

An 80 MHz carrier is modulated by 400 Hz sine wave. The carrier voltage is 5V and the frequency deviation is 20 kHz. Find modulation index.

(a) 25

(b) 50

(c) 400

(d) 5

(e) 20

$$(b) m_f = \frac{\delta}{f_M} = \frac{200000}{400} = 50.$$