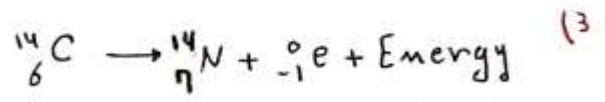


هذه بنكي المؤتمت لبحث
الكيمياء النووية

قسم الطالب المبتدئ

C (2) C (11)



الجواب (C)

A (6) D (5) B (4)

A (9) D (8) A (7)

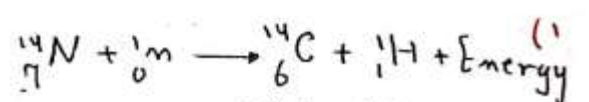
C (12) A (11) B (10)

(15) D (14) C (13)

C (16)

المدرس فراس قلعه جي
إجازة في العلوم الفيزيائية والكيميائية
دبلوم في التأهيل التربوي
٠٩٨٨٤٤٠٥٧٤

قسم الطالب المتوسط



الجواب (B)

D (4) A (3) C (2)

D (7) C (6) B (5)

A (10) C (9) C (8)

D (13) C (12) B (11)

D (16) D (15) B (14)

C (19) C (18) B (17)

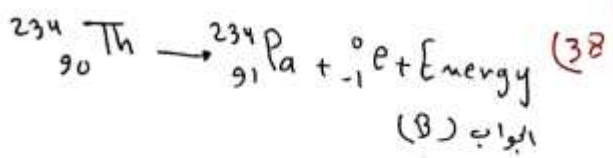
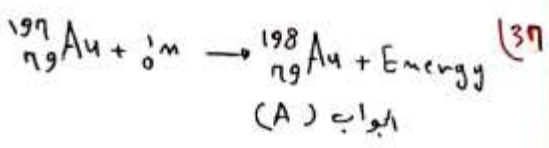
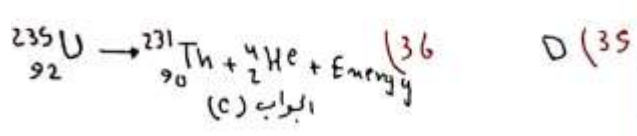
D (22) B (21) B (20)

B (25) C (24) C (23)

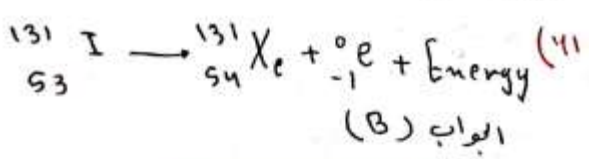
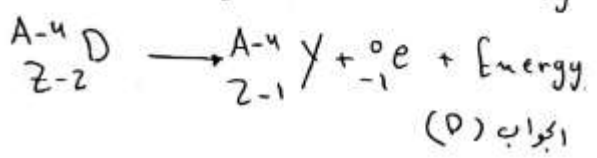
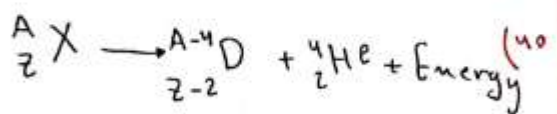
D (28) B (27) C (26)

D (31) C (30) C (29)

C (34) A (33) D (32)



B (39)



قسم الطالب الجيد

D (3) C (2) B (1)

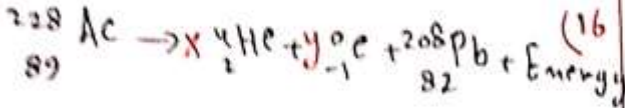
C (6) D (5) A (4)

B (9) A (8) B (7)

