1. Which of the following statements about Downsampling is TRUE? 1 / 1 point

- ○ Downsampling is likely to decrease Recall.
- ◉ Downsampling is likely to decrease Precision.
- ○ Downsampling preserves all the original observations.
- ○ Downsampling results in excessive focus on the more frequently-occurring class.

✓ Correct
Correct! You can find more information in the lesson *Upsampling and Downsampling*.

2. Which of the following statements about Random Upsampling is TRUE? 1 / 1 point

- ○ Random Upsampling will generally lead to a higher F1 score.
- ○ Random Upsampling results in excessive focus on the more frequently-occurring class.
- ◉ Random Upsampling preserves all original observations.
- ○ Random Upsampling generates observations that were not part of the original data.

✓ Correct
Correct! You can find more information in the lesson *Upsampling and Downsampling*.

3. Which of the following statements about Synthetic Upsampling is TRUE? 1 / 1 point

- ○ Synthetic Upsampling will generally lead to a higher F1 score.
- ◉ Synthetic Upsampling generates observations that were not part of the original data.
- ○ Synthetic Upsampling results in excessive focus on the more frequently-occurring class.
- ○ Synthetic Upsampling uses fewer hyperparameters than Random Upsampling.

✓ Correct
Correct! You can find more information in the lesson *Upsampling and Downsampling*.

4. What can help humans to interpret the behaviors and methods of Machine Learning models more easily? 1 / 1 point

- ○ Model Debug
- ○ Model Trust
- ○ Explanation Debug
- ◉ Model Explanations

✓ Correct
Correct! Model explanations can help humans to interpret the behaviors and methods of Machine Learning models more easily

5. What type of explanation method can be used to explain different types of Machine Learning models no matter the model structures and complexity? 1 / 1 point

- ○ Model Trust Explanations
- ○ Model Explanations
- ◉ Model-Agnostic Explanations
- ○ Local Interpretable Model-Agnostic Explanations (LIME)

✓ Correct
Correct! The Model-Agnostic explanation can be used to describe different types of Machine Learning models no matter the complexity while also having the same formats and presentations for model explanations?

6. What reason might a Global Surrogate model fail? 1 / 1 point

- ○ Single clusters in the data instance groups
- ○ Consistency between surrogate models and black-box models
- ○ Single data instance groups
- ◉ Large inconsistency between surrogate models and black-box models

✓ Correct
Correct! A Global Surrogate model might fail if there is a large inconsistency between surrogate models and black-box models.

7. When working with unbalanced sets, what should be done to the samples so the class balance remains consistent in both the train and test set? 1 / 1 point

- ◉ Stratify the samples
- ○ Use a combination of oversampling and undersampling
- ○ Use oversampling
- ○ Apply weighted observations

✓ Correct
Correct! You should stratify the samples so the class balance remains consistent in both the train and test set.

8. What approach are you using when trying to increase the size of a minority class so that it is similar to the size of the majority class? 1 / 1 point

- ○ Random Oversampling
- ○ Synthetic Oversampling
- ◉ Oversampling
- ○ Undersampling

✓ Correct
Correct! You are oversampling when trying to increase the size of a minority class so that it is similar to the size of the majority class

9. What approach are you using when you create a new sample of a minority class that does not yet exist? 1 / 1 point

- Weighting
- Oversampling
- Random Oversampling
- Synthetic Oversampling

Correct
Correct! Synthetic Oversampling is an approach used to create a new sample of a minority class that does not yet exist.

10. What intuitive technique is used for unbalanced datasets that ensures a continuous downsample for each of the bootstrap samples? 1 / 1 point

- Upsampling
- Downsampling
- SMOTE
- Blagging

Correct
Correct! Blagging is an intuitive technique used for unbalanced datasets that ensures a continuous downsample for each of the bootstrap samples.