MCQ_FILE_2_ASSIGNMENT

QUES 21: When implementing linear regression of some dependent variable y on the set of independent variables $\mathbf{x} = (x_1, …, x_r)$, where r is the number of predictors, which of the following statements will be true?

ANSWER. a) $\beta_0, \beta_1, …, \beta_r$ are the regression coefficients.

QUES 22. What indicates that you have a perfect fit in linear regression?

ANSWER. D) The value R^2 = 1, which corresponds to SSR = 0.

QUES 23. In simple linear regression, the value of what shows the point where the estimated regression line crosses the y axis?

ANSWER. A) Y

QUES 24. Which one represents an underfitted model?

ANSWER. D) The top-left plot.

QUES 25. There are five basic steps when you're implementing linear regression:

Answer. D) d, b, e, a, c.

QUES 26. Which of the following are optional parameters to LinearRegression in scikit-learn?

Answer. B) fit_intercept.

QUES 27. While working with scikit-learn, in which type of regression do you need to transform the array of inputs to include nonlinear terms such as x^2?

Answer. c) Polynomial Regression.

QUES 28. You should choose statsmodels over scikit-learn when:

Answer. C) You need more detailed results.

QUES 29. _____ is a fundamental package for scientific computing with Python. It offers comprehensive mathematical functions, random number generators, linear algebra routines, Fourier transforms, and more. It provides a high-level syntax that makes it accessible and productive.

Answer. B) Numpy.

QUES 30. _____ is a Python data visualization library based on Matplotlib. It provides a high-level interface for drawing attractive and informative statistical graphics that allow you to explore and understand your data. It integrates closely with pandas data structures.

Answer. B) Seaborn.