

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

1 / 1 point

- ☐ Downsampling preserves all the original observations.
- ☒ Downsampling is likely to decrease Precision.
- ☐ Downsampling is likely to decrease Recall.
- ☐ 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 preserves all original observations.
- ☐ Random Upsampling results in excessive focus on the more frequently-occurring class.
- ☐ 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 results in excessive focus on the more frequently-occurring class.
- ☐ Synthetic Upsampling uses fewer hyperparameters than Random Upsampling.
- ☒ Synthetic Upsampling generates observations that were not part of the original data.
- ☐ Synthetic Upsampling will generally lead to a higher F1 score.



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 Trust
- ☐ Explanation Debug
- ☐ Model 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
- ☐ Local Interpretable Model-Agnostic Explanations (LIME)
- ☒ Model-Agnostic Explanations
- ☐ Model Explanations



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

- ☐ Consistency between surrogate models and black-box models
- ☐ Single clusters in the data instance groups
- ☐ 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

- ☐ Apply weighted observations
- ☐ Use oversampling
- ☒ Stratify the samples
- ☐ Use a combination of oversampling and undersampling



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

- ☒ Oversampling
- ☐ Synthetic Oversampling
- ☐ Undersampling
- ☐ Random Oversampling



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

- ☒ Synthetic Oversampling
- ☐ Oversampling
- ☐ Weighting
- ☐ Random 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

- ☐ Downsampling
- ☒ Blagging
- ☐ SMOTE
- ☐ Upsampling



Correct

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