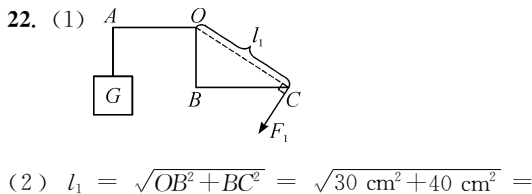


试卷①:简单机械和功、机械能和内能

1. D 2. B 3. A 4. B 5. C 6. A 7. A
8. C 9. A 10. A 11. D 12. C
13. 阻力 费力 省 14. 3.2 A 15. 200 靠近
16. 300 3 600 17. 1 0.6 18. 40 50 80%
19. a 2 20. 1.5456×10^6 100
21. (1) 竖直向上匀速 (2) 0.2 66.7% (3) =
省力 < 提升物体的重力不同



$$50 \text{ cm} \quad F_1 = \frac{F_2 l_2}{l_1} = \frac{30 \text{ N} \times 40 \text{ cm}}{50 \text{ cm}} = 24 \text{ N}$$

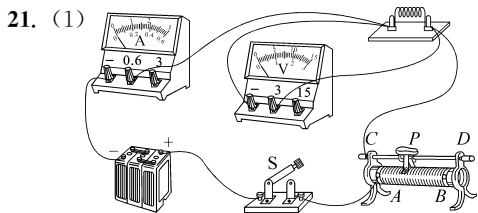
22. (1) $s = nh = 3 \times 6 \text{ m} = 18 \text{ m}$, $W = Fs = 400 \text{ N} \times 18 \text{ m}$
 $= 7200 \text{ J}$, $P = \frac{W}{t} = \frac{7200 \text{ J}}{60 \text{ s}} = 120 \text{ W}$

(2) $\eta = \frac{W_{\text{有用}}}{W_{\text{总}}} \times 100\% = \frac{G_{\text{物}}}{G_{\text{物}} + G_{\text{动}}} \times 100\% =$
 $\frac{300 \text{ N}}{300 \text{ N} + G_{\text{动}}} \times 100\% = 60\%$, $G_{\text{动}} = 200 \text{ N}$

(3) $F_{\text{大}} = G_{\text{人}} = m_{\text{人}} g = 60 \text{ kg} \times 10 \text{ N/kg} = 600 \text{ N}$, $G_{\text{大}}$
 $= nF_{\text{大}} - G_{\text{动}} = 3 \times 600 \text{ N} - 200 \text{ N} = 1600 \text{ N}$, $\eta_{\text{大}} =$
 $\frac{G_{\text{大}}}{G_{\text{大}} + G_{\text{动}}} \times 100\% = \frac{1600 \text{ N}}{1600 \text{ N} + 200 \text{ N}} \times 100\% \approx 88.9\%$

试卷②:电路初探、欧姆定律

1. D 2. C 3. A 4. C 5. C 6. B 7. A
8. C 9. B 10. D 11. B 12. A
13. 不会 不会 c、d 14. 错误 电压表正、负接
线柱接反了 15. L_2 L_1 和 L_2
16. 3 0.15 0.45 17. 6 20
18. 20 40 4 19. (1) 大 (2) 增大 减小
20. 6 电阻 R_1 断路



