructor through example.   [6 marks]
OR

b) Write a program C++ using inline function to find the multiplication values and the cubic values.

[6 marks]

Q.4) a) Discuss the concept of virtual base class.   [4 marks]
OR

b) What is meant by Friend class?   [4 marks]

Q. 5) a) Explain structure of documentation of container classes implemented in
C++.   [6 marks]

    b) Discuss the rules for virtual function.   [4 marks]

    c) Differentiate between lists and vector.   [4 marks]

OR

Q.6) a)Write a C++ program for function template that returns the maximum of two values.   [6 marks]

    b) Does the C++ supports generic programming? Explain.[4 marks]

    c) Can there be more than one argument to template? Justify[4 marks]

Q.7) a) Write a program to demonstrate multiple catch blocks.   [6 marks]

    b)What are different modes in file operations?   [4 marks]

    c)What is the difference between opening a file with a constructor function and opening a file with open() function? When is one method preferred over the other?   [4 marks]

OR

Q.8) Explain formatted I/O operations.   [6 marks]

    b) Differentiate between getline and cin.   [4 marks]

    c) What is exception handling mechanism in C++?   [4 marks]

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