Q1. PCA - Scree Plot
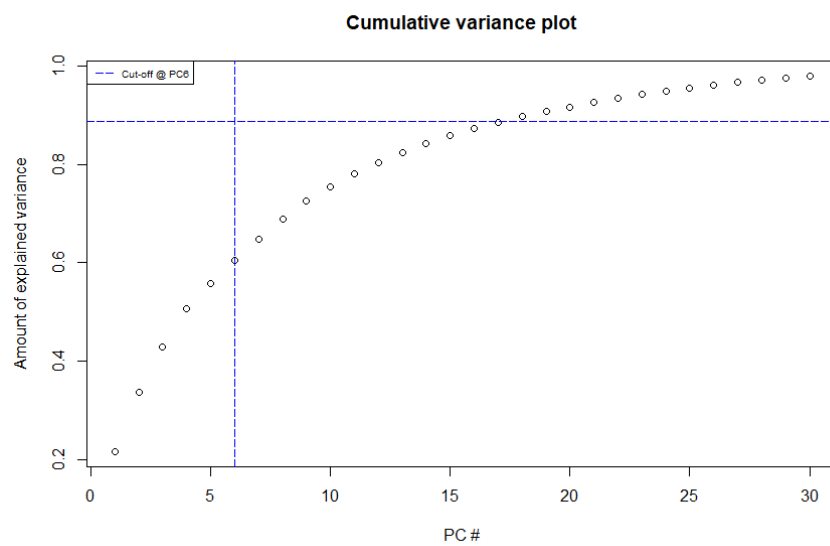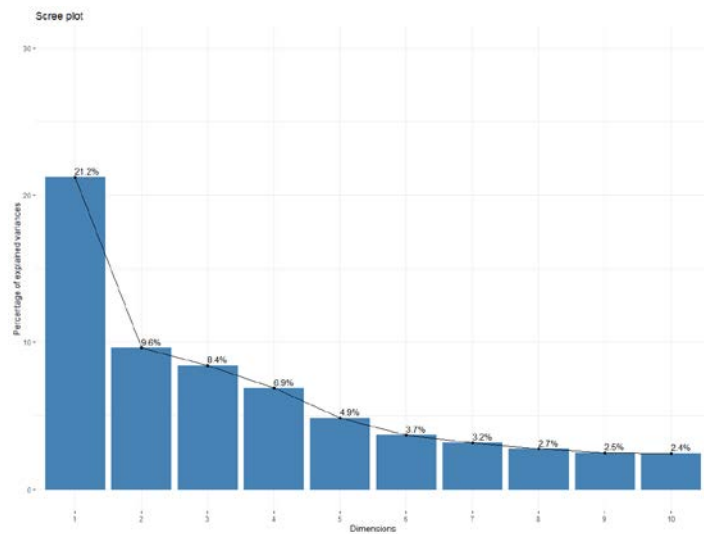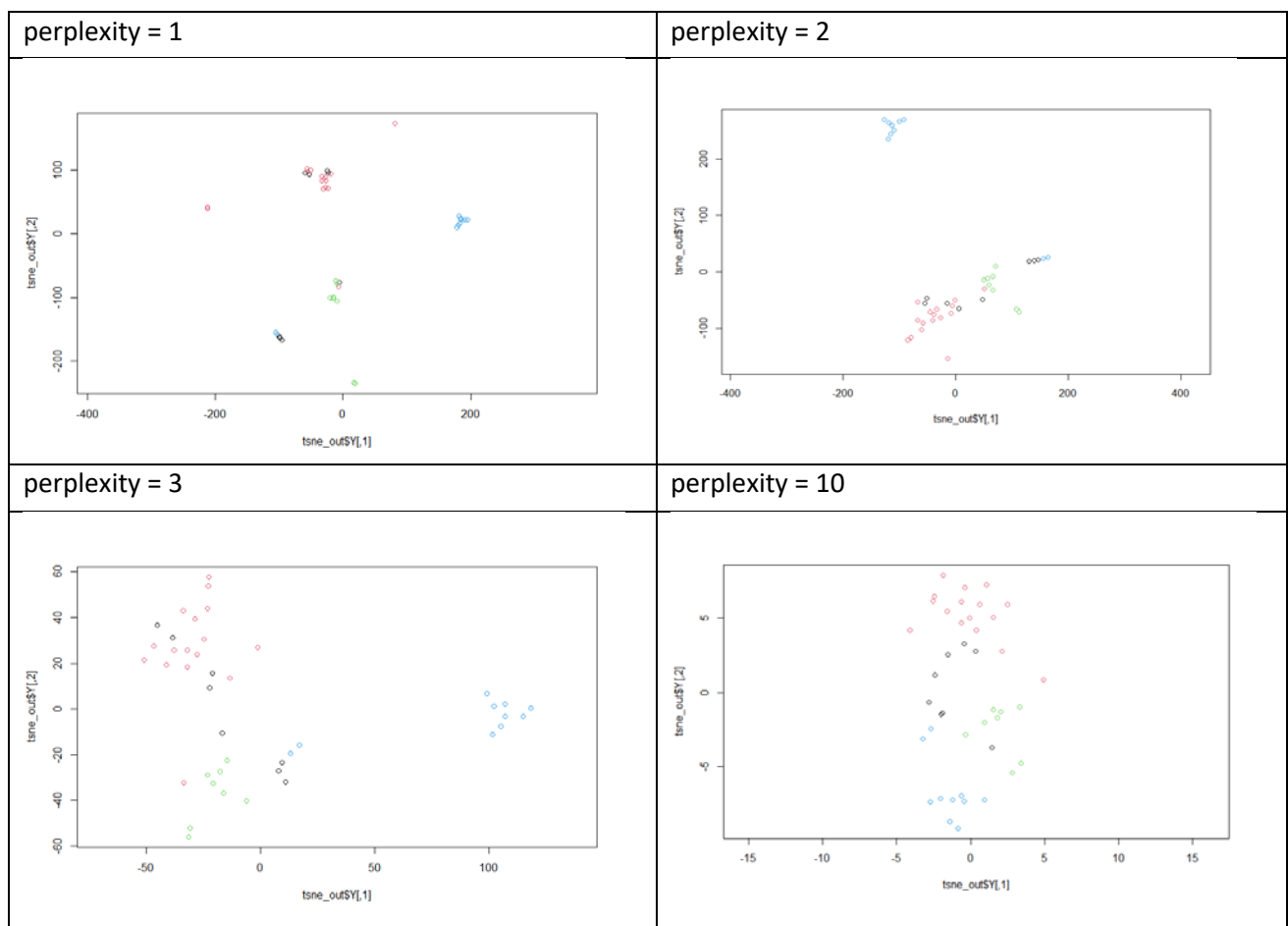

