

ΘΕΜΑ Α

(A₁) α) Λ β) Λ γ) Σ δ) Σ ε) Λ

(A₂) β (A₃) δ

ΘΕΜΑ Β

B₁) α) < 6€ λ 96 - 6€ λ 97 > 6x. βιβλίο
β) < 6€ λ 97 - 6€ λ 98 > 6x. βιβλίο

ΘΕΜΑ Γ

$$\textcircled{\Gamma_1} \quad MP = \frac{\Delta Q}{\Delta L} \Rightarrow 60 = \frac{800 - 200}{L - 10} \Rightarrow 60(L - 10) = 600$$

$$\Rightarrow L - 10 = \frac{600}{60} \Rightarrow L - 10 = 10 \Rightarrow \boxed{L = 20}$$

$$AP = \frac{800}{20} = 40$$

$$L = 40 \Rightarrow AP_{\max} \Rightarrow AP = MP$$

$$\frac{Q}{L} = \frac{\Delta Q}{\Delta L} \Rightarrow \frac{Q}{40} = \frac{Q - 1500}{40 - 30}$$

$$\Rightarrow 10Q = 40(Q - 1500) \Rightarrow Q = 4Q - 6000$$

$$3Q = 6000$$

$$\boxed{Q = 2000}$$

ΘΕΜΑ Γ

6ωχροια Γ₁

$$AP = \frac{2000}{40} = 50$$

$$MP = \frac{2000 - 1500}{40 - 30} = \frac{500}{10} = 50$$

$$40 = \frac{Q - 2000}{50 - 40} \Rightarrow 400 = Q - 2000 \Rightarrow Q = 2400$$

$$AP = \frac{2400}{50} = 48$$

$$0 = \frac{Q - 2400}{60 - 50} \Rightarrow 0 = Q - 2400 \Rightarrow Q = 2400$$

$$AP = \frac{2400}{60} = 40$$

$$MP = \frac{2100 - 2400}{70 - 60} = \frac{-300}{10} = -30$$

Γ₂ θεωρία εχ. βιβλίο (σελ 59)
(iv) Οι μεταβολές τα μέσου προϊόντος είναι μικρότερες
----- και του προϊόντος

Γ₃ $1150 + 850 = 2000 \rightarrow Q$

$$MP = \frac{\Delta Q}{\Delta L} \Rightarrow 70 = \frac{1500 - 1150}{30 - L} \Rightarrow 70(30 - L) = 350$$

$$30 - L = 5$$

$$L = 25$$

αφ' οι ερχόμενοι πρέπει να

αύξουν
κατά 15

$$40 - 25 = 15$$

ΘΕΜΑ Γ 6ωχροί

Γ₄

$$VC = N \cdot L + C \cdot Q$$

$$19.200 = 100 \cdot 32 + C \cdot 1600$$

$$19.200 = 3200 + C \cdot 1600$$

$$C \cdot 1600 = 19.200 - 3200$$

$$C \cdot 1600 = 16.000$$

$$C = \frac{16.000}{1600} = 10 \text{ χρ.μ.}$$

$$MP = \frac{\Delta Q}{\Delta L}$$

$$50 = \frac{2000 - Q}{40 - 32}$$

$$400 = 2000 - Q$$

$$Q = 1600$$

Γ₅

$$Q = 1600$$

$$VC = ;$$

$$L = 32$$

$$VC = 100 \cdot 32 + 10 \cdot 1600$$

$$VC = \underbrace{3200}_{\text{εργασία}} + \underbrace{16000}_{\text{πρώτες ύλες}} = 19.200$$

$$\text{Ποσοστό εργασίας} : \frac{3200}{19.200} \cdot 100 = 16,7 \%$$

$$\text{Ποσοστό πρώτων υλών} : \frac{16000}{19.200} \cdot 100 = 83,3 \%$$

ΘΕΜΑ Δ

$$2021 : \pi\lambda = 2000 \quad \text{οικ. μτ ενεργός} = 200 + 200 + 100 = 500$$

$$\Delta_1 \quad \alpha\rho\alpha \quad \text{εργατικό δυναμικό} = 2000 - 500 = 1500$$

$$\alpha\nu\epsilon\rho\gamma\omicron\iota = 1500 - 1440 = 60 \alpha\tau\omicron\upsilon\alpha$$

$$\pi.A = \frac{60}{1500} \cdot 100 = 4\%$$

$$\Delta_2 \quad \perp \text{ ερχ} \begin{matrix} \nearrow 4x \\ \searrow 8\psi \end{matrix} \quad K(x=2000, \psi=8000) \\ P_x = 4 \quad P_\psi = 2$$

$$\text{ΑΕΠ}_{\pi\rho\tau} 2021 = P_x \cdot Q_x + P_\psi \cdot Q_\psi = 4 \cdot 2000 + 2 \cdot 8000 \\ = 8000 + 16000 = 24000 \text{ χρ. μ}$$

$$\Delta_3 \quad \Delta T_{2021} = 100 \quad \alpha\rho\alpha \quad \Delta T_{2022} = 100 + \frac{20}{100} 100 = 120$$

$$\text{ΑΕΠ}_{\beta\tau} 2021 = \frac{24000}{100} = 24000 \text{ χρ. μ}$$

$$\text{ΑΕΠ}_{\beta\tau} 2022 = 24.000 + \frac{50}{100} 24000 = 24000 + 12000 \\ = 36.000 \text{ χρ. μ}$$

$$36.000 = \frac{\text{ΑΕΠ}_{\pi\rho\tau}}{120} \cdot 100 \Rightarrow \text{ΑΕΠ}_{\pi\rho\tau} 2022 = 43.200$$

ΘΕΜΑ Δ δωρεά

Δ₄

$$\begin{array}{rcl} 1 & 4x \\ L & 2000 \end{array}$$

$$4L = 2000 \Rightarrow L = \frac{2000}{4} = 500 \text{ ερχ.}$$

$$\begin{array}{rcl} 1 & 8\psi \\ L & 8000 \end{array}$$

$$8L = 8000 \Rightarrow L = \frac{8000}{8} = 1000 \text{ ερχ.}$$

Δ₅

$$\cancel{500} \cdot \frac{10}{\cancel{100}} = 50 \text{ ανερχοι ερω } \chi$$

$$\cancel{1000} \cdot \frac{20}{\cancel{100}} = 200 \text{ ανερχοι ερω } \psi$$

$$\alpha\pi\alpha\gamma\chi_x = 500 - 50 = 450$$

$$\alpha\pi\alpha\gamma\chi_\psi = 1000 - 200 = 800$$

$$\begin{array}{l} 450 \cdot 4 = 1800 \text{ } \chi \\ 800 \cdot 8 = 6400 \text{ } \psi \end{array} \}$$