21 When implementing linear regression of some dependent variable y on the set of independent.
variables **x** = (x_1, ⋯, x_r), where r is the number of predictors, which of the following statements will
be true?

Ans : Both a and b

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

Ans : d) The value R^2 = 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 : a) Y

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 : b) fit_intercept

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