- (2) 断开
(3) 调节电阻两端电压保持不变 右 电压表
(4) 电压不变时, 导体中的电流与导体的电阻成反比
(5) 35

22. (1) $I_0 = \frac{U_0}{I_0} = \frac{4 \text{ V}}{5 \Omega} = 0.8 \text{ A}$

(2) $U_1 = U - U_0 = 12 \text{ V} - 4 \text{ V} = 8 \text{ V}$

$$R_1 = \frac{U_1}{I_1} = \frac{8 \text{ V}}{0.8 \text{ A}} = 10 \Omega$$

$$\frac{1}{R_1} = \frac{1}{10 \Omega} = 0.1 \frac{1}{\Omega}$$

此时空气质量指数为 25

23. (1) 当 S_1 、 S_2 断开, S_3 闭合时,

$$U = U_1 = I_1 R_1 = 0.45 \text{ A} \times 20 \Omega = 9 \text{ V}$$

(2) 当 S_1 断开, S_2 、 S_3 闭合时,

$$I_2 = I - I_1 = 0.75 \text{ A} - 0.45 \text{ A} = 0.3 \text{ A}$$

$$R_2 = \frac{U_2}{I_2} = \frac{9 \text{ V}}{0.3 \text{ A}} = 30 \Omega$$

(3) 当 S_2 、 S_3 断开, S_1 闭合时,

$$R_{\text{串}} = R_1 + R_2 = 20 \Omega + 30 \Omega = 50 \Omega$$

$$I = \frac{U}{R_{\text{串}}} = \frac{9 \text{ V}}{50 \Omega} = 0.18 \text{ A}$$

$$U_1 = I_1 R_1 = 0.18 \text{ A} \times 20 \Omega = 3.6 \text{ V}$$

试卷③：九上综合(第十一~十四章)

1. C 2. A 3. D 4. C 5. B 6. A 7. C
8. C 9. A 10. B 11. B 12. D
13. 96 信息 14. 400 省力 15. 0.8 偏大
16. 4.2×10^5 8.4×10^4 17. 弹性势能 动能
18. 2.15×10^7 8.6×10^7 25 19. 3:1 3:4
20. 3 10 50 21. 4 0.9
22. (1) $\Delta t_{\text{水}} = t - t_0 = 50^\circ\text{C} - 20^\circ\text{C} = 30^\circ\text{C}$
 $Q_{\text{水}} = c_{\text{水}} m_{\text{水}} \Delta t_{\text{水}} = 4.2 \times 10^3 \text{ J}/(\text{kg} \cdot ^\circ\text{C}) \times 100 \text{ kg} \times 30^\circ\text{C} = 1.26 \times 10^7 \text{ J}$
(2) $E = 3.15 \times 10^6 \text{ J} \times 8 = 2.52 \times 10^7 \text{ J}$
(3) $\eta = \frac{Q_{\text{水}}}{E} \times 100\% = \frac{1.26 \times 10^7 \text{ J}}{2.52 \times 10^7 \text{ J}} = 50\%$
(4) $Q_{\text{放}} = \frac{Q_{\text{水}}}{40\%} = \frac{1.26 \times 10^7 \text{ J}}{40\%} = 3.15 \times 10^7 \text{ J}$, $m_{\text{煤气}} = \frac{Q_{\text{放}}}{q} = \frac{3.15 \times 10^7 \text{ J}}{4.2 \times 10^7 \text{ J}/\text{kg}} = 0.75 \text{ kg}$

23. (1) $U_X = U - U_L = 6 \text{ V} - 6 \text{ V} = 0 \text{ V}$
 $I_0 = I - I_L = 0.6 \text{ A} - 0.5 \text{ A} = 0.1 \text{ A}$,
 $R_0 = \frac{U_0}{I_0} = \frac{6 \text{ V}}{0.1 \text{ A}} = 60 \Omega$,
(2) $R_L = \frac{U_{L\text{额}}}{I_{L\text{额}}} = \frac{6 \text{ V}}{0.5 \text{ A}} = 12 \Omega$
 $R_{\text{串最小}} = \frac{U}{I_{\text{最大}}} = \frac{8 \text{ V}}{0.5 \text{ A}} = 16 \Omega$,
 $R_{X\text{最小}} = R_{\text{串最小}} - R_L = 16 \Omega - 12 \Omega = 4 \Omega$
 $U_L = U - U_{X\text{最大}} = 8 \text{ V} - 3 \text{ V} = 5 \text{ V}$,
 $I_{\text{最小}} = \frac{U_L}{R_L} = \frac{5 \text{ V}}{12 \Omega} = \frac{5}{12} \text{ A}$,
 $R_{\text{串最大}} = \frac{U}{I_{\text{最小}}} = \frac{8 \text{ V}}{\frac{5}{12} \text{ A}} = 16 \Omega = 19.2 \Omega$,
 $R_{X\text{最大}} = R_{\text{串最大}} - R_L = 19.2 \Omega - 12 \Omega = 7.2 \Omega$

