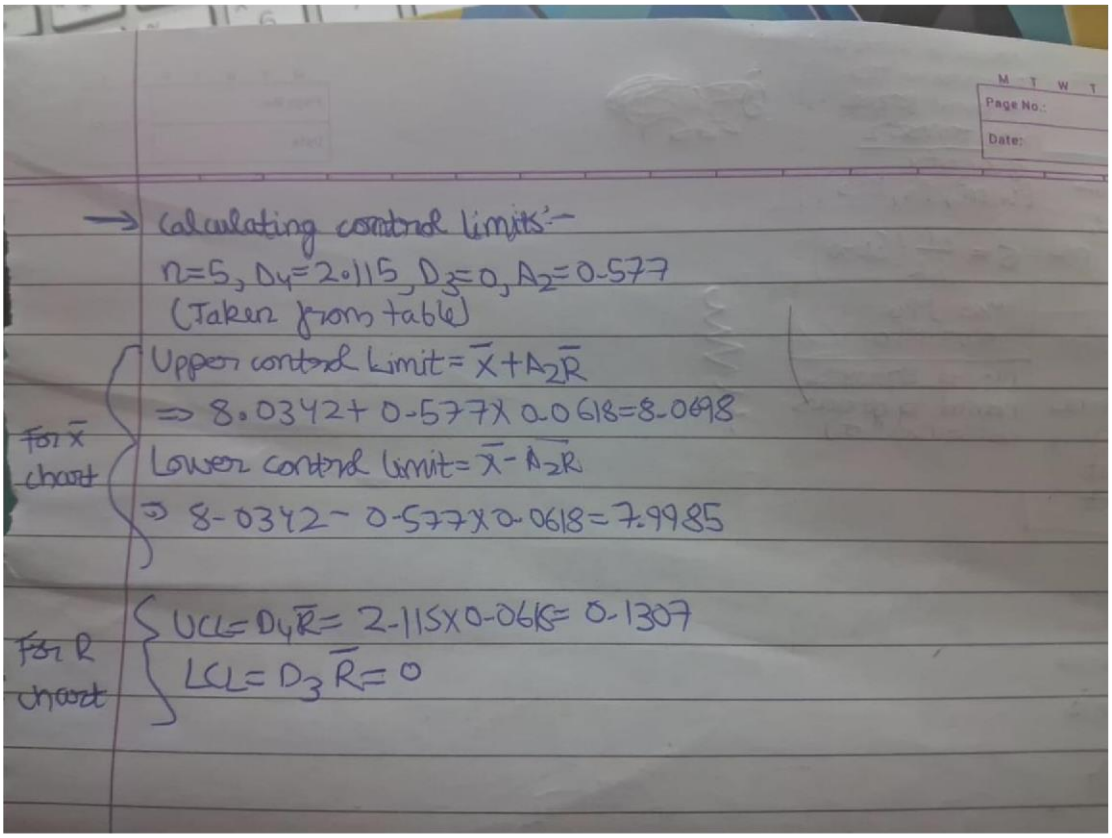
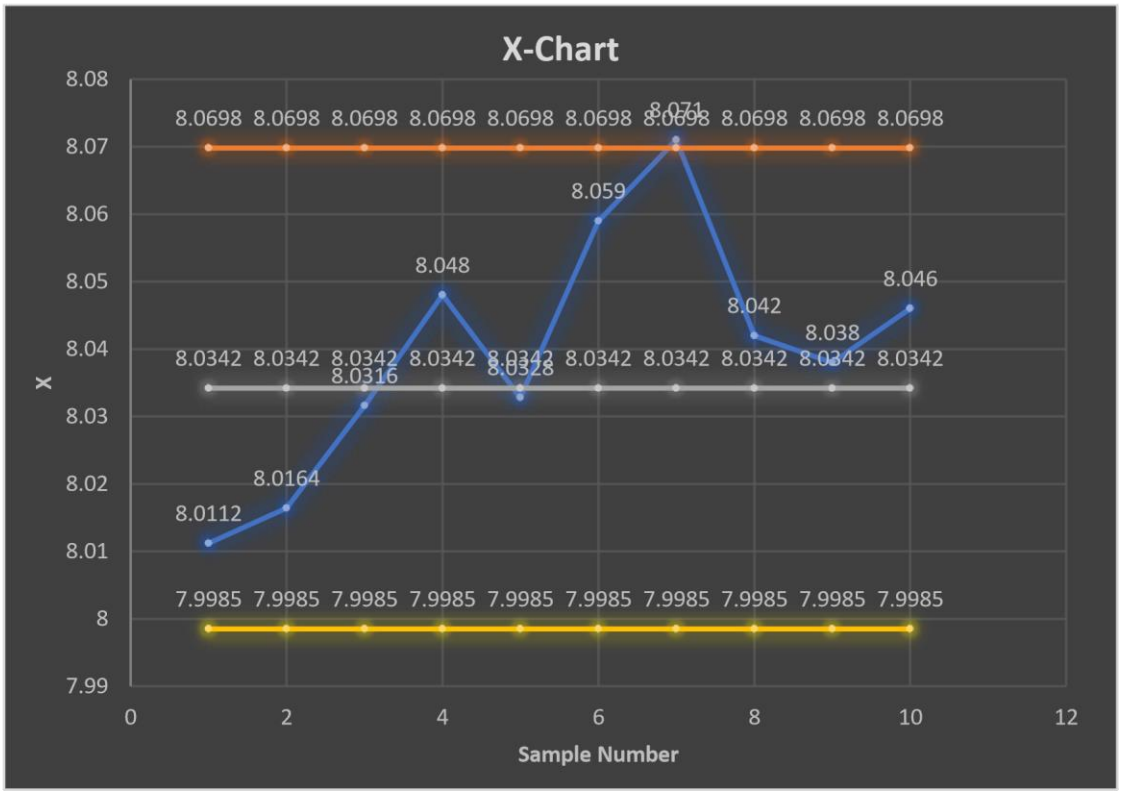
