

Time - 20 min
Marks - 5

3. Suppose you have a random variable $X \sim F(x)$.
 $F(x)$ is the distribution function.

Your digital computer is capable of generating a continuous random variable with uniform probability density function over the support $[0, 1]$.

How you can program your computer to generate X ?

[P.S: Computer generates only Pseudo-random numbers.
But it's okay for most of our applications.
your assignment requires this program as well.]