1. Logistic Regression is well suited when Response is discrete and features are continuous

Ans d

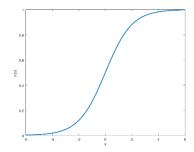
2. Logistic regression can be used in which of the following applications Disease detection

Ans b

3. As $z \to \infty$, $z \to -\infty$, the logistic function approaches the limits

Ans c

4. Plot of the sigmoid is



Ans b

5. The update rule in logistic regression is

$$\bar{\mathbf{h}}(k+1) = \bar{\mathbf{h}}(k) + \eta \left(y(k+1) - g(\bar{\mathbf{x}}(k+1)) \right) \bar{\mathbf{x}}(k+1)$$

Ans c

6. In logistic regression, the quantity $P(y = 1|\overline{x})$ is modeled as 1

$$\frac{1}{1 + e^{-\bar{\mathbf{x}}^T\bar{\mathbf{h}}}}$$

Ans a

- Logistic regression can be imported in PYTHON as from sklearn.linear_model import LogisticRegression Ans c
- 8. StandardScaler can be imported in PYTHON as from sklearn.preprocessing import StandardScaler Ans b
- 9. The metric used to characterize performance of logistic regression is confusion matrix Ans c
- 10. StandardScaler transforms the data to have Zero-mean and unit variance Ans d