B (12) D (11) C (10)

$$\Delta m = \frac{\Delta E}{c^2} = \frac{-38 \times 10^{27} \times 92 \times 60}{(3 \times 10^8)^2} \quad (15)$$

$$\Delta m = -1824 \times 10^{12} \text{ kg} \quad (10)$$

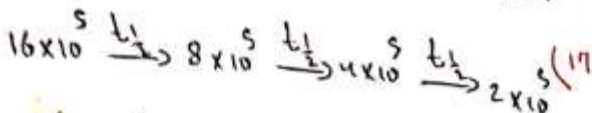
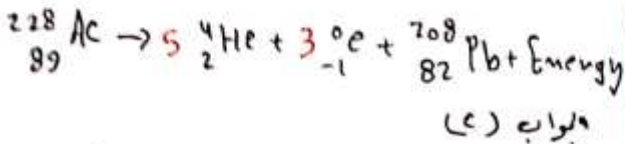


$$228 = 4x + 208 \Rightarrow$$

$$4x = 228 - 208 = 20 \Rightarrow x = \frac{20}{4} = 5$$

$$89 = 2x - y + 82$$

$$89 = 10 - y + 82 \Rightarrow y = 92 - 89 = 3$$



$$t_{\frac{1}{2}} = \frac{t}{n} = \frac{150}{3} = 50 \text{ s} \quad (8)$$

$$\Delta E = \Delta m c^2 \quad (18)$$

$$= (-0.23 \times 10^{-27}) (3 \times 10^8)^2$$

$$= -2.07 \times 10^{-11} \text{ J} \quad (A)$$

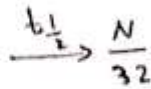
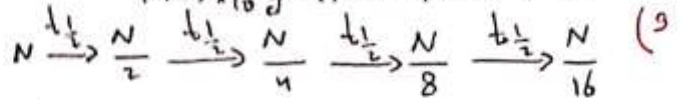
لكن طاقة الارتباط موجبة $+2.09 \times 10^{-11} \text{ J}$

المدرس فراس قلعه جي
إجازة في العلوم الفيزيائية والكيميائية
ديبلوم في التأهيل التربوي
٠٩٨٨٤٤٠٥٧٤

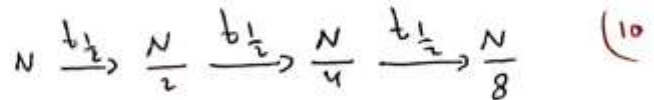
$$\Delta E = \Delta m c^2 = (-0.55 \times 10^{-27}) (3 \times 10^8)^2 \quad (8)$$

$$= -4.95 \times 10^{-6} \text{ J} \quad (B)$$

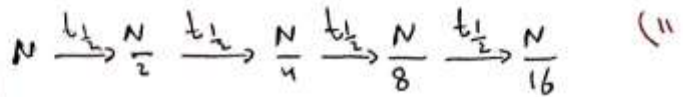
لكن طاقة الارتباط موجبة $+4.95 \times 10^{-6} \text{ J}$



$$t = t_{\frac{1}{2}} \times n = 6 \times 5 = 30 \text{ years} \quad (c)$$



$$t_{\frac{1}{2}} = \frac{t}{n} = \frac{600}{3} = 200 \text{ سنة} \quad (B)$$

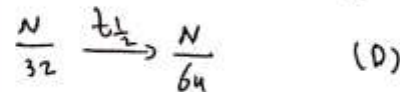
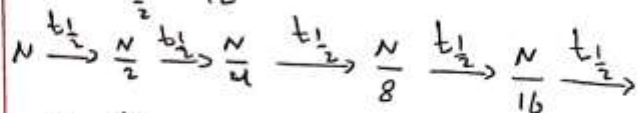


$$t = t_{\frac{1}{2}} \times n = 12 \times 4 = 48 \text{ سنة} \quad (B)$$

$$\Delta m = \frac{\Delta E}{c^2} = \frac{-38 \times 10^{27} \times 12 \times 60}{(3 \times 10^8)^2} \quad (12)$$

$$\Delta m = -304 \times 10^{12} \text{ kg} \quad (c)$$

$$n = \frac{t}{t_{\frac{1}{2}}} = \frac{72}{12} = 6 \quad (13)$$



$$n = \frac{t}{t_{\frac{1}{2}}} = \frac{30}{6} = 5 \quad (14)$$

