

**Ključ za odgovore ispita iz Fizike
jesenski rok državne mature 2016.**

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

25. **2 boda**

$$\bar{v} = \frac{\Delta s}{\Delta t} = \frac{s_{uk}}{t_{uk}}$$

1 bod

$$\bar{v} = 40 \frac{\text{km}}{\text{h}}$$

1 bod

26. **2 boda**

$$p = p_a + \rho gh$$

$$h = 40,5 \text{ m}$$

1 bod

1 bod

27. **2 boda**

$$Q = m c \Delta t$$

1 bod

$$c = 284,09 \text{ J/kgK}$$

1 bod

28. **2 boda**

$$B = \mu_0 \frac{NI}{l}$$

1 bod

$$B = 4\pi \cdot 10^{-3} \text{ T}$$

1 bod

29. **2 boda**

$$I = \frac{P}{S}$$

1 bod

$$I = 10^5 \frac{\text{W}}{\text{m}^2}$$

1 bod

30. **2 boda**

$$W_i = E - E_k \quad 1 \text{ bod}$$

$$W_i = 3.2 \cdot 10^{-19} \text{ J} = 2 \text{ eV} \quad 1 \text{ bod}$$

31. **4 boda**

$$F_{tr} = \mu mg \text{ i } F = ma \quad 1 \text{ bod}$$

$$F_{tr} = F \quad 1 \text{ bod}$$

$$a = \frac{\Delta v}{\Delta t} \quad 1 \text{ bod}$$

$$t = 2,5 \text{ s} \quad 1 \text{ bod}$$

32. **4 boda**

$$\Delta V = V_2 - V_1 = 6 \text{ dm}^3 \quad 1 \text{ bod}$$

$$W = p \Delta V \text{ ili površina ispod grafa} \quad 1 \text{ bod}$$

$$Q = \Delta U + W \quad 1 \text{ bod}$$

$$\Delta U = 140 \text{ J} \quad 1 \text{ bod}$$

33. **4 boda**

$$q = \frac{q_A + q_B}{2} \quad 1 \text{ bod}$$

$$F = k \cdot \frac{q^2}{r^2} \quad 1 \text{ bod}$$

$$F = 2.25 \cdot 10^{-7} \text{ N} \quad 1 \text{ bod}$$

$$\text{odbojna sila} \quad 1 \text{ bod}$$

34. **4 boda**

$$\frac{1}{a} + \frac{1}{b} = \frac{1}{f} \quad 1 \text{ bod}$$

$$b = -12 \text{ cm} \quad 1 \text{ bod}$$

$$\frac{-b}{a} = \frac{y'}{y} \quad 1 \text{ bod}$$

$$y' = 2,4 \text{ cm} \quad 1 \text{ bod}$$

35. **4 boda**

$$\lambda = \frac{\ln 2}{T} \quad 1 \text{ bod}$$

$$A = \lambda \cdot N \quad 1 \text{ bod}$$

$$\frac{m}{M} = \frac{N}{N_A} \quad 1 \text{ bod}$$

$$A = 3.7 \cdot 10^9 \text{ Bq} \quad 1 \text{ bod}$$