Sri Lanka Institute of Information Technology

Lab Submission
<Lab sheet No 05>

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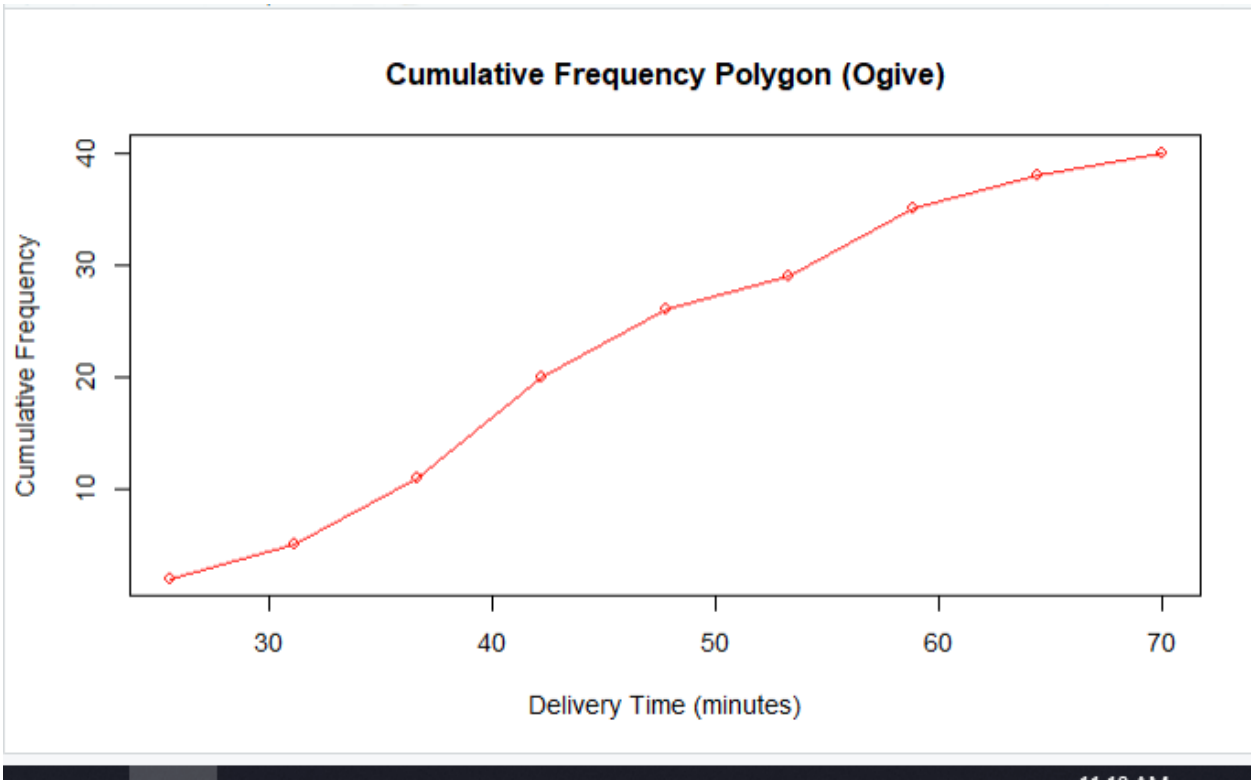
Probability and Statistics - IT2120

B.Sc. (Hons) in Information Technology

Exercise:

```
> setwd("C:\\Users\\it24100919\\Desktop\\IT24100919")
> Delivery_Times <- read.table("Exercise - Lab 05.txt", header = TRUE)
> hist(Delivery_Times$Delivery_Time_.minutes,
+      breaks = seq(20, 70, length.out = 10) ,
+      right = TRUE,
+      col = "lightblue",
+      main = "Histogram of Delivery Times",
+      xlab = "Delivery Time (minutes)",
+      ylab = "Frequency")
>
```


```
> hist_data <- hist(Delivery_Times$Delivery_Time_.minutes,
+                   breaks = seq(20, 70, length.out = 10),
+                   right = TRUE,
+                   plot = FALSE)
> cum_freq <- cumsum(hist_data$counts)
> upper_bounds <- hist_data$breaks[-1]
> plot(upper_bounds, cum_freq, type = "o",
+      main = "Cumulative Frequency Polygon (Ogive)",
+      xlab = "Delivery Time (minutes)",
+      ylab = "Cumulative Frequency",
+      col = "red")
>
```


Cumulative Frequency Polygon (Ogive)
Cumulative Frequency
10
20
30
40
30
40
50
60
70
Delivery Time (minutes)