Q Calculating Mode for the following frequency Distribution.

C.I	f
0-10	3
10-20	5
20-30	7
30-40	10
40-50	12
50-60	15
60-70	12
70-80	6
80-90	2
90-100	8

$$M_0 = L + \frac{i(f_1 - f_0)}{2f_1 - f_0 - f_2}$$

f_0 = frequency preceding the modal class

f_2 = frequency succeeding the modal class.

50 - 60 is the C.I with highest frequency 15. Hence 50 - 60 is the modal class.

$$= 50 + \frac{10(15-12)}{2(15)-12-12}$$

$$= 50 + \frac{10(3)}{30-24}$$

$$= 50 + \frac{30}{6}$$

$$= 50 + 5 = 55$$

$$m_0 = 55$$