



RJEŠENJA ISPITA DRŽAVNE MATURE IZ **FIZIKE**
U ŠKOLSKOJ GODINI 2025./2026. (1. ROK)

| BROJ ZADATKA | TOČAN ODGOVOR | |
|--------------|---------------------------------|-------|
| 1. | C | |
| 2. | D | |
| 3. | C | |
| 4. | C | |
| 5. | D | |
| 6. | C | |
| 7. | B | |
| 8. | B | |
| 9. | C | |
| 10. | C | |
| 11. | B | |
| 12. | B | |
| 13. | C | |
| 14. | B | |
| 15. | B | |
| 16. | A | |
| 17. | D | |
| 18. | B | |
| 19. | D | |
| 20. | C | |
| 21. | C | |
| 22. | B | |
| 23. | B | |
| 24. | D | |
| 25. | $s = v_0 t + \frac{1}{2} a t^2$ | 1 bod |
| | $s = 35 \text{ m}$ | 1 bod |
| 26. | $W = p \Delta V$ | 1 bod |
| | $W = 600 \text{ J}$ | 1 bod |
| 27. | $Q = m \lambda$ | 1 bod |
| | $Q = mc \Delta t$ | 1 bod |
| | $Q = 9840 \text{ J}$ | 1 bod |



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| 28. | $E = \frac{k}{\epsilon_r} \frac{q}{r^2}$ 1 bod $E_{uk} = E_1 + E_2$ 1 bod $E_{uk} = 618,75 \text{ N/C}$ 1 bod |
| 29. | $F = BIl \sin \alpha$ ili $F = BIl$ 1 bod $I = \frac{Q}{t}$ 1 bod $Q = 0,1 \text{ C}$ 1 bod |
| 30. | $\frac{1}{a} + \frac{1}{b} = \frac{1}{f}$ 1 bod $\bar{f} = \frac{\sum_{i=1}^4 f_i}{4} = \frac{f_1 + f_2 + f_3 + f_4}{4}$ 1 bod $\bar{f} = 11,8 \text{ cm}$ 1 bod |
| 31. | $\mu F_p = mg$ 1 bod $F_p = m \frac{v^2}{r}$ 1 bod $v = \frac{2r\pi}{T}$ 1 bod $\mu = 0,28$ 1 bod |
| 32. | $m_B v_B = (m_A + m_B) v_{A,B}$ 1 bod $(m_A + m_B) v_{A,B} - m_C v_C = (m_A + m_B + m_C) v$ 1 bod $E_k = \frac{(m_A + m_B + m_C) v^2}{2}$ 1 bod $E_k = 2,3 \text{ J}$ 1 bod |



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| 33. | $I = \frac{\varepsilon}{r + \frac{R_1 R_2}{R_1 + R_2}} \quad 1 \text{ bod}$ $U_{12} = \varepsilon - Ir \text{ ili } I_1 = \frac{U_{12}}{R_1} \quad 1 \text{ bod}$ $I_2 = \frac{\varepsilon}{r + R_1} \quad 1 \text{ bod}$ $\frac{I_1}{I_2} = 0,9 \quad 1 \text{ bod}$ |
| 34. | $E_p = \frac{kA^2}{2} \quad 1 \text{ bod}$ $a_0 = \omega^2 A \quad 1 \text{ bod}$ $a = -a_0 \sin(\omega t) \quad 1 \text{ bod}$ $a = 4,3 \text{ m/s}^2 \quad 1 \text{ bod}$ |
| 35. | $E_f = W_i + E_k \quad 1 \text{ bod}$ $E_f = \frac{hc}{\lambda} \text{ i } E_k = \frac{mv^2}{2} \quad 1 \text{ bod}$ $\lambda_b = \frac{h}{mv} \quad 1 \text{ bod}$ $\lambda_b = 8,44 \cdot 10^{-10} \text{ m} \quad 1 \text{ bod}$ |