21 When implementing linear regression of some dependent variable y on the set of independent variables x = (x1, ..., xr), where r is the number of predictors, which of the following statements will be true?

Ans - d) Both and b

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

Ans - d) The value R2 = 1, which corresponds to SSR = 0

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

Ans - b) B0

24) Check out these four linear regression plots:

Which one represents an **underfitted** model?

Ans - d) The top-left plot

25) There are five basic steps when you're implementing linear regression:
• **a.** Check the results of model fitting to know whether the model is satisfactory.
• **b.** Provide data to work with, and eventually do appropriate transformations.
• **c.** Apply the model for predictions.
• **d.** Import the packages and classes that you need.
• **e.** Create a regression model and fit it with existing data.
However, those steps are currently listed in the wrong order. What's the correct order?
Ans - d) d, b, e, a, c

26) Which of the following are optional parameters to LinearRegression in scikit-learn?
Ans - c) normalize

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?
Ans - c) Polynomial regression

28) You should choose statsmodels over scikit-learn when:
Ans - c) You need more detailed results.

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.
Ans - b) Numpy

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.
Ans - b) Seaborn