The synthetic data with correlation preserved features will be really effective in training an Autoencoder for non-linear dimensionality reduction.

A dataset with independent features (no-correlation among them) is itself a manifold (i.e if the dataset lies in the R^n space then the manifold is itself R^n). Therefore, the Autoencoder will not be able to reduce the dimension (since there are no low dimensional manifold in the dataset of R^n).

An Autoencoder requires a huge amount of data to properly learn the internal representation of the training dataset. However, the CT-GAN generates synthetic data will not be suitable for Autoencoder training since correlation among features are not preserved.