试卷④：电功和电热、电磁转换

1. D 2. C 3. C 4. A 5. B 6. D 7. C
8. C 9. C 10. C 11. A 12. C
13. 6 2:5 14. 比热容 3×10^5 600
15. 12 0.2 2:1 16. 短路 正常 36
17. 金属外壳 甲 18. 弱 Q
19. 磁场 右 电流的方向 磁性 导电性
20. (1) $R_{\text{滑}} = \frac{U_{\text{滑}}}{I_{\text{滑}}} = \frac{6 \text{ V}}{0.5 \text{ A}} = 12 \Omega$
(2) $U_{\text{源}} = U_{\text{滑}} = IR_{\text{滑}} = 0.75 \text{ A} \times 12 \Omega = 9 \text{ V}$,
 $U_L = U_{\text{源}} - U = 9 \text{ V} - 6 \text{ V} = 3 \text{ V}$,
 $P_L = U_L I_L = 3 \text{ V} \times 0.5 \text{ A} = 1.5 \text{ W}$
 $I_{\text{最大}} = 0.5 \text{ A}$,
 $U_{\text{滑最大}} = 15 \text{ V}$,
 $R_{\text{滑最大}} = \frac{U_{\text{滑最大}}}{I_{\text{最大}}} = \frac{15 \text{ V}}{0.5 \text{ A}} = 30 \Omega$
 $U_{\text{源}} = U_{\text{滑}} + U_L = 15 \text{ V} + 3 \text{ V} = 18 \text{ V}$
 $W = U_{\text{源}} I_{\text{最大}} t = 18 \text{ V} \times 0.5 \text{ A} \times 10 \text{ s} = 90 \text{ J}$
21. (1) $R_{\text{串}} = \frac{U}{I} = \frac{3 \text{ V}}{0.01 \text{ A}} = 300 \Omega$,

- 由 $R_t = 5 + 0.5t$ 得 $R_t = 45 \Omega$,
 $R_0 = R_{\text{串}} - R_t = 300 \Omega - 45 \Omega = 255 \Omega$
(2) $V = 700 \text{ mL} = 7 \times 10^{-4} \text{ m}^3$,
 $m = \rho V = 1 \times 10^3 \text{ kg}/\text{m}^3 \times 7 \times 10^{-4} \text{ m}^3 = 0.7 \text{ kg}$
 $Q_{\text{吸}} = c_{\text{水}} m \Delta t = c_{\text{水}} m(t - t_0)$
 $= 4.2 \times 10^3 \text{ J}/(\text{kg} \cdot ^\circ\text{C}) \times 0.7 \text{ kg} \times (100^\circ\text{C} - 20^\circ\text{C})$
 $= 2.352 \times 10^5 \text{ J}$
 $W = \frac{U^2}{R} t = \frac{(220 \text{ V})^2}{44 \Omega} \times 4 \times 60 \text{ s} = 2.64 \times 10^5 \text{ J}$,
 $\eta = \frac{Q_{\text{吸}}}{W} \times 100\% = \frac{2.352 \times 10^5 \text{ J}}{2.64 \times 10^5 \text{ J}} \times 100\% \approx 89\%$
22. (1) 2 (2) 40 (3) S_1, S_2 1 210
(4) $W = \frac{n}{n_0} \times 3.6 \times 10^6 \text{ J} = \frac{25}{3000} \times 3.6 \times 10^6 \text{ J} = 3 \times 10^4 \text{ J}$, $P = \frac{W}{t} = \frac{3 \times 10^4 \text{ J}}{30 \text{ s}} = 1000 \text{ W}$
 $U = \sqrt{PR_1} = \sqrt{1000 \text{ W} \times 40 \Omega} = 200 \text{ V}$

试卷⑤：九下综合(第十五~十八章)

