5. How .Net runtime generates executable files from your code?

At the compile time source code can be converted into Microsoft Intermediate Language (MSIL). Microsoft Intermediate Language (MSIL) is a CPU-independent set of instruction or machine code.

Its working as intermediator with user and computer. You can run your program wherever with out copy the source code. You can just copy the IL file from your machine(Dll or .exe). It can run every where.

The Common Language Runtime (CLR) includes a JIT compiler for converting MSIL to native code. The JIT Compiler in CLR converts the MSIL code into native machine code that is then executed by the OS.

Source code in .net ------>Compiler----->MSIL-------->JIT------->Machine code.