1. **Write a short note on the evolution of .Net Framework and C#(100 words)**

The .NET Framework is a proprietary software framework developed by Microsoft that runs primarily on Microsoft Windows. It was the predominant implementation of the Common Language Infrastructure until being superseded by the cross-platform .NET project.

* NET Framework in 2002 introduced C#, a language for writing managed code that had a design similar to C++. The framework itself was aimed at Windows-based computers and servers. It had WinForms, a GUI library for desktop applications; ASP.NET, a framework for Web; and ADO.NET for data access.
* The .NET Framework is an open-source platform for developing Windows-based applications, often referred to as Microsoft .net.
* The .NET Framework includes a variety of developer tools and class libraries. The .NET Framework works with applications developed in C#, F#, Visual Basic, and other popular programming.

1. **Explain the following terms;**

* Mono: Open-source implementation of .NET Framework for Linux, macOS, and other non-Windows platforms.
* Xamarin: Cross-platform development platform for mobile apps using C# and .NET.
* COM: (Component Object Model): Microsoft's binary interface standard for interoperability between different programming languages and platforms.
* .NET Core: Open-source, cross-platform implementation of .NET Standard.
* Unity C#: Development environment for creating 2D and 3D games and applications using C#.
* REST: (Representational State Transfer): Architectural style for designing web APIs.

1. **Critically, explain Any three key functions of CLR(50 words)**

* Code Execution: Loads, verifies, and executes code written in various .NET languages.
* Memory Management: Allocates and manages memory for applications, including garbage collection.
* Type Safety: Enforces type safety rules to prevent errors and ensure program stability.