Roll No……..….. **Total No. of Printed Pages: [01]**
Total No. of Questions: [09]

BCA (Semester-4TH)
ESSENTIALS OF IT
Subject Code: BCSE0-F93
Paper ID: [OE1160124]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a) What is object oriented analysis and design?
b) What is UML?
c) What is SQL?
d) Distinguish between algorithm and flowchart.
e) Name the types of inheritance.
f) What is Polymorphism?
g) How is relational schema represented?
h) What are CSS?
i) What are instance variables?
j) What are the types of web content?

Section – B **(5 marks each)**

Q2. What are the three ways to apply UML?
Q3. What are the various symbols used in a flowchart? Explain.
Q4. Explain the constructor overloading using a suitable illustrative example,
Q5. How SQL can be used as DDL, DML and DCL? Give examples.
Q6. Explain static and dynamic Polymorphism in detail.

Section – C **(10 marks each)**

Q7. For the schema student (id, name, department, course) give the class representation along with the attribute type.
Q8. Explain various data models that are used to represent the underlying structure of the Database.
Q9. Compare various SDLC models in detail.