Scree plot

Cumulative variance plot

Q1: TSNE

perplexity = 1	perplexity = 2
perplexity = 3	perplexity = 10

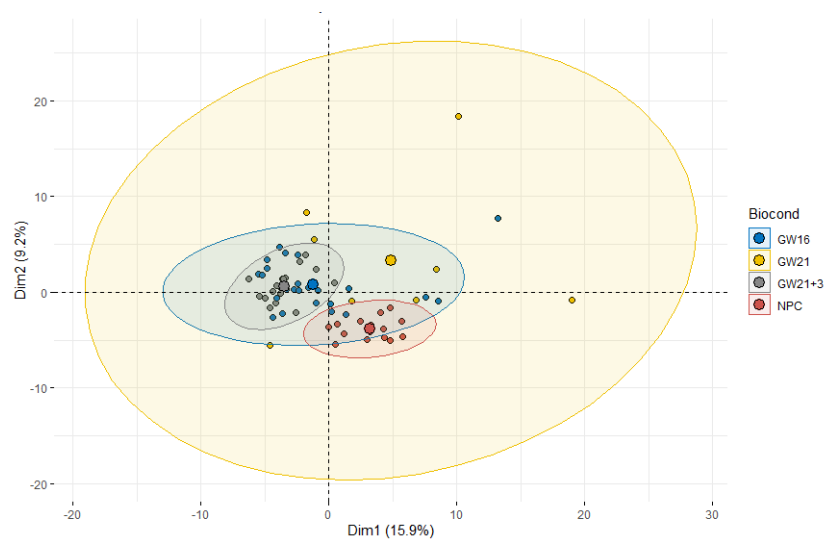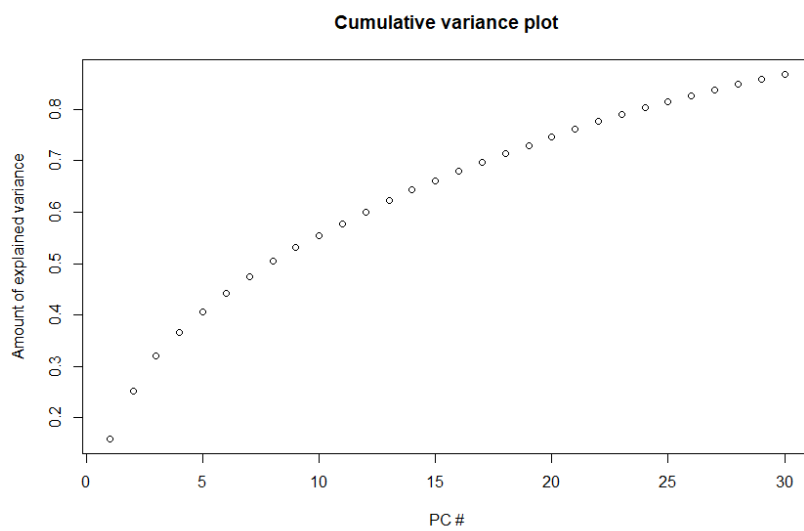Q1 - UMAP

