In [1]:

```python
#Generating a function for PDF such that getting the aruguments
def get_pdf_probability(dataset,startrange,endrange):

    #Importing necessary libraries for visual representation
    from matplotlib import pyplot
    from scipy.stats import norm
    import seaborn as sns


    # Plotting distribution plot with density curve in blue col
    ax = sns.distplot(dataset,kde=True,kde_kws={'color':'blue'}


    # Making initial & end range axis vertical line visible
    pyplot.axvline(startrange,color='Red')
    pyplot.axvline(endrange,color='Red')


    # Generating a sample
    sample = dataset


    # Calculating parameters like mean & std and displaying the
    sample_mean =sample.mean()
    sample_std = sample.std()
    print('Mean=%.3f, Standard Deviation=%.3f' % (sample_mean,


    # Defining the distribution by giving mean & std as input
    dist = norm(sample_mean, sample_std)

    # Sample probabilities for a range of outcomes
    values = [value for value in range(startrange, endrange)]
    probabilities = [dist.pdf(value) for value in values]

    # For whole probality
    prob=sum(probabilities)
    print("The area between range({},{}):{}".format(startrange,
    return prob
```

Graph

In [8]:
```
1  get_pdf_probability(dataset["ssc_p"],30,80)
```

Mean=67.303, Standard Deviation=10.827
The area between range(30,80):0.8698639973987944

/var/folders/07/ykgp85052b11h5kz22ghn8l40000gn/T/ipykernel_43901/2842244316.py:5: Us

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  ax = sns.distplot(dataset,kde=True,kde_kws={'color':'blue'},color='Green')

Out[8]: 0.8698639973987944