Answer 1: Machine Learning (ML) is a branch of artificial intelligence (AI) that enables computers to learn from data, improve their performance over time without being explicitly programmed, and make predictions or decisions based on patterns in the data.

Answer 4: Regression is a type of supervised learning where the model predicts a continuous output value based on input variables. The goal is to find the relationship between the independent (input) and dependent (output) variables. Example: Predicting house prices based on features like size and location.

Answer 6: XGBoost (Extreme Gradient Boosting) is an advanced, efficient implementation of gradient boosting, a technique used for supervised learning. It builds an ensemble of decision trees, where each tree corrects the errors of the previous ones. It is known for its speed, accuracy, and scalability in handling large datasets. XGBoost is widely used in machine learning competitions for its high performance.