



RJEŠENJA PROBNOGA ISPITA DRŽAVNE MATURE IZ **FIZIKE**  
U ŠKOLSKOJ GODINI 2022./2023.

BROJ ZADATKA	TOČAN ODGOVOR
1.	D
2.	C
3.	D
4.	C
5.	B
6.	B
7.	A
8.	B
9.	B
10.	D
11.	A
12.	A
13.	C
14.	A
15.	C
16.	D
17.	A
18.	D
19.	C
20.	D
21.	C
22.	C
23.	A
24.	B
25.	$\frac{p_1}{T_1} = \frac{p_2}{T_2}$ 1 bod $T_2 = 381,97\text{K}$ ili $t_2 = 108,82^\circ\text{C}$ 1 bod



26.	$\sin \alpha = \frac{n_2}{n_1}$	1 bod
	$\alpha = 59,1^\circ$	1 bod
27.	$F_u = \rho_z V g$ i $F_g = m g$	1 bod
	$F_u = F_g + F_N$	1 bod
	$F_N = 184,14 \text{ N}$	1 bod
28.	$Q_1 = W + Q_2$	1 bod
	$\eta = \frac{W}{Q_1}$	1 bod
	$\eta = 0,69$ ili $\eta = 69\%$	1 bod
29.	$F_e = F_{cp}$	1 bod
	$F_e = k \frac{e^2}{r^2}$ i $F_{cp} = \frac{mv^2}{r}$	1 bod
	$v = 1,1 \cdot 10^6 \text{ m/s}$	1 bod
30.	$\frac{1}{2}mv^2 = eU$	1 bod
	$\lambda = \frac{h}{mv}$	1 bod
	$\lambda = 3,9 \cdot 10^{-11} \text{ m}$	1 bod
31.	$m_2 v = (m_1 + m_2) v_K$	1 bod
	$E_k = \frac{mv^2}{2}$ i $E_p = \frac{kx^2}{2}$	1 bod
	$\frac{1}{2}(m_1 + m_2)v_K^2 = \frac{1}{2}kA^2$	1 bod
	$A = 0,79 \text{ m}$	1 bod
32.	$F_R = F_V - F_1$ , $F_V = 0$	1 bod
	$v_{pg} = v_0 + at$	1 bod
	$s = v_0 t + \frac{1}{2}at^2$	1 bod
	$s = 1,5 \text{ m}$	1 bod
33.	$I = \frac{\mathcal{E}}{R_v + R_u}$	1 bod
	$U = IR_v$ ili $U = IR$	1 bod



	$R_u = 3 \, \Omega$	1 bod
	$\mathcal{E} = 10,5 \, V$	1 bod
34.	$B_z = \frac{\mu_0 I}{2\pi r}$	1 bod
	$B_z = \mu_0 \frac{NI}{l}$	1 bod
	$B_{uk} = \sqrt{B_z^2 + B_z^2}$	1 bod
	$B_{uk} = 1,3 \cdot 10^{-3} \, T$	1 bod
35.	35.1. 4.	1 bod
	35.2. 3.	1 bod
	35.3. $E_{ukupno} = E_{kmax} = \frac{mv_0^2}{2}$	1 bod
	$E_{ukupno} = 1,08 \cdot 10^{-4} \, J$	1 bod