

A 卷

一. 单项选择题

1-5: A D D C B. 6-10: D C A C A 11-15: B C B D B

二. 填空题.

16. 快. 温度高低

17. 内能转化为机械能; 甲

18. 内; 比热容大

19. 断开; 并联

20. 顺时针; a.

21. 下; 小

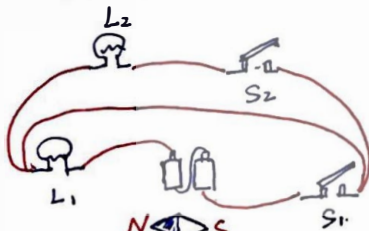
22. 076588

23. 减弱; 增大

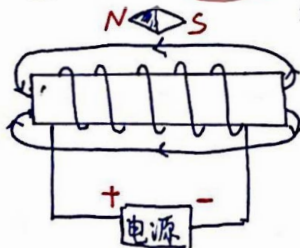
24. 开关; 绿

三. 作图题.

25.

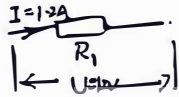


26.



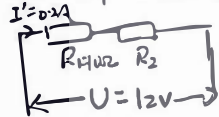
27. 解: (1) $Q = c_{水} m_{水} \Delta t_{水} = 4.2 \times 10^3 \text{ J}/(\text{kg} \cdot ^\circ\text{C}) \times 200 \text{ kg} \times 80^\circ\text{C} = 6.72 \times 10^7 \text{ J}$
 (2) $Q_{放} = m_{油} \times 3.4 \times 10^7 \text{ J}/\text{kg} = 2.38 \times 10^8 \text{ J}$

28. 解: 当 S_1 闭合, S_2 接 B 时.



$$R_1 = \frac{U}{I} = \frac{12\text{V}}{1.2\text{A}} = 10\Omega$$

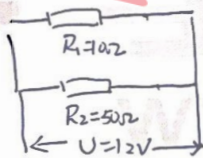
当 S_1 断开, S_2 接 B 时



$$R_{总} = \frac{U}{I'} = \frac{12\text{V}}{0.2\text{A}} = 60\Omega$$

$$R_2 = R_{总} - R_1 = 50\Omega$$

(2) S_1 闭合, S_2 接 A 时



$$P_1 = \frac{U^2}{R_1} = 14.4\text{W}$$

$$P_2 = \frac{U^2}{R_2} = 2.88\text{W}$$

$$P_{总} = P_1 + P_2 = 14.4\text{W} + 2.88\text{W} = 17.28\text{W}$$

四. 实验与探究题.

29. (1) 加热时间: (2) 98°C (3) 丙.

30. (1) 正负接线柱接反 (2) 错误 (3) 没有多做几次实验, 具有偶然性.

31. (1) 无法控制变量 (2) 灯的实际电压越大, 灯的实际功率越大.

(3) 在电路中接入一个滑动变阻器



2015-2016学年武侯区 九 年级上期末 物理 试题详解

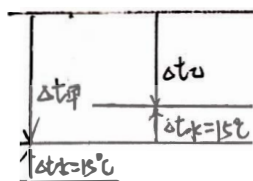
名师微点评

解题老师:

B 卷.

1. A.
2. A、D
3. B.

解析:



— 甲、乙 $m_{甲} = m_{乙}$ $t_{甲初} = t_{乙初}$

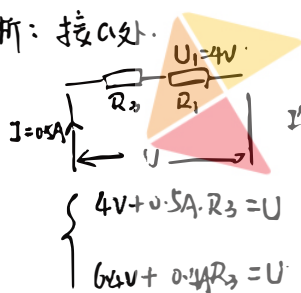
乙末·水末
甲末·水末
水 $t_{水初}$

$$Q_{甲吸} = Q_{水吸} \quad Q_{乙吸} = Q_{水吸}$$

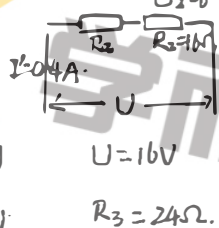
$$Q_{甲吸} = Q_{乙吸} \Rightarrow C_{水} m_{水} \Delta t_{甲} = C_{水} m_{水} \Delta t_{乙} \quad \therefore m_{甲} = m_{乙} \quad \Delta t_{甲} > \Delta t_{乙} \quad \therefore C_{甲} < C_{乙}$$

4. C

解析: 接 a 处.



接 b 处. $U_2 = 6.4V$



$$\begin{cases} 4V + 0.5A \cdot R_3 = U \\ 6.4V + 0.4A \cdot R_3 = U \end{cases}$$

$$\begin{cases} U = 16V \\ R_3 = 24\Omega \end{cases}$$

接 b 时, R_2 消耗的电功率 $P_2 = I'^2 \cdot R_2 = 2.56W$

接 a 时, R_1 消耗的电功率 $P_1 = U_1 I = 4V \times 0.5A = 2W$

5. B、D

解析: 由功率大小判断出加热和保温:

A 灯亮为加热, B 灯亮为保温. A 错.

加热时: $R_1 = \frac{U^2}{P_{加热}} = \frac{(220V)^2}{880W} = 55\Omega$ B 对

保温时: $R_2 = R_1 + R_2 = \frac{U^2}{P_{保温}} = \frac{(220V)^2}{55W} = 880\Omega$ C 错.

保温时电流与加热时电流之比: $\frac{P_{保温}}{P_{加热}} = \frac{I_{保温} \cdot U}{I_{加热} \cdot U} = \frac{55W}{220W} = \frac{1}{4}$

6. (1) C. (2) 30 (3) 降低 (4) A.



7.

解: (1) $W = \frac{30}{1800} \times 36 \times 10^6 \text{ J} = 6 \times 10^4 \text{ J}$

$$P_{\text{线}} = \frac{W}{t} = \frac{6 \times 10^4 \text{ J}}{60 \text{ s}} = 1000 \text{ W}$$

$$(2) R = \frac{U_{\text{线}}^2}{P_{\text{线}}} = \frac{(220 \text{ V})^2}{1210 \text{ W}} = 40 \Omega$$

$$I = \sqrt{\frac{P_{\text{线}}}{R}} = \sqrt{\frac{1000 \text{ W}}{40 \Omega}} = 5 \text{ A}$$

$$(3) R_{\text{线}} = \frac{U_{\text{总}}}{I} - R_{\text{热}} = \frac{220 \text{ V}}{5 \text{ A}} - 40 \Omega = 4 \Omega$$

∴ 每米导线的电阻为 0.004Ω .

∴ 总长为: 1000 m .

∴ 小明家至供电站的距离为 500 m .