

# Assignment

## GATE 2023, EC-27

EE23BTECH11215 - Penmetsa Srikar Varma

### QUESTION

Q27) Let  $m(t)$  be a strictly band-limited signal with bandwidth  $B$  and energy  $E$ . Assuming  $\omega_0 = 10B$ , the energy in the signal  $m(t) \cos(\omega_0 t)$

- (A)  $\frac{E}{4}$       (B)  $\frac{E}{2}$       (C)  $E$       (D)  $2E$