

Section2: Cross-validation and Parameter Tuning

Now that you are done with the videos of section 2, let's assess your learning. Here, are a few questions, followed by 4 options, out of which 1 is the correct option. Select the right option and validate your learning! The answers are provided in a separate sheet

Q1. How many estimates of the performance metrics can you get when using K-fold cross validation?

- a. 1
- b. $K - 1$
- c. K
- d. $K + 1$

Q2. Besides getting a more accurate estimation of the performance metrics, K-fold cross-validation is useful for:

- a. Hyper-parameter tuning
- b. Getting more samples
- c. Better visualization of the model
- d. Improve the performance metrics

Q3. What are hyper-parameters?

- a. Parameters that are not directly learnt within estimators
- b. Parameters of the meta-estimator
- c. Parameters that cannot be adjusted
- d. None of the above

Q4. Which scikit-learn class is used to look for the best parameters from a specified grid using cross-validation?

- a. BaseSearchCV
- b. SeachCV
- c. CrossValidationSearch
- a. GridSearchCV