1. A 2. A 3. B 4. C 5. B 6. C 7. A

8. C 9. D 10. D 11. A 12. D

13. 20 4 400 100 14. 6 1.2

15. 60 90 灯丝电阻随温度的升高而增大

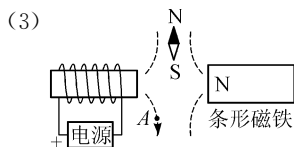
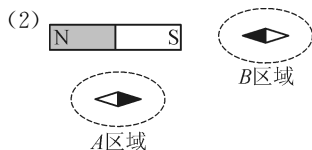
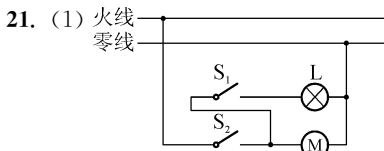
16. 6 1.5 2

17. 0.108 能

18. 控制电流和通电时间相同 电阻 能

19. (1) 0.6 (2) S 增强 0.8

20. 不可再生 核裂变



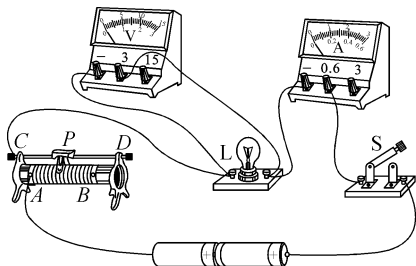
22. (1) L_1 断路 (2) 2.4 (3) 灯泡的亮度 转换

法 (4) L_1

23. (1) 静止 运动 通电 (2) 相反 磁场方向

(3) 相反 电流方向 (4) 不能

24. (1)



(2) B (3) 断路 (4) 0.3 (5) 0.75

(6) 增大

$$25. (1) I_1 = \frac{U}{R_1} = \frac{220 \text{ V}}{110 \Omega} = 2 \text{ A}$$

$$(2) I = \frac{P}{U} = \frac{660 \text{ W}}{220 \text{ V}} = 3 \text{ A}$$

$$I_2 = I - I_1 = 3 \text{ A} - 2 \text{ A} = 1 \text{ A}$$

$$Q_2 = W_2 = UI_2t = 220 \text{ V} \times 1 \text{ A} \times 60 \text{ s} = 1.32 \times 10^4 \text{ J}$$

$$R_2 = \frac{U}{I_2} = \frac{220 \text{ V}}{1 \text{ A}} = 220 \Omega$$

(3) 只闭合 S_2 时, 图乙电路中的电流最小, 电熨斗的电功率最小, 处于低温工作状态

由 $P = UI = I^2 R$ 可知, 电流为原来的 $\frac{1}{2}$ 即 0.5 A, 功率为原来的 $\frac{1}{4}$

$$R_{\text{串}} = \frac{U}{I} = \frac{220 \text{ V}}{0.5 \text{ A}} = 440 \Omega$$

$$R_x = R - R_2 = 440 \Omega - 220 \Omega = 220 \Omega.$$

$$26. (1) P_{\text{额}} = U_{L\text{额}} I_{L\text{额}} = 4 \text{ V} \times 0.5 \text{ A} = 2 \text{ W}$$

$$(2) U = U_1 + U_2 = U_1 + IR_2 = 3.0 \text{ V} + 0.2 \text{ A} \times R_2$$

$$U = U_1 + U_2 = U_1 + IR_2 = 1.0 \text{ V} + 0.4 \text{ A} \times R_2$$

$$U = 5 \text{ V}, R_2 = 10 \Omega$$

$$(3) U_{L\text{最小}} = U - U_{1\text{最大}} = 5 \text{ V} - 3 \text{ V} = 2 \text{ V}, I_{1\text{最小}} = 0.4 \text{ A}$$

$$R_{1\text{最大}} = \frac{U_{1\text{最大}}}{I_{1\text{最小}}} = \frac{3 \text{ V}}{0.4 \text{ A}} = 7.5 \Omega,$$

$$U_{1\text{最小}} = U - U_{L\text{额}} = 5 \text{ V} - 4 \text{ V} = 1 \text{ V},$$

$$I_{1\text{最大}} = 0.5 \text{ A}$$

$$R_{1\text{最小}} = \frac{U_{1\text{最小}}}{I_{1\text{最大}}} = \frac{1 \text{ V}}{0.5 \text{ A}} = 2 \Omega$$