



ΠΡΟΤΕΙΝΟΜΕΝΕΣ
ΑΠΑΝΤΗΣΕΙΣ ΘΕΜΑΤΩΝ

ΘΕΜΑ Α

A1. α. Σ β. Λ γ. Σ δ. Λ ε. Λ

A2. 1. στ, 2. δ, 3. ε, 4. β, 5. α

ΘΕΜΑ Β

B1. (1) αέρα, (2) κατανομής, (3) μεγάλων, (4) κυκλοφορία, (5) ακτινοβολίας

B2. α. 6.2.3 Σελ. 82

β. 6.2.1 Σελ. 79

ΘΕΜΑ Γ

Γ1. 1.1.2 Σελ. 10

Γ2. 2.2.2 Σελ. 33

ΘΕΜΑ Δ

Δ1. α. $w = \frac{Q_{\lambda}}{H * \eta} = \frac{85000}{10000 * 0,85} = \frac{8,5}{0,85} = \frac{850}{85} = 10 \frac{kg}{h}$

β. $M = w * T \rightarrow 2400 = 10 * T \rightarrow T = \frac{2400}{10} = 240 \frac{h}{\acute{\epsilon}τος}$



Δ2. α.

$$V_1 = \frac{Q_1}{\Delta t} = \frac{1600}{15} = \frac{320}{3} \frac{lt}{h} \approx 107 \frac{lt}{h}$$

$$V_2 = \frac{Q_2}{\Delta t} = \frac{1400}{15} = \frac{280}{3} \frac{lt}{h} \approx 93 \frac{lt}{h}$$

β.

$$V = V_1 + V_2 = \frac{320}{3} + \frac{280}{3} = \frac{600}{3} = 200 \frac{lt}{h}$$

$$\Delta t_1 = \frac{Q_1}{V} = \frac{1600}{200} = 8^\circ C$$

$$\Delta t_2 = \frac{Q_2}{V} = \frac{1400}{200} = 7^\circ C$$

$$t_{v1} = t_v = 90^\circ C$$

$$\Delta t_1 = t_{v1} - t_{r1} \rightarrow 8 = 90 - t_{r1} \rightarrow t_{r1} = 90 - 8 = 82^\circ C$$

$$t_{v2} = t_{r1} = 82^\circ C$$

$$\Delta t_2 = t_{v2} - t_{r2} \rightarrow 7 = 82 - t_{r2} \rightarrow t_{r2} = 82 - 7 = 75^\circ C$$

γ.

$$t_{m1} = \frac{t_{v1} + t_{r1}}{2} = \frac{90 + 82}{2} = \frac{172}{2} = 86^\circ C$$

$$t_{\varepsilon v1} = t_{m1} - t_\chi = 86 - 20 = 66^\circ C$$

$$t_{m2} = \frac{t_{v2} + t_{r2}}{2} = \frac{82 + 75}{2} = \frac{157}{2} = 78,5^\circ C$$

$$t_{\varepsilon v2} = t_{m2} - t_\chi = 78,5 - 20 = 58,5^\circ C$$