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$A_1 - \gamma, A_2 - \delta, A_3 - \alpha, A_4 - \gamma, A_5 - \gamma$

Θεμα Β $B_1 - \Gamma$

$$P_{\mu} = V_{\text{eff}} \cdot I_{\text{eff}} = \frac{V}{\sqrt{2}} \cdot \frac{I}{\sqrt{2}} = \frac{N\omega BA \cdot N\omega BA}{4R} \Rightarrow$$

$$P_{\mu} = \frac{N^2 \omega^2 B^2 A^2}{4R} \sim \omega^2$$

$B_{2,1} - \alpha$, διότι $\bar{K} = \frac{3}{2} kT$

$B_{2,2} - \gamma$, διότι $PV = NkT \Rightarrow$

$$P = \frac{NkT}{V}$$

Θεμα Γ



$$\alpha) \frac{T}{4} = 5 \cdot 10^{-3} \text{ s} \Rightarrow T = 20 \cdot 10^{-3} \text{ s}$$

$$f = \frac{1}{20 \cdot 10^{-3}} \text{ Hz} = 50 \text{ Hz}$$

$$V = I \cdot R = 10 \cdot 5 = 50 \text{ V}$$

β) $P_{\text{max}} = V \cdot I = 50 \cdot 10 = 500 \text{ W}$

γ) $P_{\mu} = V_{\text{eff}} \cdot I_{\text{eff}} = \frac{V \cdot I}{2} = 250 \text{ W}$