Answer All Questions   **Time Allowed: 01 Hour**

Q1

a.

What is an object?
Describe the role of the constructor and destructor.
Describe the public and private sections of the class.

b.

What is operator overloading.
What restrictions are placed on operator overloading.
What is an operator function?

Design a class complex to represent a complex numbers. It must have suitable d
constructor and destructor. Include a user-defined constructor to create an object wit
values for real and imaginary part.
Write appropriate methods to **add**, **subtract**, **multiply** and **print** a complex number.

Q2

What does inheritance mean? Explain with example the access level in a child class fro
base class specified as private, protected and public members.

Define a class **circle** consisting of member data *radius* and member functions *are*
perimeter.

Using inheritance define the class **circular-cylinder** consisting member data *radius* and h
and member functions *area* and *volume*.