ERRATUM

This erratum is for the textbook "*Engineering Circuit Analysis, 9th Ed., International Student Edition*" by Hayt, Kemmerly, Phillips, and Durbin. The content in red fonts is the proposed correction. In addition, explanations may be given on what changes have been proposed explicitly. Note that is the collection over almost ten years of teaching this module.

CHAPTER 2

i. **Page 13, Practice 2.2:** A single logic gate in a prototype integrated … to the "off" state in 12 ns. This corresponds to: (a) 1.2 ps; (b) 120 ps; (c) 1200 ps; (d) 12,000 ps. The answer remains the same as provided.

ii. **Page 30, Practice 2.14:** A 500 ft long 28 AWG soft copper wire is carrying a current of 100 mA. What is the voltage dropped across the wire? The answer remains the same as provided.

CHAPTER 3

i. **Page 57, Practice 3.9:** The answer for this question should be $i = \frac{1}{54}\ \text{A} = 18.5\ \text{mA}$

ii. **Page 57, Example 3.9:** … One equivalent circuit is shown in Fig. 3.22b. KCL then allows us to write $-3 - v/5 - v/5 = 0.$

CHAPTER 4

i. **Page 99, Practice 4.5:** The answer for this question should be:
$v_1 = 3\ \text{V}, v_2 = 4.212\ \text{V}, v_3 = 4.527\ \text{V},\ \ v_4 = 2.429\ \text{V}$

CHAPTER 7

i. **Page 231, Example 7.1:** The current response is wrong shown in FIGURE 7.4 (b). It is observed that the initial current $v(t) = 5\sin(\pi t)$, using the equation $i(t) = C\frac{dv(t)}{dt}$ and $C = 2\text{F}$, it yields that $i(t) = 10\pi\cos(\pi t)$. Thus, the figure shown in Figure 7.4 (b) should have a magnitude of 10π not 10.

CHAPTER 9

i. **Page 336, Practice 9.3:** the answer should be:

$$i_R(t) = 2.437\left(e^{-78.23\times10^{10}t} - e^{-5.113\times10^{10}t}\right)\ \text{A}$$

CHAPTER 10

i. **Page 392, Example 10.2:** The final answer for capacitor voltage should be $298.5cos(5t - 84.3^o)mV$. It reads as follows.
$Re\{v_{C_2}\} = Re\{298.5e^{-j84.3^o}e^{j5t}\ mV\} = 298.5\cos(5t - 84.3^o)\ mV$

ii. **Page 398, Practice 10.8:** The correct answer should be
$(a)\ 2.236\angle 1.43^o\text{A}\ \ (b)\ 6.11\angle 97.1^o\ \text{V}\ \ (c)\ i_{R_1}(t) = 4.73\cos(t + 31.2^o)\ \text{A}$

CHAPTER 14

i. **Page 548, Section "The Exponentially Damped Sinusoidal Case",** the second equation should be

$$v(t) = \frac{1}{2}V_m e^{j\theta}e^{(\sigma+j\omega)t} + \frac{1}{2}V_m e^{-j\theta}e^{(\sigma-j\omega)t}$$

Note that there is no "*j*" before the term $(\boldsymbol{\sigma + j\omega})\boldsymbol{t}$ and $(\boldsymbol{\sigma - j\omega})\boldsymbol{t}$.

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