



RJEŠENJA ISPITA DRŽAVNE MATURE IZ **FIZIKE**  
U ŠKOLSKOJ GODINI 2020./2021. (jesenski rok)

BROJ ZADATKA	TOČAN ODGOVOR
1.	B
2.	D
3.	C
4.	C
5.	D
6.	C
7.	A
8.	B
9.	A
10.	B
11.	D
12.	A
13.	C
14.	B
15.	B
16.	B
17.	B
18.	B
19.	B
20.	D
21.	C
22.	C
23.	B
24.	C
25.	B
26.	$v = \frac{2\pi r}{T}$ 1 bod $v = 3,14 \frac{m}{s}$ 1 bod
27.	$\eta = 1 - \frac{T_2}{T_1}$ 1 bod $T_1 = 571,4 K$ 1 bod
28.	$Z = \sqrt{R^2 + (R_L - R_C)^2}$ 1 bod $Z = 17 \Omega$ 1 bod



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29.	$\omega = 2\pi f$ 1 bod $\omega = 1,57 \frac{rad}{s}$ 1 bod	
30.	$E = \Delta mc^2$ 1 bod $E = 3,57 \cdot 10^{-13} J = 2,23 MeV$ 1 bod	
31.	$F_g = F_u$ i $F_u = \rho g V$ ili 1 bod $V_{tj} \rho_{tj} g = V_{ur} \rho_{tek} g$ $V_{ur} = \frac{V_{tj} \rho_{tj}}{\rho_{tek}} = 0,75 V_{tj}$ 1 bod $V_{iz} = 0,25 V_{tj}$ 1 bod	
32.	$pV = nRT$ 1 bod $N = nN_A$ 1 bod $N = 2,7 \cdot 10^{18}$ 1 bod	
33.	$\varphi = \frac{kQ}{r}$ 1 bod $U = \varphi_A - \varphi_B$ 1 bod $U = 900 V$ 1 bod	
34.	$W = E_k + W_{tr}$ 1 bod $E_k = \frac{mv^2}{2}$ 1 bod $W = F \cdot s$ 1 bod $F = 4 N$ 1 bod ili $F_R = F - F_{tr}$ 1 bod $ma = F - \frac{W_{tr}}{s}$ 1 bod	



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	$a = \frac{v^2}{2s}$	1 bod
	$F = 4N$	1 bod
35.	$I = \frac{U}{R}$	1 bod
	$U_i = -N \frac{\Delta\Phi}{\Delta t}$	1 bod
	$\Delta\Phi = \Delta BS$	1 bod
	$B_2 = 2,47 \text{ T}$	1 bod
36.	$m = 3 \text{ ili } y' = 3y$	1 bod
	$\frac{y'}{y} = -\frac{b}{a}$	1 bod
	$\frac{1}{f} = \frac{1}{a} + \frac{1}{b}$	1 bod
	$a = 20 \text{ cm}$	1 bod
37.	$\frac{m}{M} = \frac{N_0}{N_A}$	1 bod
	$N = N_0 \cdot 2^{-\frac{t}{T}}$	1 bod
	$\Delta N = N - N_0$	1 bod
	$\Delta N = 1,14 \cdot 10^{19}$	1 bod