

FIZIKA – Ključ za odgovore
jesenski rok 2017.

1.	B	6.	D	11.	D	16.	D	21.	A
2.	C	7.	D	12.	C	17.	C	22.	C
3.	C	8.	C	13.	A	18.	C	23.	C
4.	D	9.	B	14.	D	19.	B	24.	A
5.	B	10.	A	15.	B	20.	A	25.	A

26.

$$F = \mu mg$$

1 bod

$$F = 1500 \text{ N}$$

1 bod

27.

$$\frac{V_1}{T_1} = \frac{V_2}{T_2}$$

1 bod

$$V_1 = 18,2 \text{ cm}^3$$

1 bod

28.

$$I = \frac{Ne}{t}$$

1 bod

$$N = 1,5 \cdot 10^{20}$$

1 bod

29.

$$F = kx \text{ ili } k = mg/x$$

1 bod

$$k = 400 \text{ N/m}$$

1 bod

30.

$$N = N_0 \cdot 2^{-t/T}$$

1 bod

$$N = 0.125 \text{ } N_0 = 800$$

1 bod

31.

$$W = \Delta E_k$$

1 bod

$$P = W/t$$

1 bod

$$P = 46\,875 \text{ W}$$

1 bod

32.

$$Q = mc\Delta T$$

1 bod

$$\Delta T = T_k - T_p$$

1 bod

$$T_k = 314,15 \text{ K} \quad t_k = 41^\circ\text{C}$$

1 bod

33.

$$F_L = qvB$$

1 bod

$$qvB = mv^2/r$$

1 bod

$$B = 1,04 \text{ T}$$

1 bod

34.

$$S_1 v_1 = S_2 v_2$$

1 bod

$$p_1 + \frac{1}{2} \rho_1 v_1^2 = p_2 + \frac{1}{2} \rho_2 v_2^2$$

1 bod

$$v_1 = 8 \text{ m/s,}$$

1 bod

$$v_2 = 2 \text{ m/s}$$

1 bod

35.

$$F = ma$$

1 bod

$$F = qE$$

1 bod

$$d = 1/2 at^2$$

1 bod

$$t = 2,13 \cdot 10^{-8} \text{ s}$$

1 bod

36.

$$\omega = 2\pi f \quad f = 1,18 \text{ Hz} \quad \text{ili} \quad T = 0,85 \text{ s}$$

1 bod

$$v = \frac{\lambda}{T}$$

1 bod

$$\Delta\rho = 2\pi \frac{\Delta x}{\lambda}$$

1 bod

$$\Delta\rho = 56,5^\circ = 0,987 \text{ rad}$$

1 bod

37.

$$\lambda = h/mv$$

1 bod

$$E_k = 1/2 mv^2$$

1 bod

(ili formula u obliku $E_k = h^2/2m\lambda^2$ 2 boda)

$$\Delta E_k = E_{k2} - E_{k1}$$

1 bod

$$\Delta E_k = 3.2 \text{ keV}$$

1 bod