Corrections.

(1) In sample test B, question 7: the correct answer is D. The condition $y(0) = 1$ yields $1 = -1 + C$, so $C = 2$ and $y(x) = -1 + 2\,e^{t^2}$. Thus, $y(1) = 2\,e - 1$

(2) In sample test C, question 28, the answer is correct but the solution contains a mistake. It should read: Since $\mathcal{L}\{\cos(2t)\} = \frac{s}{s^2+4}$, we have

$$f(t) = \cos(2(t-\pi))\,\mathcal{U}(t-\pi)$$

and $f(3\pi) = \cos(4\pi)\,\mathcal{U}(2\pi) = 1$.

(3) The differential equation to solve in sample test C, question 30 is

$$y' + 2\,y = \begin{cases} 1, & 0 \le t < 3 \\ 0, & t \ge 3, \end{cases}$$

(This is already corrected in the solutions.)