

A transmitter radiates 12 kW power at 80% modulation index. The power in carrier is nearly

(a) 8.21 kW.

(b) 6.66 kW.

(c) 7.4 kW.

(d) 9.09 kW.

$$(d) P_{\text{carrier}} = \frac{P_{\text{Total}}}{1 + \frac{m_a^2}{2}} = \frac{12}{1.32} = 9.09 \text{ kW.}$$