**NATIONAL INSTITUTE OF TECHNOLOGY SILCHAR**

**Cachar, Assam**

**B.Tech. IVth Sem**

**Subject Code:** CS216

**Subject Name:** Applied Probability

**Submitted By:**

Name : Subhojit Ghimire

Sch. Id. : 1912160

Branch : CSE – B

1. Write an R program to plot multiple time series using ggplot2 data visualisation package.

* **Steps:**

1. **Install ‘ggplot2’ package and load it.**

> install.packages (“ggplot2”)

> library (ggplot2)

1. **Create multiple time series using data.frame function to store x and y data in each time series.**

#Creating first time series

> x1 <- 1:10

> y1 <- rnorm(10)

> time1 <- data.frame(x1, y1)

#Creating second time series

> x2 <- 1:10

> y2 <- rnorm(10)

> time2 <- data.frame(x2, y2)

#Creating third time series

> x3 <- 1:10

> y3 <- rnorm(10)

> time3 <- data.frame(x3, y3)

1. **Plot the created three time series using ggplot function and geom\_line function.**

> ggplot (time1, aes(x1, y1)) + geom\_line (color = “red”) + geom\_line (aes(x2, y2), color = “blue”) + geom\_line (aes(x3, y3), color = “green”) + xlab (“Time”) + ylab (“Rate”)