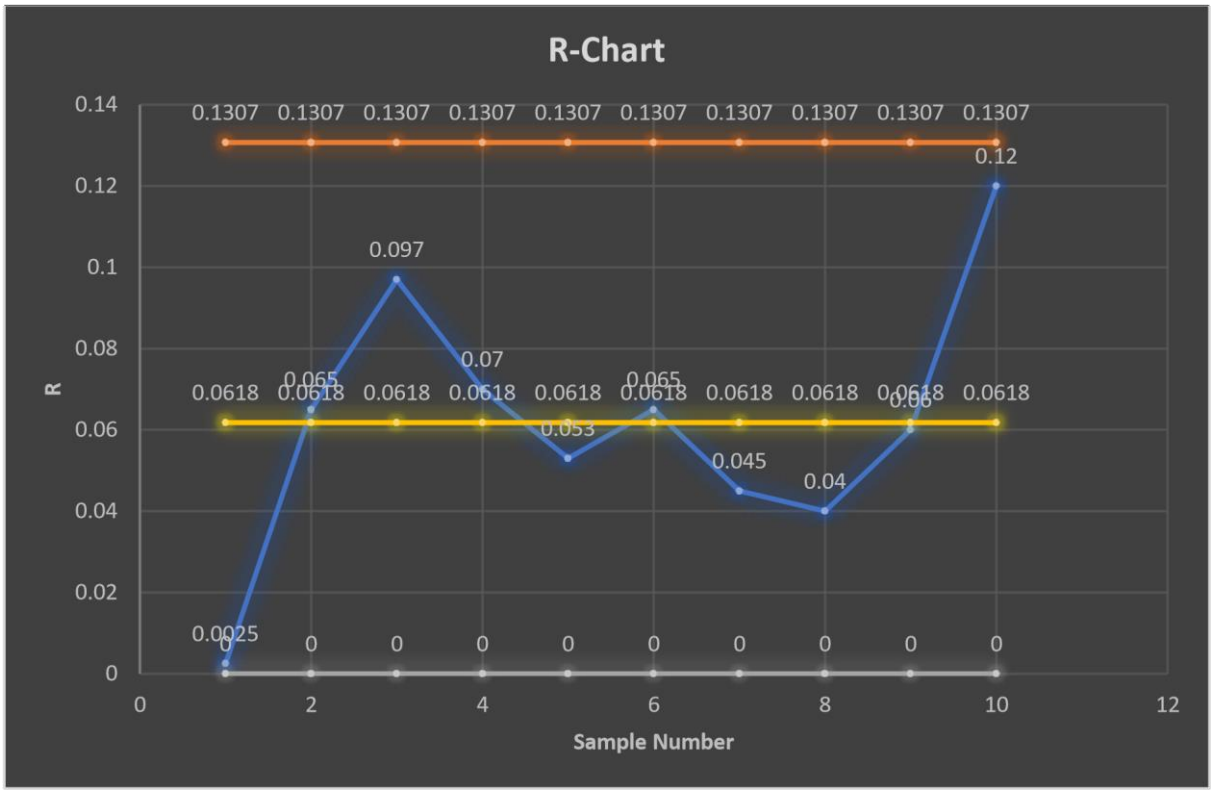
Assignment-Control Charts

