G.R. No. [   ]

Paper Code - U218-146 (BE-ES)

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) a) Write output of following functions   [6 marks]

        1. Sign(0)
        2. Abs (-8)
        3. String(-345.88)
        4. Max (5,7,8,9)
        5. Mid(S,3,2)
        6. Right(s,3)

    where s=theater

OR

b) What are different types of operator? Give hierarchy/ precedence of operators? [6 marks]

Q.2) a) List down major types of module and explain their function with example   [6 marks]

OR

b) Explain three decision logic structure with example   [6 marks]

[6 marks]

OR

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

Q.4) a) Which operators cannot be overloaded?   [4 marks]

OR

b) What is inheritance? Explain with the example.   [4 marks]

Q. 5) a) Explain in detail early binding and late binding.   [6 marks]

b) Explain the concept pointer to derived class.   [4 marks]

c) Explain pure virtual function with syntax.   [4 marks]

OR

Q.6) a)Write a program in C++ for bubble sort using function template.
[6 marks]

b) Can we specify default value for template arguments? Justify[4 marks]

c) Discuss the need of virtual destructor.   [4 marks]

Q.7) a) Explain the default catch statement with example.   [6 marks]

b) Explain following ostream class function.   [4 marks]
       i)put();
       ii)write();

c) Write a program in C++ using I/O manipulator to print the following
output for Pi=22/7:3.1   3.14   3.143   3.1428.[4 marks]

OR

Q.8) a) Explain following functions: [6 marks]
    i) seekg()   ii) seekp()
    iii) tellg()   iv) tellp()

b) Write a program in C++ to handle "divide by zero" exception.[4 marks]

c) Discuss different methods to open file.   [4 marks]