Q1: The TSNE yield the best result for data clustering when perplexity = 3.
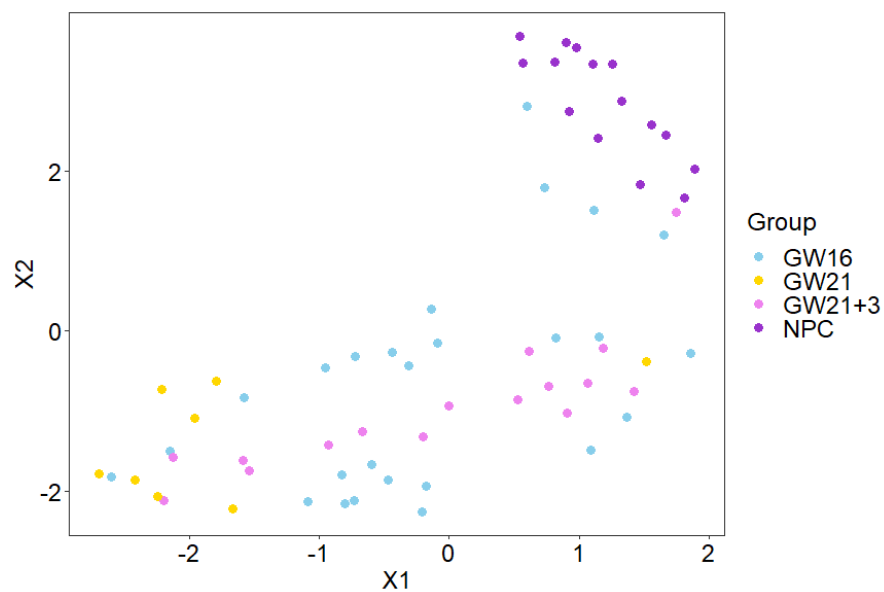
Q2. PCA - Scree Plot

