



RJEŠENJA ISPITA DRŽAVNE MATURE IZ **FIZIKE**  
U ŠKOLSKOJ GODINI 2021./2022. (jesenski rok)

BROJ ZADATKA	TOČAN ODGOVOR
1.	C
2.	B
3.	C
4.	B
5.	A
6.	B
7.	C
8.	C
9.	B
10.	A
11.	A
12.	B
13.	C
14.	B
15.	C
16.	B
17.	D
18.	A
19.	B
20.	D
21.	B
22.	D
23.	B
24.	D
25.	$\frac{p_1 V_1}{T_1} = \frac{p_2 V_2}{T_2}$ 1 bod $p_2 = 140\,729,2 \text{ Pa}$ 1 bod



26.	$v = \lambda f$ 1 bod $v = 0,9 \text{ m/s}$ 1 bod
27.	$F_U = \rho g V$ 1 bod $ma = F_U - F_G$ 1 bod $a = 2,5 \text{ m/s}^2$ 1 bod
28.	$Q = mc\Delta T$ 1 bod $Q = E_{\text{gp}}$ 1 bod $\Delta T = 0,178 \text{ K}$ 1 bod
29.	$C = \frac{\varepsilon S}{d}$ 1 bod $E = \frac{1}{2} CU^2$ 1 bod $E = 3,82 \text{ nJ}$ 1 bod
30.	$E = E_1 + E_2 + E_3$ 1 bod $E = -13,6 \text{ eV} \left( \frac{1}{n^2} - \frac{1}{m^2} \right)$ 1 bod $n = 7$ 1 bod
31.	$W_{\text{tr}} = F_{\text{tr}} s$ 1 bod $W = mgh$ 1 bod $F_{\text{tr}} = \mu mg$ 1 bod $s = 1,33 \text{ m}$ 1 bod
32.	$F_{\text{tr}} = F_x$ 1 bod $F_{\text{el}} = kx$ i $F_{\text{tr}} = \mu F_{\perp}$ 1 bod $F_x = F_{\text{el}} \cos \alpha$ i $F_y = F_{\text{el}} \sin \alpha$ 1 bod $\mu = 0,49$ 1 bod
33.	$R_{uk} = \frac{1}{\frac{1}{R} + \frac{1}{R+R}}$ 1 bod $R_{uk} = \frac{U}{I}$ 1 bod $P = UI$ 1 bod $P = 8 \text{ W}$ 1 bod



34.	$F_A = BIl \sin \alpha$	1 bod
	$F = \frac{\mu_0 I^2 l}{2r\pi}$	1 bod
	$F_A = F_g + F$ ili $BIl = mg + \frac{\mu_0 I^2 l}{2r\pi}$	1 bod
	$r = 0,0112 \text{ m} = 11,2 \text{ mm}$	1 bod
35.	35.1. 4.	1 bod
	35.2. $T = 0,8 \text{ s}$	1 bod
	35.3. $v_0 = \omega A$	1 bod
	$v_0 = 0,471 \text{ m/s}$	1 bod