

## 电路单元测试三答案

### 一、计算题

1  $u_C = (5 - 2e^{-4t})\text{V}, t \geq 0$

强制分量:  $5\text{V}$ ; 自由分量:  $-2e^{-4t}\text{V}$

2 (1) 复频域模型略

(2)  $u_1(t) = 0.8\delta(t) - (0.1e^{-t} + 2.1e^{-3t})\varepsilon(t)\text{V},$

$$u_2(t) = -0.8\delta(t) - (0.4e^{-t} + 8.4e^{-3t})\varepsilon(t)\text{V}$$

3 (1)  $u_2(t) = 2(e^{-1.5t} - e^{-3t})\varepsilon(t)\text{V}$

(2)  $u_2(t) = 0.21\cos(3t - 108.4^\circ)\text{V}$

4  $u_C(t) = (35 - 15e^{-0.5t})\text{V}, t \geq 0$