Sol.1







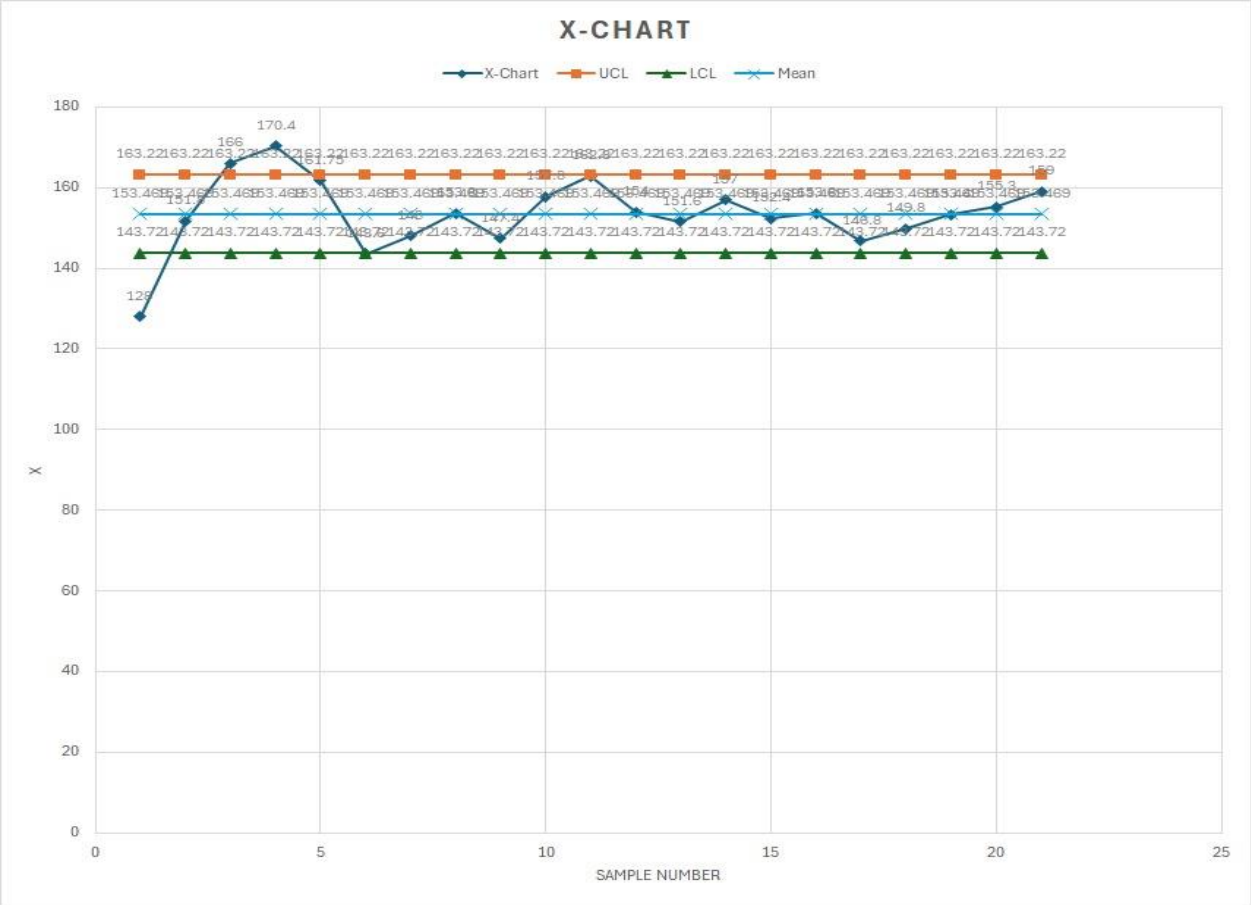
Sol.2

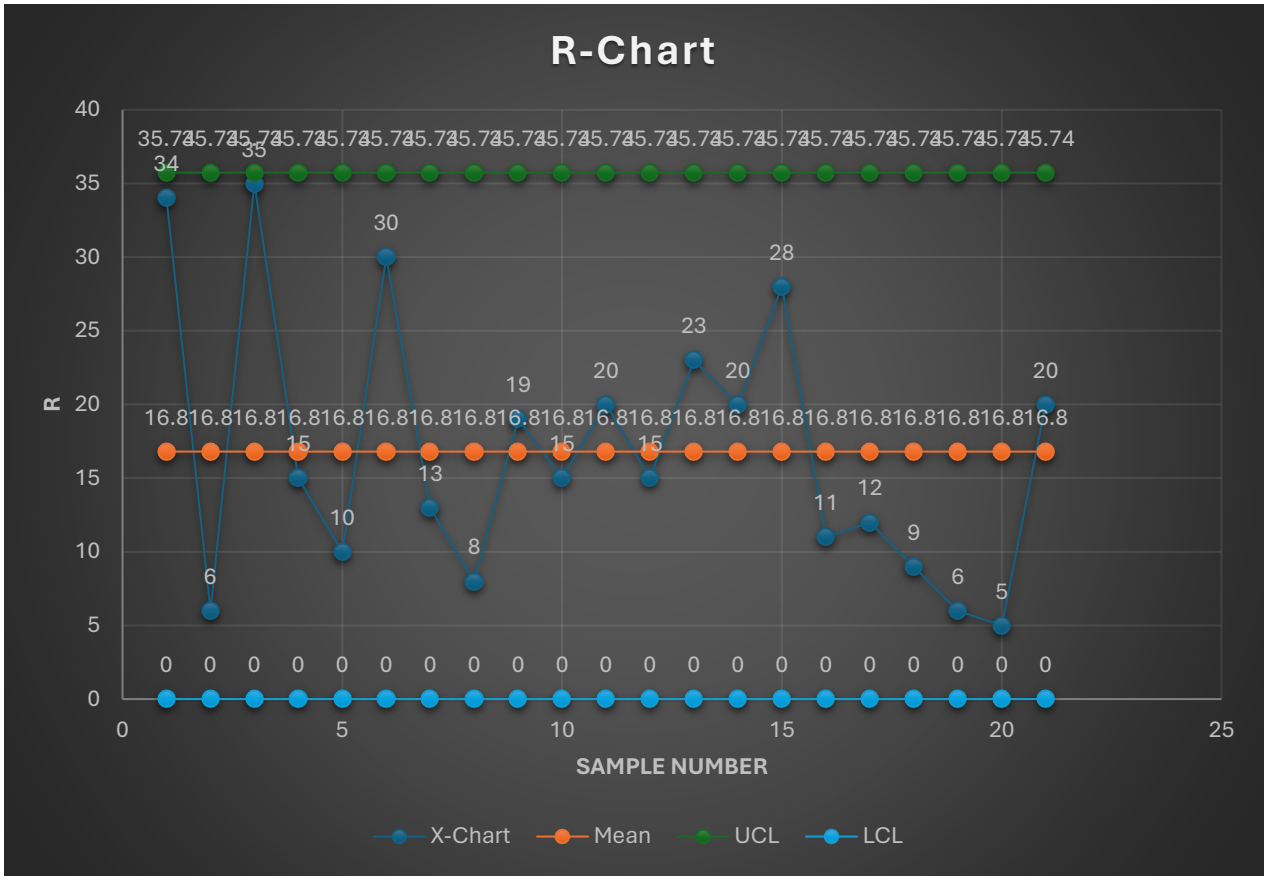
Upon initial examination of the X- and R-charts, it's apparent that the patient's blood sugar levels are not being effectively managed, falling significantly short of the target of maintaining levels below 120. Various strategies could be implemented, such as adjusting medication, reducing carbohydrate intake, or increasing physical activity.

The process is clearly out of control. The average blood sugar levels fluctuate considerably, although there appears to be some stabilization after the sixth week. Furthermore, there is a noticeable decrease in variability in the readings on the R-chart after the 15th week, suggesting a potential improvement. However, despite these observations, the patient remains far from achieving the target blood sugar level.

To address this issue, the patient should consider consulting their healthcare provider to explore options for adjusting medication dosage, increasing exercise frequency, and modifying dietary habits. Seeking professional guidance is essential for effectively managing blood sugar levels and improving overall diabetes control.

Continued use of control charts to monitor blood sugar data is recommended, as it provides valuable insights into trends and patterns over time. By regularly recording data and seeking guidance from healthcare professionals, the patient can work towards achieving the goal of controlling blood sugar levels and managing their diabetes effectively.




R-Chart
R
SAMPLE NUMBER
X-Chart
Mean
UCL
LCL