Scree plot

Cumulative variance plot

Q2: TSNE

perplexity = 1	perplexity = 2
perplexity = 4	perplexity = 10
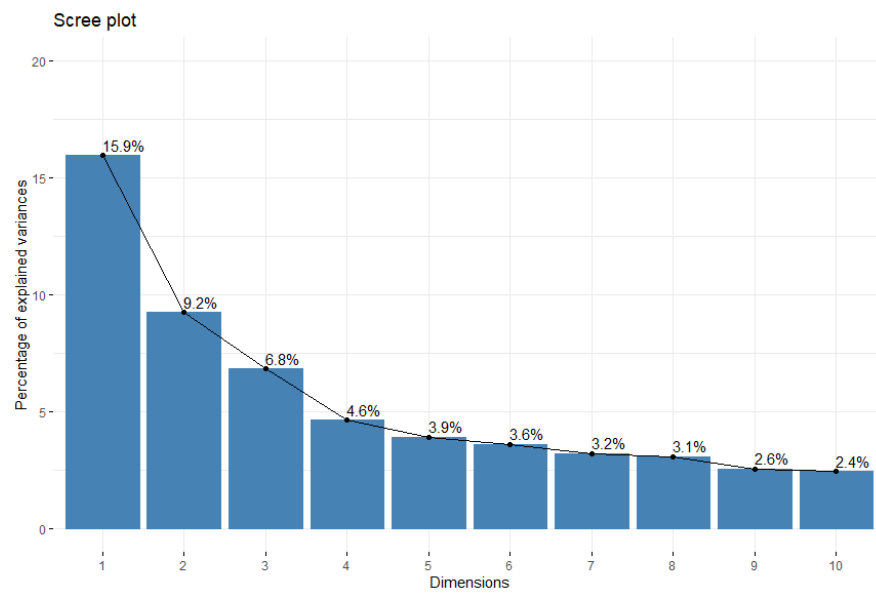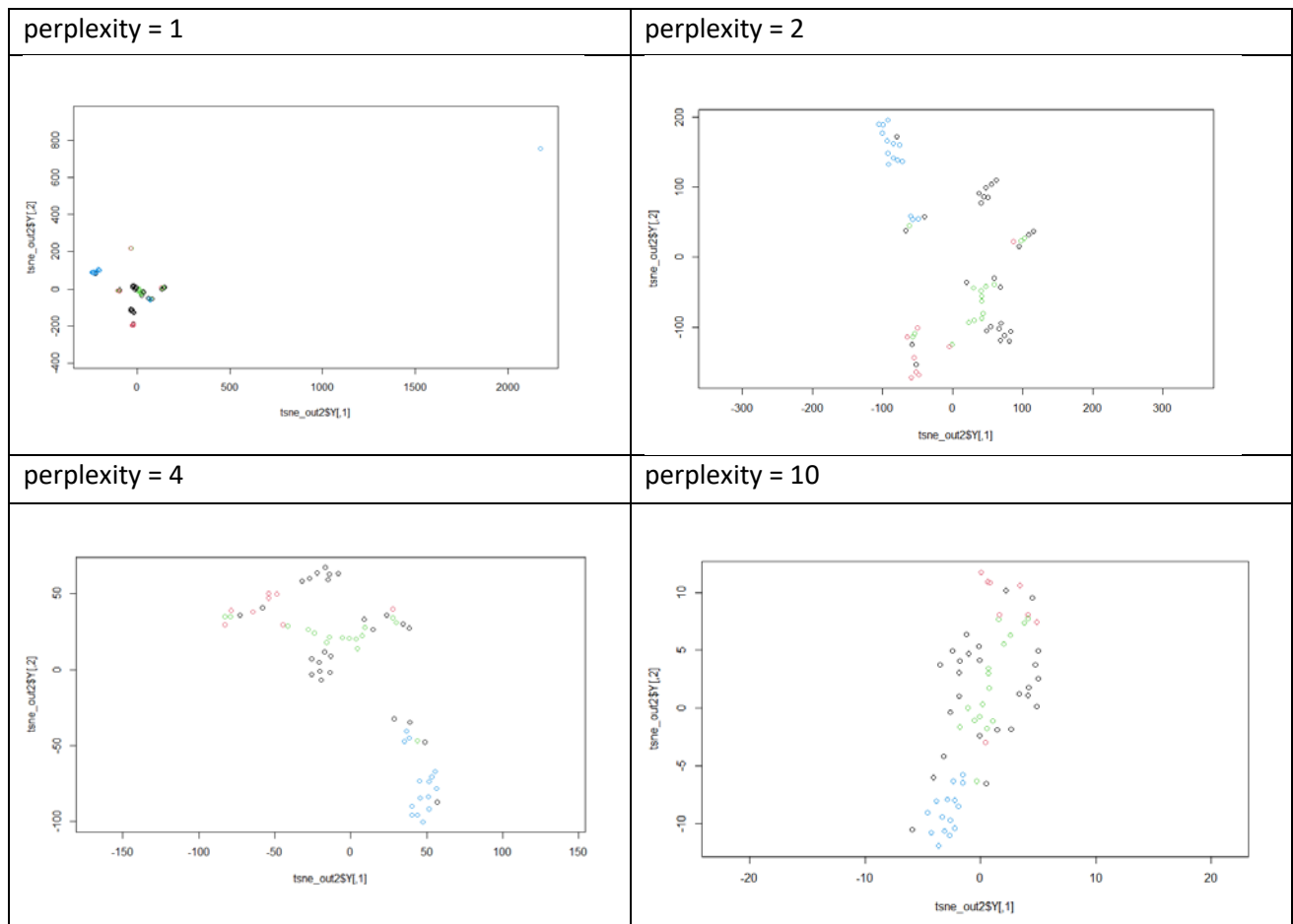
Q2: UMAP

Q2: The TSNE and UMAP yield the similar result for data clustering.