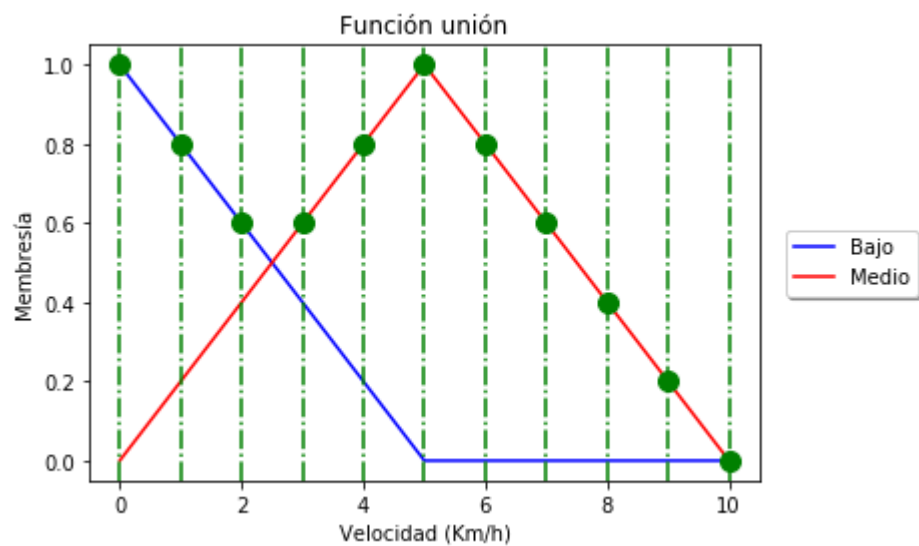


In [4]:

```

1  import numpy as np
2  import skfuzzy as sk
3  import matplotlib.pyplot as plt
4
5  x = np.arange(0, 11, 1)
6
7  bajo = sk.trimf(x,[0, 0, 5])
8  medio = sk.trimf(x,[0, 5, 10])
9
10 plt.figure()
11 plt.plot(x,bajo, 'b', linewidth = 1.5, label = 'Bajo')
12 plt.plot(x,medio, 'r', linewidth = 1.5, label = 'Medio')
13
14 plt.title('Función unión')
15 plt.ylabel('Membresía')
16 plt.xlabel('Velocidad (Km/h)')
17 plt.legend(loc='center right', bbox_to_anchor=(1.25,0.5), ncol=1, fancybox=T
18
19 plt.axvline(x=0, ymin=0, ymax=10, color="g", linestyle='-.')
20 plt.axvline(x=1, ymin=0, ymax=10,color="g", linestyle='-.')
21 plt.axvline(x=2, ymin=0, ymax=10, color="g", linestyle='-.')
22 plt.axvline(x=3, ymin=0, ymax=10,color="g", linestyle='-.')
23 plt.axvline(x=4, ymin=0, ymax=10, color="g", linestyle='-.')
24 plt.axvline(x=5, ymin=0, ymax=10, color="g", linestyle='-.')
25 plt.axvline(x=6, ymin=0, ymax=10, color="g", linestyle='-.')
26 plt.axvline(x=7, ymin=0, ymax=10, color="g", linestyle='-.')
27 plt.axvline(x=8, ymin=0,ymax=10, color="g", linestyle='-.')
28 plt.axvline(x=9, ymin=0, ymax=10, color="g", linestyle='-.')
29 plt.axvline(x=10, ymin=0, ymax=10, color="g", linestyle='-.')
30
31 plt.plot(0,1, marker='o', markersize=10, color="g")
32 plt.plot(1,0.8, marker='o', markersize=10, color="g")
33 plt.plot(2,0.6, marker='o', markersize=10, color="g")
34 plt.plot(3,0.6, marker='o', markersize=10, color="g")
35 plt.plot(4,0.8, marker='o', markersize=10, color="g")
36 plt.plot(5,1, marker='o', markersize=10, color="g")
37 plt.plot(6,0.8, marker='o', markersize=10, color="g")
38 plt.plot(7,0.6, marker='o', markersize=10, color="g")
39 plt.plot(8,0.4, marker='o', markersize=10, color="g")
40 plt.plot(9,0.2, marker='o', markersize=10, color="g")
41 plt.plot(10,0, marker='o', markersize=10, color="g")
42
43 plt.show()
44 sk.fuzzy_or(x, bajo, x, medio)

```



```
Out[4]: (array([ 0,  1,  2,  3,  4,  5,  6,  7,  8,  9, 10]),  
         array([1. , 0.8, 0.6, 0.6, 0.8, 1. , 0.8, 0.6, 0.4, 0.2, 0. ]))
```

```
In [ ]: 1
```